

ARTICLE

515

Bulk Storage Plants

- Δ **515.1 Scope.** This article covers a property or portion of a property where flammable liquids are received by tank vessel, pipelines, tank car, or tank vehicle and are stored or blended in bulk for the purpose of distributing such liquids by tank vessel, pipeline, tank car, tank vehicle, portable tank, or container.

Informational Note: See NFPA 30-2021, *Flammable and Combustible Liquids Code*, for extracted text that is followed by a reference in brackets. Only editorial changes were made to the extracted text to make it consistent with this *Code*.

Article 515 covers facilities that store (in bulk) and distribute flammable liquids, as opposed to dispensing liquids into fuel tanks of vehicles. Flammable liquid dispensing locations, including those within the bulk storage facility, are covered under Article 514. Bulk storage tanks may be located inside buildings or outside, either above ground or underground. This article addresses the hazardous locations in the vicinity of the storage tank, as well as the tank vehicle, pier, or wharf from which the liquids are loaded and off-loaded. This article also covers the classification of the areas around drum storage containers. Area classification information for facilities at which liquified natural gas is received or stored in bulk is found in NFPA 59A, *Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG)*.

- N **515.2 Other Articles.** In addition to the requirements of this article, bulk storage plants shall comply with Table 515.2, as applicable, except as modified by this article.

N **TABLE 515.2** Other Articles

Requirement	Division Classified Locations	Zone Classified Locations
Area classification	500.5, 500.6	505.5, 505.6, 505.7
Equipment	Part III of 501, 500.7, 500.8, 501.5	505.8, 505.9, 505.20, 505.22
Wiring	Part II of 501	505.15, 505.16, 505.17, 505.18, 505.19, 505.26, 505.30

- Δ **515.3 Classified Locations.** Where the term “Class I” is used with respect to Zone classifications within this article of the *Code*, it shall apply to Zone 0, Zone 1, and Zone 2 designations.

Informational Note No. 1: The term “Class I” was originally included as a prefix to Zone 0, Zone 1, and Zone 2 locations and references as an identifier for flammable gases, vapors, or liquids to differentiate from Class II and Class III locations. Zone 0, Zone 1, and Zone 2 only apply to flammable gases, vapors, or liquids so the “Class I” prefix is redundant and has been deleted, except for text that is extracted from other documents or to remain consistent throughout this article.

Table 515.3 shall be applied where Class I flammable liquids are stored, handled, or dispensed and shall be used to delineate and classify bulk storage plants. The classified location shall not extend beyond a floor, wall, roof, or other solid partition that has no communicating openings.

Where the installation does not meet the requirements found in Table 515.3, the authority having jurisdiction shall have the authority to classify the extent of the classified space.

Informational Note No. 2: See NFPA 30, *Flammable and Combustible Liquids Code*, Chapter 5, for the area classifications listed in Table 515.3 that are based on the premise that the installation meets all the applicable requirements.

Informational Note No. 3: See 514.3(C) through (E) for gasoline dispensing stations in marinas and boatyards.

Informational Note No. 4: See NFPA 30, *Flammable and Combustible Liquids Code*, Section 7.3, for additional information.

Many steps are required to properly classify a hazardous location. Although the *NEC*® provides general area classifications in Articles 501, 502, 503, 505, and 506, it does not classify specific locations. The *NEC* classifications for specific occupancies or processes have been extracted from other NFPA documents. The classifications from those documents are based on the premise that all applicable requirements of the document have been met. Deviations in on-site conditions, such as process conditions, area ventilation, and room construction, from those assumed by the document may alter the general classification. Those responsible for the specific area classification must consider the basis for the general classifications to determine the applicability to a specific location.

NFPA 30, *Flammable and Combustible Liquids Code*, contains the specific construction and installation requirements used to develop the area classifications in Article 515. Table 515.3 is extracted from NFPA 30, Table 7.3.3. The area classifications listed in the table are based on the premise that all applicable requirements of NFPA 30 have been met as conveyed by Informational Note No. 1 to 515.3.

Exhibits 515.1 through 515.5 illustrate the hazardous locations associated with several types of flammable liquid containers and operations.