

## **FUEL OIL**

### **Act 319 of 1929**

AN ACT to regulate the use, handling, storage and sale of fuel oil, and the arrangement, design, construction and installation of burners, tanks and other equipment for the burning of fuel oil for heating purposes in cities and villages adopting the provisions of this act.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929.

*The People of the State of Michigan enact:*

#### **125.551 Fuel oil; adoption of act; scope of act restricted.**

Sec. 1. This act shall be in force and effect in cities and villages that, by a majority vote of the legislative body of the city or village, adopt its provisions. This act as it relates to the storage, handling, and sale of fuel oil applies only to the use of fuel oil for oil burners as specified in this act.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2608;—CL 1948, 125.551;—Am. 1991, Act 43, Imd. Eff. June 27, 1991.

#### **125.552 Fuel oil; definitions.**

Sec. 2. For the purposes of this act:

(a) "Fuel oil" means any liquid as specified by the American standard of testing materials D-396-89A (1989) and used as fuel that has a flash point of not less than 100 degrees Fahrenheit.

(b) "Fuel oil burners" means any device, including burners, motors, piping, valves, and other equipment designed and arranged for the purpose of burning fuel oil for heating purposes.

(c) "Tank" means any container for fuel oil, having a capacity of more than 25 gallons and directly or indirectly connected with fuel oil burners.

(d) "Auxiliary tank" means any tank that has a capacity that does not exceed 60 gallons and is between the storage tank and the burner that delivers oil by gravity or pressure to the fuel oil burner or blower.

(e) "Storage tank" means any tank for the storage of oil, connected through an approved means of suction feed, directly to the fuel oil burner or indirectly connected to the fuel oil burner through approved auxiliary tank.

(f) "Department of buildings and safety engineering" means the department of buildings and safety engineering of a city or village, or another department designated by the legislative body of a city or village.

(g) "Bureau of safety engineering" means the bureau of safety engineering of the department of buildings and safety engineering of a city or village, or another bureau designated by the legislative body of a city or village.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2609;—CL 1948, 125.552;—Am. 1991, Act 43, Imd. Eff. June 27, 1991.

#### **125.553 Installation permit; temporary tag; inspection; existing plants; fees.**

Sec. 3. Before any fuel oil burners, tanks and other equipment pertaining thereto shall be installed within such city, the owner of such premises or his agent, shall obtain from the permit department of the department of buildings and safety engineering, a permit for the installation of such fuel oil burners and equipment and for the storage and use of fuel oil for the operation thereof. Upon issuing such permit the said department shall issue therewith a temporary tag to be attached to the fill pipe of the tank of such equipment until the bureau of safety engineering shall cause such equipment to be inspected, and if found to conform with this act, a permanent metal tag, properly numbered, shall be affixed by the inspector. The owners or occupants of premises on which fuel oil burners have been installed previous to the date on which this act becomes effective shall obtain from the department of buildings and safety engineering within 6 months thereafter a permit for the storage and use of fuel oil for the operation thereof. Such permits shall be issued by the department of buildings and safety engineering when such fuel oil burners shall have been inspected by the bureau of safety engineering and found to be reasonably safe. The fees for permits required under the provisions hereof shall be designated by the board of rules.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2610;—CL 1948, 125.553.

#### **125.554 Prohibited furnishing of fuel oil.**

Sec. 4. No person or persons, firm or corporation, shall supply with fuel oil any tanks or containers for fuel oil burners unless such fuel oil burners and equipment shall have been approved as provided herein and permit tag attached to the filler pipe of such tank or containers in the manner herein specified.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2611;—CL 1948, 125.554.

#### **125.555 Flash point; tester; mixing or blending; waste oil.**

Sec. 5. Fuel oil or any other oil or liquid used for equipment installed under this act shall have a flash point of not less than 100 degrees Fahrenheit as determined by an appropriate closed cup tester method specified in the American standards of testing materials standard for fuel oil. In determining the flash point of oil, a tester as required by the department of buildings and safety engineering shall be authoritative. Fuel oil shall not be mixed or blended except at a storage plant under competent supervision, and waste oil shall not be used except with the approval of the bureau of safety engineering.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2612;—CL 1948, 125.555;—Am. 1991, Act 43, Imd. Eff. June 27, 1991.

#### **125.556 Scope of tests.**

Sec. 6. The tests and investigations made by the department of buildings and safety engineering shall cover arrangement of parts, suitability of material, strength of parts, electrical control, thermostatic arrangement, sensitiveness of automatic features, positiveness of ignition, safeguards against flooding, possibilities of explosion and hydrostatic or air pressure testing of storage tanks.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2613;—CL 1948, 125.556.

#### **125.557 Oil burners; equipment.**

Sec. 7. Oil burners shall be equipped with such approved device, mechanical or electrical, which will automatically prevent the overflowing or flooding of the burner. Burners shall be designed to prevent excessive carbonization and shall be securely attached and supported.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2614;—CL 1948, 125.557.

#### **125.558 Oil burners; automatic ignition.**

Sec. 8. All burners subject to automatic ignition must be provided with permanent automatic device, so designed that oil, upon being turned into the combustion chamber, will become ignited or automatically shut off.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2615;—CL 1948, 125.558.

#### **125.559 Pipes; joints; valves; packing gland.**

Sec. 9. Standard full weight wrought iron, galvanized iron or steel or copper pipe, shall be used throughout. Underground piping shall be galvanized or copper or brass. The supply pipe or pipes shall be not less than 1/4 inch in diameter. Unions shall be ground type with conical seating with faces of metal. Flanged or packed joints shall not be used. Valves shall be constructed so that the stem cannot be withdrawn by continual operation of hand wheel. The packing gland shall be provided with a separate shouldered unthreaded follower having a beveled contact space for the compression of the packing. All threaded joints shall be made with glycerine and litharge, or shellac, or other approved compound. All pipes shall be rigidly supported and protected against mechanical injury. Gas supply pipes must be provided with shut-off valves.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2616;—CL 1948, 125.559.

#### **125.560 Electrical installations.**

Sec. 10. Electrical installations used in connection with oil burning devices shall be installed in accordance with the rules adopted by such city and be inspected and approved by the department of buildings and safety engineering.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2617;—CL 1948, 125.560.

#### **125.561 Dampers; ventilation; instructions, posting; extinguisher.**

Sec. 11. No damper shall be permitted in the smoke pipe or chimney from the device heated that may restrict to a dangerous extent the passage of fumes or gases. Ventilation shall be provided to prevent the accumulation of any trapped vapors below the combustion chamber. Complete instructions in regard to care and operation of the oil burning equipment shall be posted near the apparatus installed. The instruction sheet so posted shall include the specifications for the gravity and limiting flash point of oil suitable for use in the burner. All cards of instructions must be posted at time of installation. Near the entrance to the furnace room, and so located as to be convenient for use in emergency, there shall be provided a suitable hand extinguisher of approved type.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2618;—CL 1948, 125.561.

#### **125.562 Oil storage tanks; construction, user; storage limit.**

Sec. 12. Oil storage tanks on the inside of any building shall be located in the lowest story, cellar or basement. A total storage of 550 gallons shall be permitted inside of any building but not more than 275 gallons shall be permitted in any 1 storage tank. Where more than 1 storage tank is installed such tanks shall be connected to the main feed pipe leading to the auxiliary tank, or if no auxiliary tank is used, such storage tanks shall be connected with the main feed pipe leading to the burner, with a manually operated three-way valve so that not more than 1 tank can in any way discharge its contents at one time. In cases where conditions make it impossible to install tanks outside buildings, it shall be permissible to install tanks of larger capacity inside buildings subject to the regulations of section 13 hereof. Tanks shall be constructed of galvanized iron or basic open hearth steel or wrought iron, not less than 14 gauge. All joints shall be welded, brazed or riveted. The tanks shall be reinforced with a welded or riveted pad or flange where connections are made. All tanks shall be made tight and tested at 5 pounds air pressure and with soapy water without showing leaks. Tanks shall have rigid and incombustible support and shall not be located less than 5 feet, measured horizontally, from any fire or flame, and shall be placed on an incombustible floor. Glass gauging devices, or any others, the breakage or derangement of which would permit the escape of oil, shall not be used. Fuel oil shall not be forced from such storage tanks by positive air pressure.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2619;—CL 1948, 125.562.

#### **125.563 Oil storage tanks; fill pipe; vent pipe.**

Sec. 13. The fill pipe for such tank or tanks shall be galvanized iron or steel not less than 1 1/2 inches in diameter, extending to the outside of any building, and shall be properly capped at all times. All storage tanks for fuel oil shall be provided with a vent pipe not less than 3/4 inch in diameter with a return bend on the open or exposed end, and the outside opening of such vent pipe, or manhole in outside tanks, shall be covered by a non-corrodible wire screen of 30 by 30 mesh. Provided, however, That vent pipe of such storage tank inside of any building shall terminate on the outside of the building, not less than 10 feet above the source of supply, and that vent pipes from underground storage tanks outside of any building shall not be less than 1 1/4 inches inside diameter and shall terminate not less than 2 feet above grade line. The vent pipe from 2 or more tanks may be connected to 1 upright provided they be connected at a point at least 12 inches above the source of supply.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2620;—CL 1948, 125.563.

#### **125.564 Oil storage; limitations.**

Sec. 14. Except as otherwise permitted in this act, the storage of fuel oil in excess of 550 gallons shall be outside of any building in underground tanks. Storage of oil in tanks above ground of more than 550 gallons shall not be permitted without special permit from the board of rules of the department of buildings and safety engineering.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2621;—CL 1948, 125.564.

#### **125.565 Tanks located underground.**

Sec. 15. Tanks located underground shall have the top of tank at least 3 feet below the surface of the ground, and below the level of the lowest pipe leading into the building to be supplied. Tanks may be permitted underneath a building if buried at least 3 feet below the lowest floor, or they may be placed 24 inches below the lowest floor and covered with 15 inches of earth and 9 inches of brick or concrete.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2622;—CL 1948, 125.565.

#### **125.566 Installation of inside tanks.**

Sec. 16. Where it is impractical to bury tanks, the chief inspector of the department of buildings and safety engineering may allow them to be installed inside of a building when completely incased in 12 inches of concrete and 6 inches of sand.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2623;—CL 1948, 125.566.

#### **125.567 Underground tanks incased.**

Sec. 17. Underground tanks located within 10 feet of a basement or pit lower than the top of such tank, shall be completely incased in 6 inches of concrete of a 1, 3 and 5 mixture.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2624;—CL 1948, 125.567.

#### **125.568 Measuring devices.**

Sec. 18. Measuring devices on tanks beneath buildings and previously described encased tanks, shall be of approved wall gauge type.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2625;—CL 1948, 125.568.

#### **125.569 Metal gauge.**

Sec. 19. The metal used in all tanks shall be of a minimum gauge, U.S. standard, depending upon the capacity or size as given in the following table:

| Capacity<br>(Gallons) | Thickness<br>of material |
|-----------------------|--------------------------|
| 1 to 500              | 14 gauge                 |
| 501 to 1100           | 12 gauge                 |
| 1101 to 4000          | 7 gauge                  |
| 4001 to 10500         | 1/4 inch                 |
| 10501 to 20000        | 5/16 inch                |
| 20001 to 30000        | 3/8 inch                 |

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2626;—CL 1948, 125.569.

#### **125.570 Tanks; construction, testing; underwriter's label.**

Sec. 20. All such tanks shall be welded, brazed or riveted and shall be heavily coated outside with asphaltum or other rust-resisting material. All tanks shall be tested for leakage and shall be tight at 5 pounds air pressure. All tanks having a capacity in excess of 275 gallons shall bear the underwriter's label.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2627;—CL 1948, 125.570.

#### **125.571 Required equipment; gravity, water pressure or suction burners.**

Sec. 21. All oil burners operating by gravity or water pressure, shall be equipped with approved automatic device or devices for the control of the flow of oil in case of failure of the oil to properly ignite. All oil burners of the suction or force feed type shall be equipped with approved anti-siphoning device. Where a pump is used between the storage tank and the auxiliary tank a pressure relief valve shall be installed in the supply line, so arranged as to return any surplus oil to the storage tank. Suction pipes must extend to within not less than 2 inches from the bottom of the tank and must be provided with an accessible control valve inside the building between the tanks and the burner. All pipe connections, except for gravity flow, shall be made from the top of the tank.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2628;—CL 1948, 125.571.

#### **125.572 Required equipment; burners connected with heating system.**

Sec. 22. All fuel oil burners used in connection with hot water and steam heating systems shall be equipped with a pressurestat or some approved automatic device to reduce or extinguish the fire in the event of undue pressure within the boiler.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2629;—CL 1948, 125.572.

#### **125.573 Gases prohibited in gas pilot.**

Sec. 23. The use of acetylene or any other gas possessing a wider range of explosiveness in admixture with air than coal gas, or water gas, is prohibited for use in the gas pilot of any fuel oil burner.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2630;—CL 1948, 125.573.

#### **125.574 Scope of act restricted.**

Sec. 24. This act shall not apply in the case of manufacturing plants except for heating buildings or generating steam for power.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2631;—CL 1948, 125.574.

#### **125.575 Violation of act; penalty.**

Sec. 25. Any person, firm or corporation who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not to exceed 100 dollars or by imprisonment for a period of not to exceed 90 days, or by both such fine and imprisonment, and each day that a violation of this act shall be permitted to exist shall constitute a separate and distinct offense.

**History:** 1929, Act 319, Imd. Eff. May 28, 1929;—CL 1929, 2632;—CL 1948, 125.575.