Chapter Ind 8

FLAMMABLE AND COMBUSTIBLE LIQUIDS

Scope and application Ind 8.01 Definitions Ind 8.02 Ind 8.60 Ind 8.03 Adopted standard specifications Ind 8.61 Ind 8.04 Enforcement Ind 8.62 Ind 8.05 Inspections Ind 8.63 Ind 8.64 Storage, handling and use Ind 8.65 Ind 8.10 Application Ind 8.66 Approval of proposed construc-Ind 8.12 Ind 8.67 tion or installation or operation Ind 8.68 Ind 8.13 Inspection before covering in-stallations General provisions for sale, purchase, dispensing or use of flammable liquids Ind 8.14 Ind 8,70 Ind 8.71 Ind 8.15 Race track fueling stations Motor vehicle exhibition Ind 8.72 Ind 8.16 Ind 8.73 Tank storage Ind 8.74 Ind 8.20 Ind 8.21 Installation of outside above-Ind 8.75 ground tanks Installation Ind 8.76 Ind 8.22 of underground Ind 8.77 tanks Ind 8.78 Ind 8.23 Installation of tanks inside of buildings Ind 8.80 Ind 8.25 for underground Provisions Ind 8.81 tanks temporarily out of service, Ind 8.82 abandoned or removed Ind 8.83 dismantling Ind 8.26 Removal or of Ind 8.84 aboveground field erected storage tanks Leaking tanks Ind 8.85 Ind 8.27 Ind 8.86 Ind 8.28 Sources of ignition Pipes, valves and fittings Ind 8.30 General Ind 8.31 Materials Ind 8.90 Ind 8.32 Pipe joints Ind 8.91 Ind 8.33 Supports Ind 8.92 Ind 8.34 Protection against corrosion Ind 8.35 Valves Ind 8.93 Ind 8.36 Pumps and piping Ind 8.37 Testing Container and portable tank storage Ind 8.40 Container and portable tank storage Ind 8.41 Storage outside buildings Ind 8.42 Fire control Commerical and industrial plants Ind 8.50 Scope Ind 8.51 Incidental storage or use of flammable or combustible liquids Ind 8.52 Unit physical operations Ind 8.53 Drainage Ind 8.54 Ventilation Ind 8.55 Tank vehicle and tank car load. ing and unloading Fire control Ind 8.56 Ind 8.57 Sources of ignition Ind 8.58 Electrical Ind 8.59 Repairs to equipment Ind 8.591 Housekeeping

Buildings Loading and unloading facilities Wharves Electrical equipment Sources of ignition Drainage and waste disposal Fire control Care and attendance of property Service stations Storage and handling Attendance or supervision of dispensing Dispensing systems Marine service stations Electrical equipment Heating equipment Drainage and waste disposal Sources of ignition Fire control **Processing** plants Scope Location Processing building Liquid handling Tank vehicle and tank car loading and unloading Fire control Sources of ignition Ind 8.87 Houskeeping Refineries, chemical plants and distilleries Storage Wharves Fired and unfired pressure vessels Location of process units Ind 8.94 Fire control Flammable and combustible liquid tank vehicles Ind 8.950 Scope Ind 8.951 Basic design Ind 8.952 Cargo tanks, piping and connections designed for transfer of flammable and combustible li-quids at temperatures below their boiling points Ind 8.953 Tank vehicle chassis, assembly and appurtenances Ind 8.954 Auxiliary equipment Ind 8.955 Operation of tank vehicles Oil burning equipment

Bulk plants

Storage

- Ind 8.970 Application and scope Ind 8.971 Use of approved equipment Ind 8.972 Design and construction of tanks
- Ind 8.973 Installation of underground
- tanks Ind 8.974 Installation of unenclosed supply tanks inside buildings

Ind	8.975	Installation of enclosed supply	ľı	ıd	8.981	Oil pumps
		tanks inside buildings	h	ъd	8.982	Piping materials and designs
Ind	8.976	Installation of outside above-	Ir	nd	8.983	Valves
		ground tanks not larger than 275	i Ir	id	8.984	Tests of tanks and piping
		gallons	I	ιđ	8.985	Centralized oil distribution sys-
Ind	8.977	Installation of outside above				tems
		ground tanks larger than 275 gal-	It	ıd	8.986	Inside heating oil tanks taken
		lons .				out of service
Ind	8.978	Installation of fill and return	I	nd	8.991	Storage and handling of flamma-
		piping				ble liquids on farms and con-
Ind	8.979	Installation of supply piping				struction projects
Ind	8.980	Oil gauging				

History: Chapter Ind 8 as it existed on August 31, 1971 was repealed and a new chapter Ind 8 was created effective September 1, 1971.

l

1

Ind 8.01 Scope and application. (1) This code applies specifically to flammable and combustible liquids with a flash point below 200° F. There are many liquids which have a flash point above 200° F. and are accordingly exempt from this code. Such liquids, however, involve some degree of hazard, which may be controlled by application of certain provisions of this code, with appropriate modifications. Attention is directed to the fact that some liquids of flash point higher than 200° F. assume the characteristics of lower flash liquids when heated, and under such conditions the department shall apply the provisions of the code to liquids with flash point above 200° F.

(2) Additional requirements may be necessary for the safe storage and use of liquids which have unusual burning characteristics, which are subject to self-ignition when exposed to the air, which are highly reactive with other substances, which are subject to explosive decomposition, or have other special properties which dictate safeguards over and above those specified here.

(3) Notes used in connection with any rules in this code are only intended for explanatory material and not a part of the rule.

(4) The provisions of this code may be modified for experimental and/or research laboratories providing written approval is obtained from the department.

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71.

Ind 8.02 Definitions. (1) AEROSOL shall mean a material which is dispensed from its container as a mist, spray or foam by a propellant under pressure.

(2) APARTMENT HOUSE—see Wis. Adm. Code, Chs. Ind 50-59 [50-64], Building and Heating, Ventilating and Air Conditioning.

(3) APPROVED is defined as being acceptable to the department.

(4) ASPHALT shall include other materials having similar characteristics when heated above ambient temperatures. (See Wis. Adm. Code section Ind 8.951 (3).)

(5) ASSEMBLY OCCUPANCY—see Wis. Adm. Code, Chs. Ind 50-59 [50-64], Building and Heating, Ventilating and Air Conditioning.

(6) ATMOSPHERIC TANK shall mean a storage tank which has been designed to operate at pressures from atmospheric through 0.5 psig.

(7) BAFFLE. A nonliquid tight transverse partition in a cargo tank. Register, October, 1978, No. 274

Flammable and Combustible Liquids

 $\mathbf{2}$

INDUSTRY, LABOR AND HUMAN RELATIONS

(8) BARREL shall mean a volume of 42 U.S. gallons.

(9) BASEMENT—see Wis. Adm. Code, Chs. Ind 50-59 [50-64], Building and Heating, Ventilating and Air Conditioning.

(10) BOILING POINT shall mean the boiling point of a liquid at a pressure of 14.7 psia (760 mm). Where an accurate boiling point is unavailable for the material in question, or for mixtures which do not have a constant boiling point, for purposes of this code the 10% point of a distillation performed in accordance with approved methods Test for Distillation of Petroleum Products, ASTM D-86, may be used as the boiling point of the liquid.

(11) BOIL OVER shall mean the expulsion of crude oil (or certain other liquids) from a burning tank. The light fractions of the crude oil burn off producing a heat wave in the residue, which on reaching a water strata may result in the expulsion of a portion of the contents of the tank in the form of froth.

(12) BULK PLANT shall mean that portion of a property where flammable or combustible liquids are received by tank vessel, pipelines, tank car, or tank vehicle, and are stored or blended in bulk for the purpose of distributing such liquids by tank vessel, pipeline, tank car, tank vehicle or container.

(13) CARGO TANK. Any container or aggregate quantity of containers having a liquid capacity in excess of 100 gallons, used for the carrying of flammable or combustible liquid or asphalt and mounted permanently or otherwise upon a tank vehicle. The term "cargo tank" does not apply to any container used solely for the purpose of supplying fuel for the propulsion of the tank vehicle upon which it is mounted.

(14) CHEMICAL PLANT shall mean a large integrated plant or that portion of such a plant other than a refinery or distillery where flammable or combustible liquids are produced by chemical reactions or used in chemical reactions.

(15) CLOSED CONTAINER shall mean a container as herein defined, so sealed by means of a lid or other device that neither liquid nor vapor will escape from it at ordinary temperatures.

(16) COMPARTMENT. A liquid tight division in a cargo tank.

(17) CONTAINER shall mean any can, barrel, drum or portable tank, except stationary tanks, tank vehicles, and tank cars.

(18) CRUDE PETROLEUM shall mean hydrocarbon mixtures that have a flash point below 150° F. and which have not been processed in a refinery.

(19) DEPARTMENT means the department of industry, labor and human relations.

(20) DISTILLERY shall mean a plant or that portion of a plant where flammable or combustible liquids produced by fermention are concentrated, and where the concentrated products may also be mixed, stored, or packaged.

> Register, October, 1978, No. 274 Flammable and Combustible Liquids

3

(21) DWELLING shall mean a building occupied exclusively for residence purposes and having not more than 2 dwelling units or as a boarding or rooming house serving not more than 2 persons with meals or sleeping accommodations, or both.

(22) DWELLING UNIT shall mean one or more rooms arranged for the use of one or more individuals living together as a single housekeeping unit, with cooking, living, sanitary and sleeping facilities.

(23) EDUCATIONAL OCCUPANCY—see Wisconsin Admin Code, Chs. Ind 50-59 (50-64], Building and Heating, Ventilating and Air Conditioning.

(24) FIRE AREA shall mean an area of a building separated from the remainder of the building by construction having a fire resistance rating of at least one hour and having all communicating openings properly protected by an assembly having a fire resistance rating of at least one hour.

(25) FLAMMABLE AEROSOL shall mean an aerosol which is required to be labeled "Flammable" under the U. S. Federal Hazardous Substances Labeling Act. For the purposes of this code (Ind 8.40) such aerosols are considered Class IA Liquids.

(26) FLASH POINT of the liquid shall mean the temperature at which it gives off vapor sufficient to form an ignitable mixture with the air near the surface of the liquid or within the vessel used as determined by appropriate test procedure and apparatus as specified below.

(a) The flash point of liquids having a viscosity less than 45SSU at 100° F. (37.8° C.) and a flash point below 175° F. (79.4° C.), shall be determined in accordance with the Standard Method of Test for Flash Point by the Tag Closed Tester, ASTM D-56.

(b) The flash point of liquids having a viscosity of 45SSU or more at 100° F. (37.8° C.) or a flash point of 175° F. (79.4° C.) or higher shall be determined in accordance with the Standard Method of Tester for Flash Point by the Pensky-Martens Closed Tester, ASTM D-93.

(27) HEAD AND BULKHEAD. A liquid tight transverse closure at the end of a cargo tank or between compartments of a cargo tank.

(28) HOTEL shall mean buildings or groups of buildings, not dwellings, under the same management in which there are sleeping accommodations for hire, primarily used by transients who are lodged with or without meals, including but not limited to inns, clubs, motels and apartment hotels.

(29) INSTITUTIONAL OCCUPANCY—see Wisconsin Adm. Code, Chs. Ind 50-59 [50-64], Building and Heating, Ventilating and Air Conditioning.

l

(30) LIQUID shall mean, for the purpose of this code, any material which has a fluidity greater than that of 300 penetration asphalt when tested in accordance with Test for Penetration for Bituminous Materials, ASTM D-5. When not otherwise identified, the term liquid shall include both flammable and combustible liquids.

(a) Combustible liquids shall mean any liquid having a flash point at or above 140° F. (60° C.), and shall be known as class III liquids. Class IIIA shall include those having flash points at or above 140° F. (60° C.) Register, October, 1978, No. 274

Flammable and Combustible Liquids

4

and below 200° F. (93.4° C.). Class IIIB shall include those having flash points at or above 200° F. (93.4° C.).

1. This code does not cover class IIIB liquids (see Ind. 8.01 (1)). Where the term combustible liquids or class III liquids is used in this code, it shall mean only class IIIA liquids.

(b) FLAMMABLE LIQUIDS shall mean any liquid having a flash point below 140° F. and having a vapor pressure not exceeding 40 psia at 100° F. Flammable liquids shall be divided into 2 classes of liquids as follows:

1. Class I liquids shall include those having flash points below 100° F. and may be subdivided as follows:

a. Class IA shall include those having flash points below 73° F. and having a boiling point below 100° F.

b. Class IB shall include those having flash points below 73° F. and having a boiling point at or above 100° F.

c. Class IC shall include those having flash points at or above 73° F. and below 100° F.

2. Class II liquids shall include those having flash points at or above 100° F. and below 140° F.

(c) Stable Liquid. Normally stable liquids are those having the relative capacity to resist changes in their chemical composition which would produce violent reactions or detonations despite exposure to air, water, heat, including the normal range of conditions encountered in handling, storage, or transportation.

(d) Unstable (reactive) liquid shall mean a liquid which in the pure state or as commercially produced or transported will vigorously polymerize, decompose, condense or will become self-reactive under conditions of shock, pressure or temperature.

(31) KEY OPERATED DISPENSING DEVICE is a refueling device designed for purpose of restricting its use to authorized personnel only. For purposes of this code, the device must be provided with gallonage totalizer panel and made operable by use of a special key or keys issued only to authorized personnel. Further, the keys are to be only obtainable from the manufacturer of the device. The device is not intended for sale of petroleum products unless it includes a monetary totalizer.

(32) LOW-PRESSURE TANK shall mean a storage tank which has been designed to operate at pressures above 0.5 psig but not more than 15 psig.

(33) MARINE SERVICE STATION shall mean that portion of a property where flammable or combustible liquids used as fuels are stored and dispensed from fixed equipment on shore, piers, wharves, or floating docks into the fuel tanks of self-propelled craft and shall include all facilities used in connection therewith.

(34) MERCANTILE OCCUPANCY shall mean the occupancy or use of a building or structure or any portion thereof for the displaying, selling, or buying of goods, wares or merchandise.

(35) NFPA means the national fire protection association.

Ĺ

Register, October, 1978, No. 274 Flammable and Combustible Liquids

-5

(36) OFFICE OCCUPANCY shall mean the occupancy or use of a building or structure or any portion thereof for the transaction of business, or the rendering or receiving of professional services.

(37) OWNER shall be as defined in chapter 101, Wis. Stats. (Also see "Place of Employment" or "Public Building.")

(38) PLACE OF EMPLOYMENT as referred to in definition of owner shall, for purposes of this code, include any location within the jurisdiction of this department stated in chapter 101, Wis. Stats. at which flammable and combustible liquid tanks, their products and attached pumping systems are considered to be integral and indispensable parts of the place of employment or public building.

(39) PUBLIC BUILDING shall be as defined in chapter 101, Wis. Stats.

(40) PORTABLE TANKS shall mean a closed container having a liquid capacity over 60 U. S. gallons and not intended for fixed installations.

(41) PIPING SYSTEMS consist of pipe, tubing, flanges, bolting, gaskets, valves, fittings, the pressure containing parts of other components such as expansion, joints and strainers, and devices which serve such purposes as mixing, separating, snubbing, distributing, metering or controlling flow.

(42) PRESSURE VESSEL shall mean a storage tank or vessel which has been designed to operate at pressures above 15 psig.

(43) PROTECTION FROM EXPOSURES shall mean fire protection for structures on property adjacent to tanks. When acceptable to the department of industry, labor and human relations such structures located 1) within the jurisdiction of any fire department or 2) within or adjacent to plants having private fire brigades shall be considered as having adequate protection for exposures.

(44) PUBLIC WAY shall mean public thoroughfare, dedicated alley, railroad right-of-way or waterway.

(45) REFINERY shall mean a plant in which flammable or combustible liquids are produced on a commercial scale from crude petroleum, natural gasoline or other hydrocarbon sources.

(46) SAFETY CAN shall mean an approved container, of not more than 6 gallons capacity, having a spring closing lid and spout cover and so designed that it will safely relieve internal pressure when subjected to fire exposure.

(47) SELF-SERVICE STATION shall mean that portion of property where flammable or combustible liquids used as motor fuels are stored, and where the fuel is dispensed by the general public into the fuel tanks of motor vehicles or into approved containers by the use of automatic dispensing units.

Note: See section Ind 8.72 (3) for automatic dispensing units.

(48) SERVICE STATION shall mean that portion of property where flammable or combustible liquids used as motor fuels are stored and dispensed from fixed equipment into the fuel tanks of motor vehicles and Register, October, 1978, No. 274

Flammable and Combustible Liquids

6

shall include any facilities available for the sale and service of tires, batteries and accessories, and for minor automotive maintenance work. Major automotive repairs, painting, body and fender work are excluded.

(49) TANK FULL TRAILER. Any vehicle with or without auxiliary motive power, equipped with a cargo tank mounted thereon or built as an integral part thereof, and used for the transportation of flammable and combustible liquids or asphalt so constructed that practically all of its weight and load rests on its own wheels.

(50) TANK SEMITRAILER. Any vehicle with or without auxiliary motive power, equipped with a cargo tank mounted thereon or built as an integral part thereof, and used for the transportation of flammable and combustible liquids or asphalt so constructed that when drawn by a tractor by means of a fifth wheel connection, some part of its load and weight rests upon the towing vehicle.

(51) TANK TRUCK. Any single self-propelled motor vehicle equipped with a cargo tank mounted there on and used for the transportation of flammable and combustible liquids or asphalt.

(52) TANK VEHICLE. Any tank truck, tank full trailer, or tractor and tank semitrailer combination.

(53) VAPOR PRESSURE shall mean the pressure, measured in pounds per square inch (absolute) exerted by a volatile liquid as determined by the Standard Method of Test for Vapor Pressure of Petroleum Product (Reid Method) ASTM D-323.

(54) VENTILATION as specified in this code is for the prevention of fire and explosion.

Note: The above standards may be obtained for personal use from American Society of Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19103. The standards are available for inspection in the office of the department, the secretary of state and the revisor of statutes.

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71; renum. (47) through (53) to be (48) through (54) and cr. (47), Register, September, 1972, No. 201, eff. 10-1-72.

Ind 8.03 Adopted standard specifications. (1) The following list of standard specifications of American Society for Testing and Materials have been adopted as part of this code.

(a) Fire Tests of Building Construction and Materials. Part 14 ASTM designation E119-69.

(b) Specifications for Aluminum-Alloy Sheet and Plate. Part 6 ASTM designation B209-70.

(c) Specifications for Ferretic Ductile Iron Castings for Valves, Flanges, Pipe Fittings, and other Piping Components. Part 2 ASTM designation A445-66.

(d) Distillation of Petroleum Products. Part 11, 17 and 20 ASTM designation D86-67.

(e) Flash Point by Tag Closed Tester. Part 17 and 20 ASTM designation D56-70.

(f) Flash Point by Pensky-Martens Closed Tester. Part 11, 16, 17 and 20 ASTM designation D93-66.

(g) Penetraton of Bituminous Materials. Part 11 ASTM designation D5-65.

(h) Vapor Pressure of Petroleum Products (Reid Method). Part 17 and 29 ASTM designation D323-58 (reapproved 1968).

Note: The above standards may be obtained for personal use from American Society of Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19103. The standards are available for inspection in the office of the department, the secretary of state and the revisor of statutes.

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71.

8

Ind 8.04 Enforcement. The regulations in this code will be enforced by the department and its authorized agents under the procedure prescribed in chapter 101, Wis. Stats., and by all local officials or bodies having jurisdiction to approve plans or specifications or issue permits for construction, alterations or installations within the purview of this code or having authority to investigate and eliminate related fire hazards.

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71.

Ind 8.05 Inspections. (1) The authorized inspectors of the department, upon presenting appropriate credentials to the owner, operator, or agent in charge, are authorized—

(a) To enter without delay and at reasonable times any factory, plant, establishment, construction site, or other area, workplace or environment where work is performed by an employe of an employer; and

(b) To inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, any such place of employment and all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials therein, and to question privately any such employer, owner, operator, agent or employe.

(2) The inspector before making an inspection shall contact a representative of the employer and a representative authorized by the employes who shall be given an opportunity to accompany the inspector during the physical inspection of any workplace under subsection (1) for the purpose of aiding such inspection.

(a) Where there is no authorized employe representative, the inspector shall consult with a reasonable number of employes concerning matters of health and safety in the workplace.

ł

Note: The department policy is not to give advance notice, but in the scheduling and in the act of inspecting it may not always be possible to avoid advance notice or to obtain accompaniment as, for example, inside boilers or in precarious locations of elevator installations, but otherwise these rules will be diligently observed.

History: Cr. Register, April, 1973, No. 208, eff. 5-1-73;am. (2) (intro), Register, October, 1978, No. 274, eff. 11-1-78.

INDUSTRY, LABOR AND HUMAN RELATIONS

STORAGE, HANDLING AND USE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS

GENERAL PROVISIONS

Ind 8.10 Application. (1) All persons, firms, corporations, copartnerships, voluntary associations and governmental agencies except federal, storing, handling or using flammable or combustible liquids are subject to the provisions of Wisconsin Adm. Code, chapter Ind 8.

(2) Sections Ind 8.10 through 8.93 do not apply to transportation of flammable or combustible liquids in bulk, nor to transportation in conformity with regulations of or on file with the U. S. department of transportation (formerly I.C.C.). (See section Ind 8.950, vehicle cargo tanks for flammable and combustible liquids.)

(a) Except to the extent specifically provided for, sections Ind 8.10 through Ind 8.93 apply to oil burning equipment. (See section Ind 8.970 for oil burning equipment regulations.)

(3) Ind 8.10 through Ind 8.93 does not apply to:

(a) Liquids without flash points that may be flammable under some conditions, such as certain halogenated hydrocarbons and mixtures containing halogenated hydrocarbons.

(b) Mists, sprays or foams except flammable aerosols in containers are included in section Ind 8.40.

(4) Insofar as sections Ind 8.10 through Ind 8.957 cover operational practices or use of containers, they shall apply and be enforced as to all plants, stations, establishments and facilities, wherein or whereon flammable or combustible liquids are stored, handled or used, whether existing and in service prior to the effective date of this code or subsequently established or placed in service. Rules covering physical installations shall apply to all plants, stations, establishments and facilities erected or installed or first devoted to flammable or combustible liquid storage, handling, or use on or after the effective date of these rules and, to the extent specifically provided for or to the extent necessary to eliminate any distinct hazard to life or adjoining property, shall apply to establishments and facilities existing and devoted to storage, handling or use of flammable or combustible liquid prior to the effective date of these rules. For purposes of section Ind 8.10, nonconformity with the rules existing as of the effective date thereof.

(a) With respect to vents or pressure relief devices on tanks, contol valves on tanks or in piping systems, ventilation or sources of ignition shall be deemed distinctly hazardous and shall be corrected or eliminated provided however that vents or pressure relief devices on tanks prior to effective date of this code and meeting the size requirements of February 1962, Wisconsin flammable and combustible liquids code may be allowed to continue.

(5) At any plant, station or establishment existing and devoted to flammable or combustible liquid use as of the effective date of these rules, existing nonconformity and continuance of which is allowed under sections Ind 8.10 (1), (2) and (3) shall not prevent the installation of

Register, October, 1978, No. 274 Flammable and Combustible Liquids

-9

additional or replacement facilities which in and of themselves are in conformity with these rules.

(6) Where, under sections Ind. 810 to Ind 8.957, the application of a requirement to an establishment or facility is conditioned upon a determination of whether the continuance of a nonconformity existing as of the effective date of these rules will or will not constitute a distinct hazard, then before any determination is made or order issued on the premises, the owner of the establishment or facility to be affected shall be given an opportunity to be heard with at least 10 days written notice of time and place. In the evaluation, due consideration shall be given to all existing protection and fire safety devices and the extent to which they eliminate or modify the need or hazard.

ſ

(7) Where required correction or elimination of existing nonconformity necessitates the obtaining and installation of additional devices or structural protection or the emptying or temporary nonuse of one or more facilities a reasonable time, considering the amount of work to be done, the availability of materials, and the need for continued operation of the facility, shall be allowed therefor. Provided that when work involving reconstruction or modernization of storage facilities is undertaken at a location then any required elimination or correction of nonconformity thereat shall be made in the course of such work. Provided, further, however, that where practical difficulties are encountered in accomplishing required elimination of nonconformity at any location, an extension or further extension beyond the time specified in any order therefor may be obtained upon written application to the department setting forth supporting facts.

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71.

Ind 8.12 Approval of proposed construction, installation or operation. (1) Except as otherwise provided in subsection (1) (c), before any construction of new or additional installation or change in operation of a previously approved installation for the storage, handling or use of flammable or combustible liquids is undertaken, written approval and/ or approved plans shall be obtained from the department.

(a) If the installation to be undertaken is one in which one or more tanks for storage, handing, or use of flammable or combustible liquid will have individual capacity of 8,000 gallons or larger; full information in writing, with plans consisting of prints of drawings made to scale, shall be submitted at least in triplicate and the approval of the department obtained.

(b) If the installation to be undertaken is one in which all tanks for storage, handling, or use of flammable or combustible liquid will have an individual capacity of less than 8,000 gallons, the approval in writing of the chief of the local fire department shall be obtained except that if by local ordinance another official is empowered to issue permits or approve plans for the proposed flammable or combustible liquid installations, the approval of the local official shall be obtained. If the installation is not within a governmental subdivision having an organized fire department or an official designated by local ordinance as aforesaid, the approval of the department shall be obtained.

1. Exception. Permits for oil burning installations are excluded for one and 2 family residences. Also, aboveground tanks of 300 gallon capacity or less located on farms are excluded from these requirements.

(c) The local official having approval jurisdiction under section Ind 8.12 shall require an application form SB-9 and that the proposed installation comply with the applicable requirements of these regulations as written or as modified by the department, and if the information submitted with the application shows compliance, the local official shall issue approval in writing. In the event of a dispute as to whether the information submitted shows compliance as aforesaid, it shall be submitted to the department and the decision of the department shall control.

(d) Form SB-9—Application for Installation Bulk Storage Flammable or Combustible Liquid Tanks is furnished by the Department of Industry, Labor and Human Relations; Division of Industrial Safety and Buildings, P. O. Box 2209, Madison, Wisconsin 53701.

Note: The correct address is Department of Industry, Labor and Human Relations; Division of Safety and Buildings, P.O. Box 7969, Madison, Wisconsin 53707.

(e) Change of operation from that of a general service station to that of a self-service station, in part or in total, shall be approved by the department before commencing such operation.

Note: Also see requirements of sections Ind. 8.12 (2) (c) and Ind. 8.72 (3).

(2) The submitted information or plans shall show the following:

(a) The name of the person, firm or corporation proposing the construction or installation, the location thereof and the adjacent streets and highways.

(b) For bulk plants, the plans shall show, in addition to any applicable features required under subsections (2) (d) and (e), the plot of ground to be utilized and its immediate surroundings and property lines on all sides, layout of buildings, tanks, loading and unloading docks, type of construction of each building and the type and location of ventilation in pump houses.

(c) Plans for general service stations and self-service stations shall be submitted to the department or its authorized representatives as required by chapters Ind 50-59 [50-64]—Building and Heating, Ventilating and Air Conditioning.

1. General service stations being converted to self-service operation, in part or in total, shall require approval before such change in operation.

Note#1: For installation of new equipment at existing stations-see subsection (3).

Note#2: Buildings converted for use as a service station—see sub section (1) and Wisconsin Adm. Code, chapters 50-64, Building and Heating, Ventilating and Air Conditioning.

Note #3: Plans for service stations involving use of automatic dispensing units should indicate location of emergency controls—see subsection Ind 8.72 (3).

(d) For aboveground storage, the information or plans shall show the location, size and capacity of each tank, the class of liquid to be stored in each tank, the type of tank supports, the clearances as covered in subsections Ind 8.21 (1) and (2); type type of venting and pressure relief upon and the combined capacity of all venting and pressure relief valves on

each tank, as covered in section Ind 8.21 (3) and (5), the location of any stream or body of water within 150 feet of the tanks.

(e) For underground storage, the information or plans shall show the location and capacity of each tank, class of liquid to be stored therein, together with the clearances, location of fill, guage and vent pipes, and openings, as covered in section Ind 8.22.

(f) For installation of storage, handling or use of flammable or combustible liquids within buildings or enclosures at an establishment or occupancy covered in sections Ind 8.10 through 8.957, the information and plans shall be in such detail as will show whether applicable requirements are to be met.

(g) For oil burning equipment and incidental storage, covered in sections Ind 8.970 through Ind 8.986, the information and plans shall show the relative location of burners, tanks, pumps, piping and control valves as well as the elevations of buildings and their lowest floors or pits in relation to the proposed installation.

(3) Exceptions. Approval of plans shall not be required for installation of the following:

(a) Replacement with approved equipment at approved existing facilities other than storage tanks.

Note: See sections Ind 8.12 (1) (e) and (2) (c) for exceptions.

(b) Class II and class III flammable or combustible liquid tanks of a capacity not exceeding 275 gallons, each appurtenant to the heating of any building.

(c) Container of a capacity not in excess of 60 gallons each.

(d) Fuel supply tanks of a motor vehicle, aircraft, watercraft, mobile power plant or mobile heating plant.

(4) Approval of plans as to the compliance with the requirements of this section covers only the uniform statewide fire safety and technical controls of storage, handling and use of flammable and combustible liquids and is subject to compliance by applicant with other requirements in applicable building codes, local zoning, and similar ordinances.

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71; r. and recr. (1) (intro. par.); cr. (1) (e), r. and recr. (2) (c), Register, September, 1972, No. 201, eff. 10-1-72; am. (1) (b) (intro.) and (c), Register, October, 1978, No. 274, eff. 11-1-78.

Ind 8.13 Inspection before covering installations. (1) Before an installation, for which approval of plans is required, is covered from sight, the installer shall notify in writing the official having authority under this code or local ordinance to approve plans or issue permits for flammable or combustible liquid installations. The local official shall within 48 hours after receipt of the notice inpect the installation and give written approval or disapproval. If the local official fails to make this inspection within the time specified, the installation may be covered.

i

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71; am. (1), Register, October, 1978, No. 274, eff. 11-1-78.

Ind 8.14 General provisions for sale, purchase, dispensing or use of flammable liquids. (1) Labeling. No sale or purchase of any class I,

II or III liquids shall be made in containers unless such contaners are clearly marked with the name of the product contained therein.

Note: Also see subsection Ind 8.40 (2).

(2) A class I flammable liquid when used in starting an enginge or as fuel for a small heating appliance, lighting appliance, power tool or gasoline engine shall be dispensed only from an approved, properly identified safety can or screwed cover spout can approved for that specific use.

(a) Except as permitted under specific regulations, a class I flammable liquid shall not be dispensed into the fuel supply tank of any type internal combustion engine while the engine is running.

(b) Repair and maintenance work involving a possible source of ignition shall not be performed in a room or area containing or likely to contain an ignitable mixture of hydrocarbon vapors and air.

(c) A class I flammable liquid shall not be used for degreasing or cleaning any engine, machine, equipment or part thereof, or for cleaning a floor, pit, or any part of a building or premises. See section Ind 8.52, 8.54 and 8.70 (1) (e).

1. Industrial processes requiring usse of class I flammable liquid for degreasing or cleaning any engine, machine or part thereof shall be designed to incorporate a ventilation system to reduce vapor concentration below safe fire and explosive limits.

(d) Clothing saturated wih a class I or II flammable liquid shall not be worn longer than the time required for removal and shall not be worn or taken into a building where a source of ignition exists.

(e) Except as permitted under specific regulations, class I flammable liquids shall not be dispensed from a tank vehicle into the fuel supply tank of any type of internal combustion engine.

(3) No dispensing of any liquids having a flash point of less than 110° F. shall be made into portable containers or portable tanks unless that such container or tank is substantially a bright red color, bears a U. L. label or is constructed of metal having a tight closure with screwed or spring cover, and is fitted with a spout or so designed that the contents can be poured without spilling.

(a) No kerosene, fuel oil or similar liquids having a flash point of 110° F. or more shall be filled into any portable container or portable tank colored red.

Note: Also see section 168.11, Wis. Stats.

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71.

Ind 8.15 Race track fueling stations. (1) Tanks of racing vehicles shall be filled from safety cans, or pumps, or approved systems or approved containers as provided by sections Ind 8.72 (3) (c) through (e). During a race in which a vehicle is competing it may be refueled while its engine is running. Signs prohibiting smoking in fueling areas shall be posted and an approved fire extinguisher of at least 8B classificiation shall be provided at each fueling location.

History: Cr. Register, August, 1971, No. 188, eff. 9-1-71.

Ind 8.16 Motor vehicle exhibition. (1) Vehicles with internal combustion engines may be exhibited in buildings classified under Wisconsin Adm. Code, chapters 50-59, [50-64] Building and Heating, Ventilating and Air Conditioning providing the following requirements are satisfied: These requirements are not applicable to places where such vehicles are normally sold and/or serviced.

(a) A specific area shall be designated for display of such vehicles.(b) The vehicles shall not be displayed in any required passageway, corridor or exit way leading to an exit.

(c) The vehicle engine shall not be started or run while the building is occupied by the general public.

1. Vehicle may be driven in and out of the building under its own power but only when the building is not occupied by the general public.

(d) The fuel supply in tanks shall be limited to not more than one gallon of fuel per vehicle when entering the building.

1. When it is necessary to drain the excess fuel from the tank, the operation shall take place outside of the building.

(e) The gas fill cap shall be of a lock type or the cap shall be securely taped with a material that is not soluble in a petroleum fuel.

(f) The fuel line between fuel tank and fuel pump shall be disconnected and the engine operated until the carburetor is emptied of fuel.

1. The fuel line shall then be reconnected.

(d) an of the second s second sec

(1) Particle and the second second

and the set of the form of the set The set of the set

and the second second

(

t

 $(1 - 1)^{-1} = (1 -$

الم مركز المركز معلم المركز المركز