

NFPA®

30A

**Code for Motor Fuel
Dispensing Facilities and
Repair Garages**

2021



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NFPA® 30A

Code for

Motor Fuel Dispensing Facilities and Repair Garages

2021 Edition

This edition of NFPA 30A, *Code for Motor Fuel Dispensing Facilities and Repair Garages*, was prepared by the Technical Committee on Automotive and Marine Service Stations. It was issued by the Standards Council on June 1, 2020, with an effective date of June 21, 2020, and supersedes all previous editions.

This document has been amended by one or more Tentative Interim Amendments (TIAs) and/or Errata. See “Codes & Standards” at www.nfpa.org for more information.

This edition of NFPA 30A was approved as an American National Standard on June 21, 2020.

Origin and Development of NFPA 30A

This code originated as Chapter 7 of NFPA 30, *Flammable and Combustible Liquids Code*, and was developed by the Technical Committee on Flammable and Combustible Liquids to provide more detailed requirements for vehicle fueling and to anticipate the need to address self-service fueling and alternative fuels. It was first adopted in 1984.

The second edition, adopted in 1987, recognized unattended self-service fueling, and a third edition, adopted in 1990 and prepared by the new Technical Committee on Automotive and Marine Service Stations, incorporated requirements for lubrication-only service facilities. The fourth edition, adopted in 1993, incorporated several major amendments, the most important of which allowed aboveground fuel storage tanks at retail motor fuel dispensing facilities, which was based on a Tentative Interim Amendment to the 1990 edition.

Significant revisions for the 1996 (fifth) edition included a new chapter on marine motor fuel dispensing facilities, a new section on low-melting-point piping materials, and an increase in the maximum allowable aboveground fuel storage for Class II liquids (i.e., diesel fuel) at fleet refueling operations.

After the adoption of the 1996 edition, the Technical Committee on Automotive and Marine Service Stations was given responsibility for NFPA 88B, *Standard for Repair Garages*, and was also charged with developing fire safety requirements for alternative fuels, such as compressed natural gas (CNG), when they are dispensed along with liquid fuels. With respect to repair garages, the Technical Committee decided to integrate the technical requirements of NFPA 88B into NFPA 30A.

Major updates to the 2000 (sixth) edition included revisions to minimum separation distances for aboveground storage tanks; the addition of basic requirements for protected aboveground tanks; the addition of corrosion protection requirements for tanks and piping; the addition of requirements for the installation and testing of piping systems; and the addition of a new chapter that set requirements for CNG, liquefied natural gas (LNG), and liquefied petroleum gas (LP-Gas).

The 2003 (seventh) edition contained one major revision and several less significant changes. The major revision was the addition of a new chapter, Chapter 13, Farms and Remote Sites, which incorporated the requirements of NFPA 395, *Standard for the Storage of Flammable and Combustible Liquids at Farms and Isolated Sites*, which had been withdrawn in 2002. Other changes included a revision of the definition of *fire-resistant tanks* in Chapter 3, a change in scope to reflect the incorporation of the requirements from NFPA 395, and the addition of material from TIA No. 733 containing requirements and annex material warning of electrostatic and other hazards that can accompany dispensing operations.

The 2008 (eighth) edition contained minor revisions. All the technical specifications for tanks were removed and replaced by references to NFPA 30, *Flammable and Combustible Liquids Code*. References to NFPA 52, *Vehicular Fuel Systems Code* (now the *Vehicular Natural Gas Fuel Systems Code*),

were added to Chapter 12 to address the storage and dispensing of hydrogen at facilities that dispense gaseous liquid fuels.

Significant changes to the 2012 (ninth) edition included new requirements to address inspection, maintenance, and repair of fuel dispensing equipment, leak detection equipment, and secondary containment equipment. Also added was a new requirement that the circuits of gas detection systems be monitored for integrity in accordance with NFPA 72®, *National Fire Alarm and Signaling Code*®. Extensive revisions were made to Chapter 8, Electrical Installations, including the addition of a new area classification table with Zone system criteria, the revision of a drawing depicting the extent of area classification around fuel dispensing units, and the addition of a new diagram depicting the extent of area classification around tank-mounted fuel dispensing units.

Revisions for the 2015 (tenth) edition clarified the code's scope statement, indicating that it applies to repair garages but not to aircraft fueling. Chapter 12 was revised to correlate the code with the source codes for the various alternative fuels (hydrogen, CNG, LNG, and LP-Gas).

Significant changes to the 2018 (eleventh) edition included a revision of the scope statement and the addition of a new chapter to include on-demand mobile fueling. In addition, a revision was made to change single-poppet type emergency shutoff valves to double-poppet-type emergency shutoff valves for pressurized liquid dispensing devices. The revisions also included the addition of a requirement for leak detection devices to restrict or shut off fuel flow in remote/submersible pumps; a requirement for the mechanical or electrical isolation of fluid handling systems — other than fuel — when the emergency shutoff device is actuated; a requirement that major repair garages servicing hydrogen-fueled vehicles meet the provisions of NFPA 2, *Hydrogen Technologies Code*; a requirement that sprinkler protection provisions apply to an entire building containing major repair garage operations; a requirement for vapor removal at the ceiling level for areas where vehicles using lighter-than-air fuels are repaired; and a new requirement prohibiting the storage or placement of merchandise within 6 m (20 ft) of any fuel dispenser.

Major changes to the 2021 (twelfth) edition include the revision of Chapters 7, 8, and 9 to include new requirements for repair garages and areas where CNG and LNG vehicles are serviced. These new and revised requirements cover the areas of building construction, electrical area classification, repair area classification for CNG and LNG vehicles, flammable gas detection, and purge ventilation. Requirements for mobile fueling on public streets have been added to Chapter 14. Fire extinguisher requirements in Chapter 9 have been revised to align with NFPA 10, *Standard for Portable Fire Extinguishers*, and to accommodate new provisions for alternate vehicle fuel protection.

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Committee Scope: This Committee shall have primary responsibility for documents on safeguarding against the fire and explosion hazards associated with the general storage, handling, and dispensing of flammable and combustible liquids at automotive and marine service stations, farms, and isolated construction sites and with related activities such as dispensing gaseous fuels.

This Committee shall also have primary responsibility for documents on construction, control of fire hazards, ventilations, fire protection, and maintenance of repair garages.