

Program Letter
Division of Environmental and Regulatory Services
October 2002

Regulatory Requirements for Key, Card, Cash or Code Operated Dispensing (Revised)

Issue:

Changing business practices, such as expanding fuel-dispensing accommodations, have resulted in a significant increase in sites wishing to provide Point of Sale (POS) and unattended fueling. Service stations can provide this additional service via key, card, cash or code control dispensers. The department requires that prior to the conversion of an existing fuel dispensing system to accommodate key, card, cash or code control, an installation plan and review fees are to be submitted. The department maintains the position that regulatory oversight needs to be maintained to assure that fire safety concerns are properly addressed. A fee structure was established to facilitate the review and inspection of required components.

When the concept of key, card and code operated dispensers was first implemented, these systems were installed at non-retail facilities. Petroleum equipment manufactures were providing a method for fleet fueling security, operator efficiency, and accountability using mechanical and electronic technology. At non retail facilities, fuel dispensing was limited to designated repeat users familiar with the system and directly related to the operator or owner of the site. Essentially an "unattended" configuration with different safety concerns.

As technology advanced, the popularity of card operated POS systems increased, especially at retail facilities. Key, card or code operated dispensers generally require less labor and oversight by the business operator. Several manufacturers' promotional literature emphasize this point. According to one industry related publication, up to fifty-percent of gasoline sales in some areas occurs through card reader sales. As such, the attendant's responsibilities have shifted more toward merchandising and maintenance. Service stations can easily provide 24 hour fuel dispensing during periods when the business is absent of employees. As a deterrent to crime, some municipalities across the nation are promulgating ordinances that restrict off-hour retail fuel sales to systems that do not require attendants.

Analysis and Position:

While there may not be any physical changes to the piping configuration, a real change does take place when a conversion to POS is completed. A POS system can be programmed to be authorized by a cashier or attendant, although the vast majority of the time it is not configured in this manner. The dispenser is typically configured or programmed to authorize dispensing by a customer at the dispenser *without* communication to the attendant on duty. It therefore is an "unattended" self service dispenser.

Unattended self service facilities are permitted by NFPA 30A-9-5 (2000 Edition), subject to the required components being in place and the approval of the authority having jurisdiction. An "attended" service station as required by NFPA 30A shall have at least one attendant on duty to supervise, observe, and control the dispensing of Class 1 liquids while fuels are actually being dispensed. Several observations are made regarding operational practices experienced when "attended self-service" dispensers are modified to key, card, cash or code operation:

- ◆ The dispenser(s) modified for POS are frequently the furthest distance from the attendant station.
- ◆ Attendants do not maintain the oversight expected.
- ◆ The dispensers are utilized more frequently during periods when the attendant is absent.
- ◆ Many of the dispensers are located in areas where it is questionable whether an attendant, if available, could provide adequate oversight.
- ◆ After a period of time, service stations with attended key, cash or card control systems frequently implement unattended self-service operation.
- ◆ The increase in static discharge related fires during dispensing have recently elevated the importance of both safety and communication issues.

Technology and the trend toward POS dispensers allows an owner/operator to convert from attended to unattended fueling without implementing the life-safety features required in the national standard. The Department believes that life-safety and environmental concerns are multiplied with the variation and number of people utilizing a POS system, especially when no employees are on site. The configurations at retail facilities will also vary with facility and jobber branding, thus multiplying the potential risk for an uncontrolled population of users.

The previous and current administrative codes state the requirements and fees for the installation of key, card, or code operated systems. Formerly IND 8.11(4)(h) and currently Comm 10.10 (1) and (4)(b) reflect the plan review requirement. Changing or replacing existing dispensers *only* does not require a plan review because the initial plan review for their installation addressed them. Conversion of existing dispensers to ones that can provide POS triggers the Department's responsibilities for regulatory oversight of flammable and combustible liquid storage. Correct installation of POS dispensing systems is core to preventing the loss of life or property from fires and explosions. The conversion or replacement of an existing dispenser to facilitate a different functional element is a life-safety concern. All POS dispensing systems (attended and unattended self-service) must maintain consistency with the NFPA 30A-9-5 regulatory requirements for unattended self-service stations.

Requirements:

Plan review and LPO installation inspection is required (Comm 10.10(1) & (2)), and annual inspections by the Bureau of Retail Petroleum Services are conducted to maintain periodic compliance monitoring. In combination this regulatory oversight will assure that the site is evaluated for compliance with NFPA 30A-9-5, including:

- ◆ An accessible non-resettable emergency shut-off device with proper emergency instructions and signage.
- ◆ Outside emergency control located more than 20 ft., but less than 100 ft. from dispensers and proper signage.
- ◆ Telephone or other approved means to notify the fire department must be located on the facility property. If POS operation of the dispensers is not provided during periods when the retail facility is closed for business, a telephone located inside the business will meet this requirement.
- ◆ Required fire extinguisher and placement.

These requirements will also be applied to existing facilities that are performing unattended fueling.

Plan Review Fee:

Comm Chapter 2.42 - Self-service stations and stations using key, card or code operated dispensing devices.

Fees for the examination of plans and site inspections for self-service stations or stations using key, card or code operated dispensing devices shall be determined in accordance with Table 2.42.

Table 2.42: Self-Service Stations or Stations Converting to Key, Card or Code Operations

Plan examination fee:	\$35.00
Site inspection fee:	\$43.00

Resources:

Contact the local telephone company for available resources and communication options. The Wisconsin Public Telephone Administration maintains a web site that may also provide information < <http://www.publicpaytelephone.com/> >

There is a growing interest in dedicated emergency call telephones (photo to the right) that can be installed at a reasonable expense.



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