



FIRE PREVENTION MANUAL

FIRE EXTINGUISHING SYSTEM REQUIREMENTS

405.034 DEFICIENT (LOADED) FIRE SPRINKLER HEADS

EFFECTIVE: NOVEMBER 2016

SCOPE

This policy clarifies the Fresno Fire Department (FFD or Department) requirements for deficient fire sprinklers, which are commonly referred to as “loaded” fire sprinkler heads, and applies to all fire sprinkler systems, including those voluntarily installed.

PURPOSE

This policy has been established to provide direction for contractors and sprinkler system owners regarding deficient (loaded) fire sprinkler heads and their proper cleaning.

BACKGROUND

As noted in the *California Fire Code (CFC)*, the fire code official has the authority to formulate policies they deem necessary based upon local conditions related to fire sprinkler systems, including their installation, testing and maintenance. Additionally, *National Fire Protection Association (NFPA) Standard 25 (2013 California edition)* should be referred to when necessary for additional background and application information.

REQUIREMENTS

Based upon the need for uniformity in application across the Department’s diverse service delivery area, and after careful deliberation, the Department has determined the following:

1. Where fire sprinkler heads are determined to be deficient (i.e. loaded) as noted in *NFPA 25*, section 5.2.1.1.2 (5), the heads are not required to be replaced, but rather cleaned in accordance with the explanatory material found in *NFPA 25*, section 5.2.1.1.2 (5) Annex A of the Standard.

To quote *NFPA 25*, section 5.2.1.1.2 (5) Annex A, “In lieu of replacing sprinklers that are loaded with a coating of dust, it is permitted to clean sprinklers with compressed air or by a vacuum, provided that the equipment does not touch the sprinkler.”

Unacceptable loading requiring fire sprinkler head replacement includes any of the other items in section 5.2.1.1.2, and includes material that accumulates on, or is attached to, a sprinkler head or sensing element that will affect the operation or spray distribution of the sprinkler head. In the Department's opinion, a qualified person shall first attempt to clean sprinklers with compressed air or by a vacuum. If they are unable to clean the sprinkler by this method, then the sprinkler shall be replaced.

2. Alternately, where a sprinkler head has a metallic sensing element, and the system has been drained, it is permissible for a qualified person to use other means to clean the sprinkler head, including the use of a tool or implement which will not damage the sensing element to clean loaded fire sprinkler heads. These tools include feather dusters or other tools of similar construction.

It is the responsibility of the qualified person completing the cleaning to use due care when performing this operation and to use a tool meeting the intent of this policy.

Sprinkler heads that are damaged for failure to adhere to these requirements shall be replaced after first obtaining a permit from the Department.

3. Bulb type fire sprinkler heads shall only be cleaned with compressed air or by a vacuum, and the equipment shall not touch the sprinkler.

REFERENCES

National Fire Protection Association (NFPA) Standard 25 (2013 California edition)