

San Diego County Fire Protection District FIRE MARSHAL BULLETIN

Fire Marshal Bulletin Number: 2024-03

Subject: Process to Request a Water Tank with FDC as an Alternative Water Supply Source for a New Structure

Effective Date: June 1, 2024

Purpose: The purpose of this bulletin is to describe the process to request a Water Tank with FDC (Fire Department Connection) as an alternative fire suppression water supply source for a new structure proposed on a parcel served by a Water District or Municipal Water District, instead of installing a new Fire Hydrant.

Background and Code Requirements

Section 507.1 of the <u>2022 California Fire Code</u> states "An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction." For parcels served by a Water District or Municipal Water District this fire protection water supply is typically provided by existing water mains and fire hydrants.

For parcels located within a Water District or Municipal Water District, new proposed structures must be located within the proximity of an existing or proposed fire hydrant (as measured along an accessible path of travel of road, driveway, etc.) as established by Table C102.1 in Appendix C of the 2022 California Fire Code. If there are no existing fire hydrants within the required proximity, a new fire hydrant will be required for the proposed structure, and a waterline extension to that hydrant may also be required. The County of San Diego 2023 Consolidated Fire Code contains the following provisions regarding water tanks, fire flow and the installation of waterline extensions and fire hydrants:

Sec. 507.2.2 Water tanks. Water tanks for private *residential* fire protection, *when authorized by the fire code official*, shall *comply with Table 507.2.2* and be installed in accordance with the NFPA 22 edition referenced in Chapter 80 of CFC. Water tanks for *commercial* fire protection, *when authorized by the fire code official*, shall be installed in accordance with the NFPA 22 edition referenced in Chapter 80 of CFC. *Water tanks are only allowed as determined by the fire code official if a letter from the applicable water district is provided stating that the district would not be able to provide service (proper fire flow) if the water line were extended and a hydrant installed.*

Sec. 507.3 Fire flow. Fire flow requirements shall be based on Appendix B of the California Fire Code or the standard published by the Insurance Services Office, "Guide for Determination of

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Required Fire Flow." Consideration should be given to increasing the gallons per minute to protect buildings and structures of extremely large square footage and for such reasons as: poor access roads, grade and canyon rims, hazardous brush and response times greater than five minutes by a recognized fire department or fire suppression company. In hazardous fire areas the main capacity for new subdivisions shall not be less than 2,500 – 3,000 gallons per minute, unless otherwise approved by the fire code official. If fire flow increases are not feasible, the fire code official may require alternative design standards such as: alternative types of construction that provides a higher level of fire resistance, fuel break requirements, which may include required irrigation, modified access road requirements, specified setback distances for building sites addressing canyon rim developments and hazardous brush areas, and other requirements as authorized by this chapter and as required by the fire code official.

Sec. 507.5.8 Waterline Extensions. The fire code official may require a waterline extension for the purpose of installing a fire hydrant if a water main is 1,500 feet or less from the property line. Water tanks are only allowed as determined by the fire code official if a letter from the applicable water district is provided stating that the district would not be able to provide service (proper fire flow) if the water line were extended and a hydrant installed.

Process To Request A Water Tank With FDC

During building permit plan review and processing the project applicant must complete the following steps to request the installation of an onsite Water Tank with FDC to be used as a fire suppression water supply source instead of installing a new fire hydrant within the required proximity of the proposed structure.

Step 1 – Notification to San Diego County Fire Protection District

The project applicant must provide a letter to the San Diego County Fire Protection District that specifically requests to utilize a proposed Water Tank with FDC as an alternative to a new fire hydrant with an explanation of why the alternative is requested for their project.

Step 2 – Letter from Water District or Municipal Water District

The project applicant must also provide a letter from the applicable Water District or Municipal Water District stating that the district <u>would not be able to provide service</u> (proper fire flow) to a new fire hydrant on an existing water line or to a new fire hydrant on a proposed water line extension, if an extension is required. The San Diego County Fire Protection District will determine the proper fire flow for the proposed structure(s) per Section 507.3. The applicant shall provide the proper fire flow requirement to the applicable Water District or Municipal Water District.

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Step 3 – Determination

The letters from Steps 1 and 2 will be reviewed by San Diego County Fire Protection District and the fire code official will make a determination to either accept or not accept a proposed Water Tank with FDC as an alternative to a new fire hydrant and water line extension, if an extension is required.

Step 4 – Project Plans

If the proposed Water Tank with FDC as an alternative to a new fire hydrant is accepted, the Water Tank with FDC must meet the requirements of Section 507.2.2 and Annex F of the County of San Diego 2023 Consolidated Fire Code, any Fire Code Plan Check Correction List issued for the project, and all other applicable exhibits such as the Water Tank Standards For Fire Protection. Project plans may need to be revised to display all required information as determined by the fire code official.

If the proposed Water Tank with FDC as an alternative to a new fire hydrant <u>is not</u> accepted, project plans may need to be revised to show the location of the proposed fire hydrant and any other required information as determined by the fire code official.