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Standard for Solvent Extraction Plants

2017



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NFPA® 36

Standard for

Solvent Extraction Plants

2017 Edition

This edition of NFPA 36, *Standard for Solvent Extraction Plants*, was prepared by the Technical Committee on Solvent Extraction Plants. It was issued by the Standards Council on November 11, 2016, with an effective date of December 1, 2016, 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 36 was approved as an American National Standard on December 1, 2016.

Origin and Development of NFPA 36

This standard was developed at the request of the solvent extraction industry in an effort to achieve greater uniformity in fire protection practices for extraction plants. The purpose of the standard is to provide reasonable standards for the design and operation of solvent extraction processes and extraction plants.

In the development of this standard, the Technical Committee on Solvent Extraction Plants recognized some fundamental differences between the operation of solvent extraction plants and the processing of solvents in other facilities. Many extraction plants are relatively small units in isolated locations, operated without the benefit of overall fire protection measures, such as are customary in large solvent processing facilities.

The operator of a solvent extraction plant must establish and maintain fire safety esprit de corps among a small number of employees, as opposed to relying on the established customs of large-scale operations.

There are certain hazards in the combining and separating of solids and solvents that are peculiar to the solvent extraction industry. Also serving as a complicating problem is the potential dust explosion hazard in some areas of the typical plant. Therefore, the technical committee determined that it would be desirable to give consideration to practices applicable to both dust-laden and flammable vapor–laden atmospheres.

NFPA 36 was tentatively adopted at the 1957 Annual Meeting of the Association. A revision of this tentative edition was adopted at the 1958 Annual Meeting. NFPA 36 was officially adopted by the Association at its 1959 Annual Meeting. Amendments were adopted in 1962, 1964, 1967, 1972, 1973, 1974, 1978, 1983, 1985, 1988, 1993, 1997, 2001, 2004, and 2008.

The 1997 edition of NFPA 36 incorporated the following amendments:

- (1) New appendix text to 1.1.1 to refer the user to NFPA 30, Flammable and Combustible Liquids Code, for solvent extraction processes not covered by NFPA 36
- (2) New 1.1.6, extending the scope of NFPA 36 to any preparation or meal finishing area that is connected to the solvent extraction process by a conveyor, thus establishing a boundary between those operations governed by NFPA 36 and those that might be governed by NFPA 61, Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities
- (3) Revision of 5.2.5 to require compliance with all stated measures for preventing vapors from migrating beyond the controlled or restricted areas
- (4) New appendix text to 5.5.1 to provide guidance to the user in applying requirements for hazardous (classified) locations
- (5) New 5.8.1.7, which established specific requirements for actions to be taken to remove vapors from the extractor, especially during emergencies