

NFPA 22-2018 Edition

Standard for Water Tanks for Private Fire Protection

TIA Log No.: 1358

Reference: 15.2.1, 16.1.2.1, 16.4.4, 16.5.1, and 16.5.10

Comment Closing Date: May 17, 2018

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www.nfpa.org/22

1. *Revise 15.2.1 to read as follows:*

15.2.1 General. A listed frostproof casing shall be placed around all exposed tank piping in localities where the lowest mean atmospheric temperature for one day, as ~~shown by Figure 16.1.4~~determined by 16.1.2.1, is 20°F (−6.7°C) or lower.

2. *Revise 16.1.2.1 to read as follows:*

16.1.2.1 The coldest weather temperature that is used to determine the need for heating shall be based on the lowest mean temperature for one day, as ~~shown in Figure 16.1.4~~obtained from an approved source.

3. *Revise 16.4.4 to read as follows:*

16.4.4 Outside winter design temperatures shall be ~~in accordance with Figure 16.1.4~~as determined by 16.1.2.1.

4. *Revise 16.5.1 to read as follows:*

16.5.1 If tanks are located where the lowest mean temperature for one day is less than 5°F (−15°C), as ~~shown in Figure 16.1.4~~determined by 16.1.2.1, a water-recirculating system with a heat exchanger/heater or other approved method of heating shall be provided and installed according to the heater manufacturer's recommendations.

5. *Revise 16.5.10 to read as follows:*

16.5.10 The size of the pipe required shall be a function of the tank size and the winter weather conditions that prevail at the site, as ~~indicated in Figure 16.1.4~~determined by 16.1.2.1.

Substantiation: The references to Figure 16.1.4 are no longer valid, as the isothermal map previously used to determine the lowest one-day mean temperature was removed in the 2018 edition of NFPA 22. This TIA removes the erroneous references and replaces them with language that allows the user to determine the information from a variety of sources. The word “approved” (which by definition means acceptable to the AHJ) in 16.1.2.1 ensures that the data is from a reputable source. The phrase “or other approved method of heating” has been added to 16.5.1 because immersion heaters are normally installed lower in the tank, causing the heated water to rise. The cold water is then forced down by the heated water to be heated in turn, so water-recirculating is unnecessary.

Emergency Nature: The standard contains an error or an omission that was overlooked during the regular revision process.

The references to Figure 16.1.4 were not revised when the figure was deleted at the second draft stage for the 2018 edition, so this TIA intends to correct this error. In addition, 16.5.1 has been revised to correct an omission by permitting the use of heaters other than water-recirculating heaters where approved.

Anyone may submit a comment by the closing date indicated above. To submit a comment, please identify the number of the TIA and forward to the [Secretary, Standards Council](#), 1 Batterymarch Park, Quincy, MA 02169-7471.