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**FIRE PREVENTION & COMMUNITY RISK REDUCTION DIVISION**

**INFORMATION NOTICE 2025-01**

**SUBJECT:** Fire Sprinklers, ITM Requirements for Harsh Environments

**EFFECTIVE:** August 21, 2025

**CODE REFERENCE:** NFPA 25, Section 5.3.1.1.2 & A.5.3.1.1.2 (2023 Edition)

**SCOPE:**

NFPA 25 outlines frequencies for sprinkler replacement or testing based upon the sprinkler type and exposure. Specifically, Section 5.3.1.1.2 requires that sprinklers installed for 5 years and exposed to “harsh environments,” including corrosive atmospheres, shall be replaced or tested and then retested every 5 years.

A.5.3.1.1.2 clarifies examples of harsh environments to include paper mills, packing houses, tanneries, alkali plants, foundries, forge shops, fumigation areas, pickle and vinegar works, stables, storage battery rooms, electroplating rooms, galvanizing rooms, steam rooms of all descriptions including moist vapor dry kilns, salt storage rooms, locomotive sheds or houses, driveways, areas exposed to outside weather, areas around bleaching equipment in flour mills, and portions of any areas where corrosive vapors prevail.

The question is whether all sprinklers exposed to outside weather are subject to the testing or replacement requirement for harsh environments.

**TECHNICAL INTERPRETATION:**

It is the position of PFA that not all sprinklers exposed to outside weather meet the criteria of a harsh environment. Examples of these conditions may include but are not limited to, sprinklers installed in exterior locations, but that are largely protected from direct weather exposure by means of their location, arrangement, covering or partial enclosure, or similar means of protection.

Similarly, it is the position of PFA that there are conditions when sprinklers are exposed to outside weather that do meet the criteria of a harsh environment, such as but not limited to, direct sun, wind, snow loading, freezing rain, hail, or similar weather exposure, salt air exposure, seasonally hot or cold winds, intense heat due to reflected surfaces, or similar “harsh environment” conditions.

**INSPECTION, TESTING & MAINTENANCE (ITM) REQUIREMENT:**

Where it can be demonstrated that sprinklers meet a true harsh environment, PFA will require the harsh environment replacement or testing frequency as per NFPA 25 for these sprinklers.

Where it can be demonstrated that sprinklers have exposure to outside weather, but do not have sufficient exposure to outside weather to warrant a harsh environment, PFA will support the less restrictive replacement or testing frequency as defined by NFPA 25 for these sprinklers.

Servicing contractors who are uncertain shall consult their designated design professional for additional guidance, or the sprinkler manufacturer. Professional discernment and judgement are aspects of being “qualified” as required by NFPA 25, Section 4.1.1.3.

**APPLICABLE CODE REFERENCES:**

**NFPA 25, 5.3.1.1.2-** *Where sprinklers exposed to harsh environments, including corrosive atmospheres, have been installed for 5 years, one of the following shall occur:*

- (1) The sprinklers shall be replaced.*
- (2) Representative samples of the sprinklers shall be tested and then retested every 5 years.*

**NFPA 25, 5.3.1.1.3-** *Listed corrosion-resistant sprinklers installed in harsh environments shall be permitted to be tested every 10 years and then retested every 5 years.*

**NFPA 25, A5.3.1.1.2-** *Examples of harsh environments are paper mills, packing houses, tanneries, alkali plants, organic fertilizer plants, foundries, forge shops, fumigation areas, pickle and vinegar works, stables, storage battery rooms, electroplating rooms, galvanizing rooms, steam rooms of all descriptions including moist vapor dry kilns, salt storage rooms, locomotive sheds or houses, driveways, areas exposed to outside weather, areas around bleaching equipment in flour mills, and portions of any area where corrosive vapors prevail.*

**APPROVED:**



Shawn McGaffin, Division Chief – Fire Marshal