

NFPA[®]

820

**Standard for
Fire Protection in
Wastewater Treatment
and Collection Facilities**

2020



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NFPA® 820

Standard for

Fire Protection in Wastewater Treatment and Collection Facilities

2020 Edition

This edition of NFPA 820, *Standard for Fire Protection in Wastewater Treatment and Collection Facilities*, was prepared by the Technical Committee on Wastewater Treatment Plants. It was issued by the Standards Council on April 28, 2019, with an effective date of May 18, 2019, and supersedes all previous editions.

This edition of NFPA 820 was approved as an American National Standard on May 18, 2019.

Origin and Development of NFPA 820

The Committee on Wastewater Treatment Plants was organized in 1983 to have primary responsibility for documents on safeguarding against the fire and explosion hazards specific to wastewater treatment plants and associated collection systems. This document includes the hazard classification of specific areas and processes. The need to develop NFPA 820 was based on fire or explosion incidents that, while infrequent, are relatively severe when they do occur. Initial work on the document was begun early in 1985 and resulted in the first edition being issued in 1990. Extensive changes were made between the first edition and the 1992 edition, with the most notable revision being the document title, which was changed from *Recommended Practice for Fire Protection in Wastewater Treatment Plants* to *Recommended Practice for Fire Protection in Wastewater Treatment and Collection Facilities*. In addition, the document scope was revised to include storm sewer systems and their appurtenances.

In 1995 the document was changed from a recommended practice to a standard, which contains mandatory requirements. This was done because NFPA 820 was widely referenced by various jurisdictions.

The 1999 edition of NFPA 820 was changed to include some editorial corrections and to make the document more enforceable. The definitions were also modified to conform to NFPA's *Manual of Style*.

For the 2003 edition, the entire document was reformatted to conform to the *Manual of Style for NFPA Technical Committee Documents*. Definitions were revised to conform to the *NFPA Glossary of Terms*.

The 2008 edition included guidance on waste gas burners and enclosed aeration basins. Definitions were coordinated with the *NFPA Glossary of Terms*.

The 2012 edition incorporated editorial changes to Table 5.2, Table 6.2(a), and Table 6.2(b). A new definition was added for waste gas burners, along with mitigation steps to Section 10.11 on fire and explosion prevention control procedures. Ventilation requirements and supporting language were revised to provide clarity and to tie in with an effort to better coordinate with associated industry documents.

For the 2016 edition, all tables were reformatted for better readability and reviewed and revised to provide clearer guidance on when the requirements apply. Combustible gas detector requirements were modified in several locations in the tables. Construction requirements throughout the document were revised to indicate that building codes cover general building construction; components of the wastewater facility are covered by the requirements provided in the chapter tables. The 2016 edition required alarm signaling for combustible gas detectors and ventilation because those systems are critical in preventing fires and explosions. The document was also revised to better indicate conditions under which dual ventilation can be used.

The 2020 edition has been updated to cover the protection of pressure sewers. All caution text throughout the document has been moved to the annex. New sections have been added to

emphasize the importance of monitoring for flammable atmospheres prior to the performance of work that could introduce a source of ignition. The definition for *physical separation* has been updated to clarify that personnel entry into physically separated spaces is by individual, exterior access ports with no physical connection. In addition, the 2020 edition now permits the use of an airlock as an alternative means of providing a physical separation.

Technical Committee on Wastewater Treatment Plants

Glenn E. McGinley, II, *Chair*

Ohio Public Employment Risk Reduction Program, OH [E]

Norman Bartley, Hazen Sawyer PC, NY [SE]

Josef Berkold, Donohue Associates, WI [U]
Rep. Water Environment Federation

John G. Brosnan, CH2M HILL, OH [SE]

Marty Cole, Hubbell Canada LP, Canada [M]

Bradley A. Cyrus, The Gorman-Rupp Company, OH [M]
Rep. Water & Wastewater Equipment Manufacturers Assn., Inc.

Claudio C. Groppetti, Honeywell/Xtralis, Inc., MN [M]

Leigh Ann Grosvenor, City of Deltona, FL [E]

John N. Harrell, Wilson & Company, Inc., MO [SE]

Clark A. Henry, Environment One Corporation, NY [M]

Linda Leong, San Francisco Public Utilities Commission, CA [U]

Christine Minor, City of Toledo, Division of Water Reclamation, OH [U]

Christopher Lee Motyl, NYS Department Of Health, NY [E]

Diep T. Nguyen, DTN Engineers, Inc., CA [SE]

Dennis Michael Querry, Trinity River Authority, TX [U]
Rep. Independent Electrical Contractors, Inc.

William J. Ryan, Jr., CDM Smith, MA [SE]

Karl Wiegand, Globe Fire Sprinkler Corporation, MI [M]
Rep. National Fire Sprinkler Association

Alternates

Scott R. Connor, Team-1 Academy Inc., Canada [SE]
(Voting Alt.)

Jeff Leano, City And County of San Francisco, CA [U]
(Alt. to Linda Leong)

James Lewis, American Fire Sprinkler Corporation, KS [M]
(Alt. to Karl Wiegand)

John R. Puskar, Prescient Technical Services LLC, OH [SE]
(Alt. to Diep T. Nguyen)

Sam Rizzi, CH2M HILL, OH [SE]
(Alt. to John G. Brosnan)

Nonvoting

James F. Wheeler, Washington, DC [SE]
(Member Emeritus)

Shawn Mahoney, NFPA Staff Liaison

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NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This Committee shall have primary responsibility for documents on criteria for safeguarding against the fire and explosion hazards specific to wastewater treatment plants and associated collection systems, including the hazard classification of specific areas and processes.

Contents

Chapter 1 Administration	820– 5	7.6 Alarm Signaling Systems.	820– 31
1.1 Scope.	820– 5	7.7 Laboratories.	820– 31
1.2 Purpose.	820– 5	7.8 Special Fire Protection Measures.	820– 31
1.3 Application.	820– 5	Chapter 8 Materials of Construction	820– 32
1.4 Retroactivity.	820– 5	8.1 General.	820– 32
1.5 Equivalency.	820– 6	8.2 Materials Selection.	820– 32
1.6 Units and Formulas.	820– 6	8.3 Applications.	820– 33
1.7 Document Organization.	820– 6	Chapter 9 Ventilation	820– 33
1.8 <i>National Electrical Code</i> ® Criteria.	820– 6	9.1 General.	820– 33
Chapter 2 Referenced Publications	820– 6	9.2 Installation.	820– 34
2.1 General.	820– 6	9.3 Ventilation Criteria.	820– 35
2.2 NFPA Publications.	820– 6	9.4 Airlocks.	820– 35
2.3 Other Publications.	820– 7	Chapter 10 Administrative Controls	820– 36
2.4 References for Extracts in Mandatory Sections.	820– 7	10.1 General.	820– 36
Chapter 3 Definitions	820– 7	10.2 Management Policy and Direction.	820– 36
3.1 General.	820– 7	10.3 Fire Risk Assessment.	820– 36
3.2 NFPA Official Definitions.	820– 7	10.4 Fire Prevention Program.	820– 36
3.3 General Definitions.	820– 7	10.5 Water-Based Fire Protection Systems.	820– 36
Chapter 4 Collection Systems	820– 11	10.6 Other Fire Protection and Detection Systems. ..	820– 36
4.1 General.	820– 11	10.7 Impairments.	820– 36
4.2 Design and Construction.	820– 11	10.8 Emergency Action Plan.	820– 36
Chapter 5 Liquid Stream Treatment Processes	820– 11	10.9 Fire Brigades.	820– 36
5.1 General.	820– 11	10.10 Polychlorinated Biphenyls.	820– 37
5.2 Design and Construction.	820– 11	10.11 Fire and Explosion Prevention.	820– 37
Chapter 6 Solids Treatment Processes	820– 23	Annex A Explanatory Material	820– 37
6.1 General.	820– 23	Annex B Wastewater Treatment Processes	820– 47
6.2 Design and Construction.	820– 23	Annex C Selection of Collection System Materials ..	820– 49
Chapter 7 Fire and Explosion Prevention and Protection	820– 23	Annex D Chemical and Fuel Fire/Explosion Hazards	820– 50
7.1 Scope.	820– 23	Annex E Informational References	820– 54
7.2 Fire Protection Measures.	820– 23	Index	820– 56
7.3 Fire Alarm Systems.	820– 31		
7.4 Combustible Gas Detection.	820– 31		
7.5 Ventilation Monitoring.	820– 31		