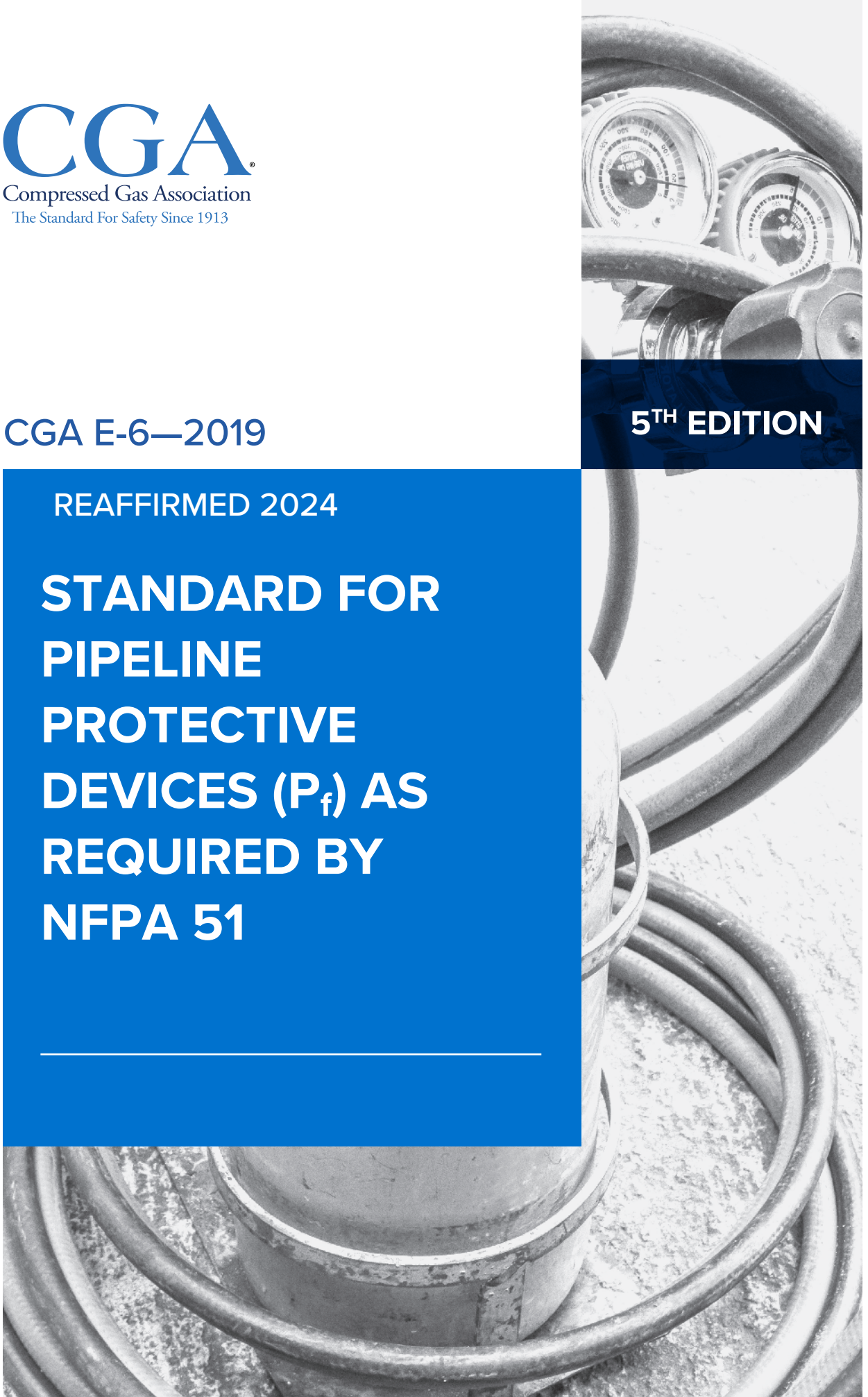


5TH EDITION

CGA E-6—2019

REAFFIRMED 2024

**STANDARD FOR
PIPELINE
PROTECTIVE
DEVICES (P_f) AS
REQUIRED BY
NFPA 51**



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Work Item 23-041
Industrial Gases Apparatus Committee

NOTE—No technical information has been changed from the 2019 edition. This reaffirmed edition may include minor editorial changes.

NOTE—Technical changes from the previous edition are underlined.

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1 Scope

The requirements of this standard cover pipeline protective (P_r) devices for use in fuel gas pipelines supplying equipment using oxygen or air downstream. Examples of such equipment include torches or burners that internally premix the oxygen (or air) and fuel gas as outlined in NFPA 51, *Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes* [1].¹

This publication does not cover devices used in a system where a combustible mixture of fuel gas and oxygen or fuel gas and air is passed through the P_r device.

2 Definitions

For the purpose of this publication, the following definitions apply.

2.1 Publication terminology

2.1.1 **Shall**

Indicates that the procedure is mandatory. It is used wherever the criterion for conformance to specific recommendations allows no deviation.

2.1.2 **Should**

Indicates that a procedure is recommended.

2.1.3 **May**

Indicates that the procedure is optional.

2.1.4 **Will**

Is used only to indicate the future, not a degree of requirement.

2.1.5 **Can**

Indicates a possibility or ability.

2.2 Technical definitions

2.2.1 **P_r device**

NFPA designated pipeline protection device that prevents backflow and flame advancement and can be wet (hydraulic) or dry.

NOTE—These devices can include, but are not limited to, flashback arrestors.

2.2.1.1 **Flashback arrestor (dry type)**

Device designed to protect equipment upstream of the device from a flame front. See Figure 1.

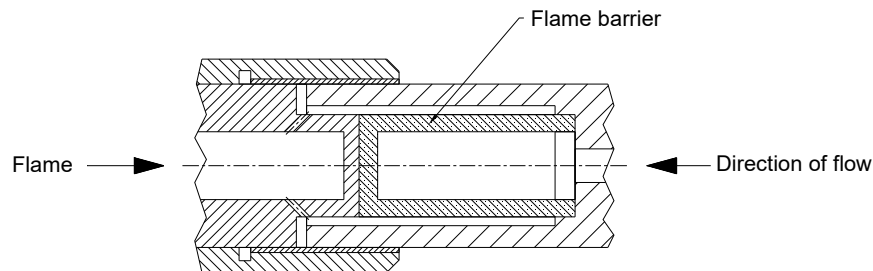


Figure 1—Typical dry type flashback arrestor

¹ References are shown by bracketed numbers and are listed in order of appearance in the reference section.