

Commonwealth of Massachusetts
Department of Fire Services
Office of the State Fire Marshal

Revised: August 1, 2004
Effective September 1, 2004

GUIDELINES FOR SELF-SERVICE MOTOR FUEL FACILITY APPLICATIONS

In accordance with the provisions of 527 CMR 5.08:(5), the dispensing of motor fuel by means of self-service mode automated fuel dispensing systems shall be permitted provided that the applicant for such system has submitted complete plans and specifications of the proposed installation to the Marshal and has received approval of same. In accordance with the provisions of Massachusetts General Law Chapter 7 § 3B a fee of two hundred dollars in the form of a check made payable to the “Commonwealth of Massachusetts” must accompany each application. Applications shall be addressed to: Massachusetts Department of Fire Services, Office of the State Fire Marshal, PO Box 1025-State Road, Stow, MA 01775 ATTN: SELF-SERVE PLAN REVIEW.

General Requirements

1. All dispensing areas shall be equipped with a UL 1254 compliant pre-engineered dry chemical extinguishing system, including end of island protection. The system shall be designed and installed to protect the entire spill and hazard area. If unusual conditions, procedures or obstacles are present which may adversely affect the performance of the overhead system, special application ground nozzles may be installed in addition to the overhead system. If the head of the fire department requires by local rule special application ground nozzles, this shall be noted on the plans.
2. All fire suppression systems shall be installed, and maintained by companies and persons holding the required certificates of competency and registration issued by the Marshal.
3. All fire suppression systems shall be maintained in accordance with the provisions of NFPA 17, and the manufacturers specifications.
4. CCTV coverage is required on all fueling positions. CCTV monitors shall display all camera angles simultaneously on the screen with a minimum picture frame of 5 inches by 6.5 inches per camera.
5. An intercom system is required between the control console and dispensing island.
6. On partial self-serve facilities an additional switch, which will disconnect power to the self-serve island and activate the suppression system shall be installed on the full serve island.

7. Warning signs shall be conspicuously posted on the front and back of the dispenser and shall incorporate the following language:

WARNING

NO SMOKING – STOP MOTOR

It is unlawful and dangerous to dispense gasoline into unapproved containers.

No filling of portable containers in or on a motor vehicle or trailer.

Place container on ground before filling.

The words “Warning” and “No Smoking – Stop Motor” shall consist of block letters not less than one inch in height, white letters on a red background. The remaining sentences shall consist of block letters not less than ½ inch in height, red letters on a white background.

8. The concrete pad surrounding the dispensing island shall be installed as level as possible. The positive limit barrier shall be installed in this pad with the outer groove located no further than the protected hazard area as defined by each suppression system design.
9. A means to instantly disconnect the power to all dispensers and activate the suppression system shall be conspicuously marked and located at the control console.
10. The use of automatic credit reading devices are permitted provided that they are indicated on the plans and comply with the requirements of 527 CMR 5.08(5)(1).
11. 190°F (maximum) electric thermostat detectors shall be installed on 15-foot (maximum) centers in a single line over the center of the island, for islands up to 6 feet wide. For wider islands two rows of detectors shall be located one foot in from each curb. If a canopy is provided, detectors shall be located on the underside (15 foot maximum height) of the canopy. If there is no canopy, the detector(s) shall be mounted to the underside of a 18” by 18” by 2” heat collector, which shall be located no higher than the nozzles.

Plans, specifications, and documentation shall consist of the following.

Documentation

1. Copy of the **LICENSE** to store flammables (Form FP-2) issued under MGL Chapter 148 § 13. Or a letter from the city or town clerk bearing their seal indicating that the land is licensed and listing storage capacity and restrictions if any.
2. Copy of a current **Registration** (Form FP-5) issued by the city or town clerk showing that the license is being exercised.
3. Copy of the current **Notification of Storage Tank** (Form FP-290).
4. Copy of the current **Permit to Maintain New/Existing Storage Facility**.

5. A letter containing the following information
 - a. Exact name and address where facility will operate
 - b. Type of work to be performed. (New, upgrade, conversion etc.)
 - c. Type of facility. (Complete self-serve, partial self-serve)
 - d. Description of any unrelated business (car wash, convenience store etc.)

Plans

1. Plans (4 copies) shall be 24" x 36" non-reproducible blueprints. Copies shall be marked in bold type in the lower right hand corner with the following. STATE FIRE MARSHAL COPY, FIRE DEPARTMENT COPY, SUPPRESSION SYSTEM INSTALLER COPY, PETROLEUM MARKETING COMPANY COPY.
2. Plans shall contain the name and address of the proposed facility, the name and address of the person or firm preparing the plans and the name and address of the licensed company installing the suppression system (if known).
3. Plans shall contain as a minimum the following details, views and notes.
 - a. Site Plan: Showing all buildings, lot lines, designated parking areas, fueling islands, entrances, exits, windows, pavement markings, visibility obstructions, dimensions, fences, signs, tanks and pavement slope.
 - b. Extinguishing System Plan View: System name and type, nozzle placement, spacing, piping & cylinder count and configuration, lighting, island width and length and location of heat actuation devices (maximum 190° F).
 - c. Elevation and End Views: Nozzle placement, spacing, piping configuration, aiming points, lighting, island width and length and height (minimum 6") location of heat actuation devices (maximum 190° F), potential spill area for each pump, positive limit barrier, dispensers and length of dispenser hoses. A detail shall be provided showing the design of the positive limit barrier. (See Appendix A for specifications)
 - d. Legend: The legend shall provide a key to include but not limited to all proposed and or required systems, system components, lights, signs, dispensers, intercoms, CCTV cameras, control points, extinguishers.
 - e. Notes: Plans shall contain a section for the signature and notes of the head of the local fire department or designee and shall bear said signature. Plans shall also contain a space with minimum dimensions of 7" long by 3" high for use by this office.

Plans shall also contain the following statements:

Self-Serve extinguishing systems shall be installed from and in accordance with State Fire Marshal approved plans.

All extinguishing systems, dispensing systems and control equipment shall be Underwriters Laboratory (UL) listed.

Plans containing credit card reading devices shall include a note and include the language from 527 CMR 5.08: (5)(1).

Failure to construct install or maintain any equipment, devices, system or procedure indicated on these plans shall be cause for the revocation of this approval.

Plans approved by the head of the fire department are approved with the intent they comply in all respects to 527 CMR. Any omissions or errors on the plans do not relieve the applicant of complying with all applicable requirements of 527 CMR.

**STATE FIRE MARSHAL APPROVAL OF PLANS TO
CONSTRUCT/RENOVATE A SELF-SERVICE FACILITY BECOME
NULL AND VOID ONE YEAR FROM THE DATE OF APPROVAL.**