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ASSE International

Performance Requirements for

Chemical Dispensing Systems with Integral Backflow Protection

An American National Standard

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Foreword

This foreword is not part of the standard; however, it is offered to provide background information.

ASSE International is dedicated to the preservation of public health and safety through "Prevention Rather than Cure." Prevention of contamination or pollution of potable water in plumbing systems is one of the major objectives of the ASSE Standards Program through the development and promulgation of Standards embracing performance criteria.

In industrial and institutional cleaning operations, it is desirable and convenient to dispense cleaning solutions derived from potable water and concentrated products. A dispensing device connected to potable supply constitutes a cross-connection, which could be a source of contamination to the potable water. Devices providing this function often contain features that are intended to prevent this contamination. This standard identifies accepted methods of backflow protection, as well as test methods for evaluating backflow systems incorporated into a chemical dispensing system.

Recognition is made of the time volunteered by members of this working group and the support of manufacturers, who also participated in the meetings for this standard.

This standard does not imply ASSE's endorsement of a product that conforms to these requirements. Compliance with this standard does not imply acceptance by any code body.

This standard was promulgated in accordance with procedures developed by the American National Standards Institute (ANSI).

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Performance Requirements for Chemical Dispensing Systems with Integral Backflow Protection

Section I

1.0 General

1.1 Application

Chemical dispensing systems with integral backflow protection (herein referred to as the "device") provide a means of mixing potable water with chemicals to provide the user with a chemical solution which is ready for use. The amount of dilution shall be fixed or adjustable.

1.2 Scope

1.2.1 Description

This standard applies to those devices classified as chemical dispensing systems having integral backflow protection.

1.2.2 Pressure Range

Devices shall be designed to withstand a supply pressure of at least 125.0 psi (861.9 kPa). The device shall operate within the full pressure range as indicated by the manufacturer.

1.2.3 Temperature Range

Cold water devices shall withstand temperatures up to 120 °F (48.9 °C) and shall operate within the full temperature range as indicated by the manufacturer.

Hot water devices shall withstand temperatures up to 180 °F (82.2 °C) and shall operate within the full temperature range as indicated by the manufacturer.

1.3 Reference Standards

- ASSE 1001-2008, *Performance Requirements for Atmospheric Type Vacuum Breakers*.
- ASME B1.20.1-2013, *Pipe Threads, General Purpose, Inch*
- ASSE 1011-2004, *Performance Requirements for Hose Connection Vacuum Breakers*
- IAPMO PS-104-97, *Material and Property Standard for Pressure Relief Connection for Dispensing Equipment*