

(5) **DISPENSING CONTAINERS.** No delivery of any class I or class II flammable liquids shall be made into portable containers of 5 gallons capacity or less unless the container is of sound metal construction, has 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.

(6) **ATTENDANCE OF SUPERVISION OF DISPENSING.** (a) Each service station open to the public shall have an attendant or supervisor on duty whenever the station is open for business. The attendant shall supervise individual dispensing devices except as provided in section Ind 8.63 (4).

(b) Service stations not accessible to or open to the public do not require an attendant or supervisor. Such station shall be used only by commercial, industrial or manufacturing establishments.

History: Cr. Register, May, 1959, No. 41, eff. 6-1-59; am. (1) (a) and cr. (1) (d), Register, December, 1960, No. 60, eff. 1-1-61; am. (1) (c), Register, February, 1962, No. 74, eff. 3-1-62; cr. (6), Register, December, 1969, No. 168, eff. 1-1-70.

Ind 8.63 Dispensing systems. (1) **LOCATION.** Dispensing devices at automotive service stations shall be so located that all parts of the vehicle being served will be on the premises of the service station.

(a) *Inside location.* Approved dispensing units may be located inside garages upon specific approval of the industrial commission. The dispensing area shall be separated from motor vehicle repair areas in a manner approved by the industrial commission. The dispensing unit shall be protected against physical damage from vehicles by mounting on a concrete island or by equivalent means and shall be located in a position where it cannot be struck by a vehicle descending a ramp or other slope out of control. The dispensing area shall be provided with an approved mechanical or gravity ventilation system. A clearly identified switch readily accessible in case of fire or physical damage to any dispensing unit, shall be provided to shut off the power to dispensing units. When dispensing units are located below grade only approved mechanical ventilation shall be used and the entire dispensing area shall be protected by an approved automatic sprinkler system.

(2) **DISPENSING UNITS.** (a) Class I and class II flammable liquids shall be transferred from underground tanks by means of fixed pumps so designed and equipped as to allow control of the flow and to prevent leakage or accidental discharge. Class I or class II flammable liquids shall not be transferred from any storage tank by any equipment or procedure which subjects the shell of the storage tank to pressures above its allowable working pressure. Air or gas pressure shall not be used for this purpose.

(b) Supplemental means shall be provided outside of the dispensing device whereby the source of power may be readily disconnected in the event of fire or other accident.

(c) Dispensing devices for class I or class II flammable liquids shall be of approved type. Devices listed by Underwriters' Laboratories shall be deemed to be in compliance with this section.

(d) Class I or class II flammable liquids shall not be dispensed by pressure or gravity from drums, barrels, and similar containers. Gear pumps or similar positive displacement devices taking suction through the top of the container shall be used.

(e) *Self-service*. Only owners, operators, or trained employees shall dispense gasoline to the general public, except that the commission may approve self-service if construction and supervision standards are as outlined in section Ind 8.63 (4).

1. Approval of the department must be obtained for all service stations to be converted to self-service and all newly constructed self-service stations. Applicants must submit full information and plans in triplicate.

(3) REMOTE PUMPING SYSTEMS. (a) *Scope*. This section shall apply to systems for dispensing class I flammable liquid to the fuel tanks of motor vehicles at automotive service stations where such liquid is transferred from underground storage to individual or multiple dispensing units by pumps located elsewhere than at the dispensing units.

(b) *Pumps*. Pumps shall be designed or equipped so that no part of the system will be subjected to pressures above its allowable working pressure. Pumps installed above grade, outside of buildings, shall be located not less than 10 feet from lines of adjoining property which may be built upon, and not less than 5 feet from any building opening. When an outside pump location is impractical, pumps may be installed inside of garages as provided for dispensers in section Ind 8.63 (1) (a), or in pits as provided in section Ind 8.63 (3) (c). Pumps shall be substantially anchored and protected against physical damage by vehicles.

(c) *Pits*. Pits for subsurface pumps or piping manifolds of submersible pumps shall withstand the external forces to which they may be subjected without damage to the pump, tank, or piping. The pit shall be no larger than necessary for inspection and maintenance and shall be provided with a tight fitting cover.

(d) *Controls*. 1. A control shall be provided that will permit the pump to operate only when a dispensing nozzle is removed from its bracket on the dispensing unit and the switch on this dispensing unit is manually actuated. This control shall also stop the pump when all nozzles have been returned to their brackets.

2. There shall be a means, visible from the operating area, to indicate when the pump motor is running.

3. A clearly identified switch, readily accessible in case of fire or physical damage at any dispensing unit, shall be provided to shut off the power to the pump motors.

4. An approved automatic device shall be provided at each dispensing unit that will stop the flow of fuel at the dispensing unit in case of fire or physical damage to the dispensing unit.

(e) *Testing*. After the completion of the installation including any paving, that section of the pressure piping system between the pump discharge and the connection for the dispensing facility shall be tested for at least 30 minutes at a pressure 50% above the maximum operating pressure.

(4) AUTOMATIC DISPENSING UNITS. (a) Underwriters' Laboratories approved special dispensing devices such as, but not limited to, money operated, card operated, and remote preset types are permitted at self-service stations, provided that dispensing of class I liquids is under the observation of an authorized attendant at all times and provided that emergency controls are clearly identified, easily acces-

sible and located within 15 feet of the attendant's control station. Instructions for operation of dispensing devices shall be conspicuously posted.

(b) The observation and control of the special dispensing devices shall be the sole function of the attendant. The attendant shall be regularly instructed in all appropriate regulations pertaining to dispensing, use of approved containers, and smoking restrictions.

(c) A reliable 2-way communication system shall be installed between the attendant's observation station and each set of pumps or island.

(5) **DELIVERY NOZZLES.** (a) Hose nozzle valves of either the manual or automatic-closing type for dispensing class I liquids into a fuel tank or into a container shall be manually held open during the dispensing operation except as provided in paragraph (5) (b).

(b) On any service station dispenser accessible to the public a listed automatic-closing type nozzle with latch-open device is permitted only when all dispensing of class I liquids is to be done by the service station attendant.

(c) If the dispensing of class I liquids at a self-service station available and open to the public is to be done by a person other than the service station attendant, the nozzle shall be a listed automatic-closing type without a latch-open device.

(6) **MARINE SERVICE STATIONS.** (a) Tanks and pumps, other than those integral with approved dispensing units, supplying class I or class II flammable liquids at marine service stations shall be located only on shore, or upon express permission of the authority having jurisdiction on a pier of solid-fill type. Approved dispensing units with or without integral pumps may be located on shore, piers of solid-fill type, open piers, wharves or floating docks.

(b) Class I or class II flammable liquids shall be dispensed into fuel tanks of marine craft from safety cans, or by means of a hose, equipped with a self-closing nozzle and with a valve which must be held open by manual control while making a delivery.

(c) Tanks and pumps supplying class III flammable liquids at marine service stations may be located on shore, on a pier of solid-fill type or on open piers, wharves or floating docks. Class III flammable liquid tanks which are located other than on shore or on piers of the solid-fill type shall be limited to 550 gallons aggregate capacity. Pumps not a part of the dispensing unit shall be located adjacent to the tanks.

(d) Pipelines attached to piers, wharves or floating docks shall be protected against physical damage. A readily accessible valve to shut off the supply from shore shall be provided in each pipe line at or near the approach to the pier, wharf or floating dock.

(e) Pipe lines to floating docks shall be so designed and installed as to make appropriate provision for changes in water level or tide. Transition from the fixed portion of the installation to the floating unit shall provide product control, flexibility, and protection against physical damage.

History: Cr. Register, May, 1959, No. 41, eff. 6-1-59; (7) renum. to be Ind. 8.15 and am. Register, December, 1960, No. 60, eff. 1-1-61; r. and recr. (4), Register, December, 1967, No. 144, eff. 1-1-68; r. and recr. (4), Register, June, 1968, No. 150, eff. 7-1-68; am. (2) (a), cr. (2) (e), r. and recr. (4) and (5), Register, December, 1969, No. 168, eff. 1-1-70.

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Flammable Liquids

Ind 8.64 Electrical equipment. All electrical equipment and wiring, including lighting fixtures, and motors and switch gear for pumps handling Class I or Class II flammable liquids and located where flammable vapors may accumulate, shall be designed and installed so as not to create an ignition hazard.

Note: The Wisconsin state electrical code provides information on the design and installation of electrical equipment for hazardous locations.

History: Cr. Register, May, 1959, No. 41, eff. 6-1-59.

Ind 8.65 Drainage and waste disposal. Provision shall be made in the area where Class I flammable liquids may be spilled to prevent liquids from flowing into interior of service station buildings. Such provision may be by grading driveway, raising door sills, or other equally effective means. Crankcase drainings and flammable liquids shall not be dumped into sewers but shall be stored in underground tanks, or tight drums not exceeding 55 gallons individual capacity outside of any building until removed from the premises. Not to exceed 110 gallons of crankcase drainage shall be stored above ground.

History: Cr. Register, May, 1959, No. 41, eff. 6-1-59.

Ind 8.66 Sources of ignition. There shall be no smoking on the driveway of service stations in the area used for fueling motor vehicles, dispensing flammable antifreeze or the receipt of products by tank vehicles, or in those portions of the building used for servicing automobiles, tractors, or internal combustion engines. Conspicuous signs prohibiting smoking shall be posted within sight of the customer being served. Letters on such signs shall be not less than 4 inches high. The motors of all vehicles being fueled shall be shut off during the fueling operation.

History: Cr. Register, May, 1959, No. 41, eff. 6-1-59.