1 Purpose

1.1 This recommended practice is intended to promote the uniform installation of intrinsically safe systems for hazardous (classified) locations. Information is provided to clarify and explain the requirements of Articles 504 and 505 of the *National Electrical Code* ® (*NEC* ®) ANSI/NFPA 70. (For further information, see Annex A.)

NOTE — Throughout clause 3 and 4, text that has been excerpted from the *National Electrical Code* ® (*NEC* ®) is distinguished from the main body of text as follows:

- **NEC® Article 500, 504 and 505 text is shaded and indented at the left and right margins.**
- **Other excerpted NEC® text (such as articles on sealing) is shaded but not indented.**

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1.2 This recommended practice applies to the installation of intrinsically safe systems for use in hazardous (classified) locations.

2 Scope

2.1 This recommended practice provides guidance to those who design, install, and maintain intrinsically safe systems for hazardous (classified) locations.

2.2 This recommended practice should be used in conjunction with nationally recognized codes that cover wiring practices — such as the *National Electrical Code* ® (*NEC* ®), ANSI/NFPA 70, and the *Canadian Electrical Code* (*CEC*) Part I, CSA C22.1.

2.3 This recommended practice is not intended to:

a) include guidance for designing, testing, or repairing intrinsically safe or associated apparatus; or

b) apply to the use of portable equipment, except as shown on the control drawing.

3 Definitions

For purposes of this recommended practice, the following definitions apply:

3.1 approved:
acceptable to the authority having jurisdiction (for additional information, see *NEC* ® Article 100).

3.2 associated apparatus:

Associated Apparatus: Apparatus in which the circuits are not necessarily intrinsically safe themselves, but that affect the energy in the intrinsically safe circuits and are relied on to maintain intrinsic safety. Associated apparatus may be either of the following:

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