



Selected Photos











Codes

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UCC Statewide Code Adoptions Currently Applicable to Project*

2006 International Building Code (IBC)

- Not including Chapter 1 (Instead reference UCC Chapter 403)
- Not Including Chapter 30-Elevators (Instead reference UCC Chapter 405)
- Not including Appendices other than “E” and “H”
- Additional requirement to also comply with accessibility standard ANSI/ICC A117.1-2003

2006 ICC Electrical Code

- Utilizes 2005 National Electrical Code (NEC)

2006 International Energy Conservation Code (IECC)

2006 International Fire Code (IFC)

- Only as referenced in the 2006 IBC

2006 International Fuel Gas Code

- Not including Appendices
- LPG requirements are superseded by Pennsylvania Propane and Liquefied Petroleum Act

2006 International Mechanical Code (IMC)

- Not including Appendices

2006 International Performance Code for Buildings and Facilities

2006 International Plumbing Code (IPC)

- Not including Appendices

* Pennsylvania adoption of the 2009 IBC family of codes is expected sometime this year.

Additional Upper Dublin Township Listed Adoptions

2006 International Property Maintenance Code

Discussion of Emergency and Standby Power Systems – NFPA 110

Compliance with NFPA 110 is included by reference in Chapter 35 of the IBC. Several questions emerged during programming regarding the impact this has on design.

Levels

NFPA 110 Section 4.4 defines two formal levels of equipment installation performance and maintenance for Emergency Power Supply Systems (EPSS). Level 1 systems are to be installed when failure of the EPSS to perform could result in the loss of human life or serious injury. Level 2 systems apply to situations where EPSS failure is less critical to human life. Section 7.1 defines a third category called “optional loads”. These are non-essential loads that are neither Level 1 nor Level 2.

A-4.4.1 describes exactly what constitutes a Level 1 system:

“Essential electrical systems can provide power for the following essential functions:

1. Life safety illumination
2. Fire detection and alarm systems
3. Elevators
4. Fire pumps
5. Public safety communications systems
6. Industrial processes where current interruptions would produce serious life safety or health hazards
7. Essential ventilating and smoke removal systems”

A-4.4.2 describes exactly what constitutes a Level 2 system:

“Level 2 systems typically are installed to serve loads such as the following, that, when stopped due to any interruption of the primary electrical supply, could create hazards or hamper rescue or firefighting operations:

1. Heating and refrigeration systems
2. Communication systems
3. Ventilation and smoke removal systems
4. Sewage disposal
5. Lighting
6. Industrial processes”

Class

4.2: “class defines the minimum time in hours, for which the EPSS is designed to operate at its rated load without being refueled or recharged.” Table 4.1(a) defines the classes ranging from “class 0.083” (0.083 hours) to “class X” (48-96 hours). A4.2 states that “selection of the class of the EPSS should take into account past outage records and fuel delivery problems...” However, section 5.1.2 states that for our assumed seismic design category of C, the Level 1 system is required to be a class X - 96 hour.

While this may appear on the surface to have a very significant impact on the system design, it actually does not. The seven items (above) that define a Level 1 system indicate a very limited need. The two biggest factors will be whether the building incorporates an elevator and/or a fire pump for the sprinkler system since these are the biggest potential loads. The reason for this is addressed in NFPA 110 section 7.1.5 which states “when the normal power source is not available, the EPSS shall be permitted to serve optional loads, provided that the EPSS has adequate capacity or automatic selective load pickup and load shedding are provided as needed to ensure adequate power to (1) the Level 1 loads, (2) the Level 2 loads, and (3) the optional loads, in that order of priority.” This means as long as the system is carefully designed to shed load as the fuel approaches the point where it must be conserved to insure the 96 hour Level 1 requirement, then the impact on the overall size of the system (particularly the fuel storage and delivery) can potentially be minimized.

Applicability of FEMA 450/ NEHRP Recommended Provisions for Seismic Regulation of New Buildings and Other Structures

The 2006 IBC Chapter 16 references ASCE 7-05 as the basis for structural design. ASCE 7-05 in turn is largely based on FEMA 450 (2003 NEHRP) standard for seismic design, so this standard does apply. FEMA 450 specifically addresses the unique needs of protecting fire stations, and the design elements required for an essential facility with Seismic Design Category C. Applying the provisions of FEMA 450 will increase the cost of design and construction of a fire house of this classification. As a point of reference, the new high school across the street has a Seismic Design Category of B versus the fire house C even though the soils are assumed to be the same. This is a direct function of the Essential Service Facility designation of a fire station.

Pennsylvania Office of the State Fire Commissioner Appendix on NFPA Standards

Included below is a posted document from the Pennsylvania Office of the State Fire Commissioner discussing NFPA applicability. Certain problems arise since some documents listed conflict with or are supplanted by adopted codes and most others are unrelated to construction issues. They are provided however for quick reference of those NFPA standards that OSFC believes may apply to the fire service.

What Are NFPA Standards?

Consensus standards are developed by specific industries to set forth widely accepted standards of care and operations for certain practices. Standards are an attempt by the industry or profession to self-regulate by establishing minimal operating, performance, or safety standards, and they establish a recognized standard of care. They are written by consensus committees composed of industry representatives and other affected parties. The NFPA has many standards that affect fire departments. The standards should be followed to protect fire and rescue personnel from unnecessary workplace hazards and because they establish the standard of care that may be used in civil lawsuits against fire and rescue departments. In most cases, compliance with NFPA standards is voluntary. However, in some cases, Federal or state OSHA agencies have incorporated wording from NFPA standards into regulations. In cases, the compliance with the standards is mandatory.

Regardless of whether compliance with an NFPA standard is voluntary or mandatory, fire and rescue departments must consider the impact or “voluntary” standards on private litigation. In some states, a department may be liable for the negligent performance of their duties. Even in states that protect rescue workers under an immunity statute, most state laws do not protect fire and rescue departments for grossly negligent acts. Essentially, negligence involves the violation of a standard of care that results in injury or loss to some other individual or organization. In establishing the standard of care for rescue operations, the courts will frequently look to the “voluntary” standards issued by NFPA or other organizations. Although “voluntary” in name, these standards can become, in effect, the legally enforceable standard of care for fire and rescue department. Accordingly, fire and rescue departments should pay close attention to applicable standards.

Listing and Explanation of NFPA Selected Standards Which Affect the Fire Service

- **NFPA 1: Fire Prevention Code**

The purpose of this code is to prescribe minimum requirements necessary to establish a reasonable level of fire safety and property protection from the hazards created by fire and explosion.

- **NFPA 10: Standard for Portable Fire Extinguisher**

The provisions of this standard apply to the selection, installation, inspection, maintenance, and testing of portable extinguishing equipment.

- **NFPA 101: Life Safety Code – Code for Safety to Life from Fire in Buildings and Structures**

The purpose of this Code is to provide minimum requirements, with due regard to function, for the design, operation, and maintenance of buildings and structures for safety to life from fire. Its provisions will also aid life safety in similar emergencies.

- **NFPA 101A: Guide on Alternative to Life Safety**

This guide consists of a number of different alternative approaches to life safety. Each chapter is a different system independent of the other and is to be used in conjunction with the 2000 edition of NFPA 101, Life Safety Code.

- **NFPA 101B: Code for Means of Egress for Buildings and Structures**

This document is intended to be used as part of a building code and not as a stand-alone document. This document was developed with the understanding that the building code with which it is used addresses fire protection and life safety features essential to safe egress. These features include: classification and separation of occupancies, protection of vertical openings, requirements for fire protection systems and equipment (fire alarms, extinguishers, automatic extinguishing systems, standpipes, and smoke control), interior finish, building construction and compartmentalization, building service equipment, special hazard protection, and so on.

- **NFPA 13E: Recommended Practice for Fire Department Operations in Properties Protected by Sprinkler and Standpipe Systems**

The purpose of this recommended practice is to assist fire departments in developing training programs and planning effective operations for supporting certain fixed fire protection systems in buildings in which fire can occur. Recommended practices are given for the adequate support and use of sprinkler and standpipes systems.

- **NFPA 291: Recommended Practice for Fire Flow Testing and Marking of Hydrants**

Fire flow tests are conducted on water distribution systems to determine the rate of flow available at various locations for fire-fighting purposes. A certain residual pressure in the mains is specified at which the rate of flow should be available. Additional benefit is derived from fire flow tests by the indication of possible deficiencies (such as tuberculation of piping or closed valves or both) which could be corrected to ensure adequate fire flows as needed.

NFPA 295: Standard for Wildfire Control

The purpose of this standard is to specify management practices and policies necessary for a fire protection organization to develop an effective wildfire control program.

- NFPA 299: Standard for Protection of Life and Property from Wildfire

This standard provides planning, construction, maintenance, education, and management elements for fire protection, land use planning, property development, property maintenance, wildfire safety training, public fire safety education, and others responsible for or interested in improving fire and safety in areas where wildfire might threaten lives or improve property.

- NFPA 402: Aircraft Rescue And Fire-fighting Operations

This standard establishes standards for fire and rescue operations involving aircraft.

- NFPA 403: Standard for Aircraft Rescue and Fire-fighting Services at Airports

This standard is prepared for use and guidance of those charged with providing and maintaining aircraft rescue and fire-fighting services at airports.

- NFPA 405: Recommended Practices for the Recurring Proficiency Training of Aircraft Rescue and Fire-fighting Services

This recommend practice is intended for the use of those charged with maintaining ARFF services at airports and established the basis for a recurring training program that focuses on measurable performance criteria. This recommended practice address the development of effective, coordinated aircraft rescue and fire control operations with a minimum exposure to risk of participants and the environment. Results of evaluations conducted in accordance with recommendations of this recommended practice should be recorded and maintained by means of a documented management system. Continuous broad based training id fundamental to maintaining a proficient ARFF delivery systems at airports.

- NFPA 412: Standard for Evaluating Aircraft Rescue and Fire-Fighting Foam Equipment

The tests specified in this standard provide procedures for the evaluation of foam fire-fighting equipment in the field to determine compliance with NFP 414, Standard for Aircraft Rescue and Fire Fighting Vehicles, and NFPA 403, Standard for Aircraft Rescue and Fire-Fighting Services at Airports.

- NFPA 414: Standard for Aircraft Rescue and Fire-Fighting Vehicles

This Standard specifies the optimum design, performance, and acceptance criteria for aircraft rescue and fire-fighting vehicles intended to carry rescue and fire-fighting equipment for rescuing occupants and combating fires in aircraft on, or in the vicinity of, an airport.

NFPA 422: Guide for Aircraft Accident Response

This guide provides a framework for the collection of data that provides information on the effectiveness of aircraft accident emergency response services. This guide applies the principles of those standards and guides developed by the Technical Committee on Aircraft Rescue and Fire Fighting.

- NFPA 424: Guide for Airport/Community Emergency Planning

This guide describes the elements of an airport/community emergency plan that requires consideration before, during, and after an emergency has occurred. The scope of the airport/community emergency plan should include command, communication, and coordination functions for executing the plan.

- NFPA 471: Responding to Hazardous Materials Incidents

This provides guidance to all fire departments to comply with federal hazardous materials regulations contained in 29 CFR1910.120 and 40 CFR 311. It recommends standard operating guidelines for responding to hazardous materials incidents including planning procedures, responses levels, site safety, communications, personal protective equipment, incident mitigation, and decontamination.

- NFPA 472: Professional Competence of Responders to Hazardous Materials Incidents

This standard specifies minimum competency requirements for responders to hazardous materials incidents. It establishes the training level as: fire responder's awareness level, first responder's operational level; hazardous materials technician; incident commander; and off-site specialists.

- NFPA 473: Competencies for EMS Personnel Responding to Hazardous Materials Incidents

This standard specifies minimum competency requirements for EMS Level I and Level II responders, including:

- meeting the appropriate responder awareness level
- defined in NFPA 472
- analyzing the incident to determine the hazards to the responder and the patient
- planning the response
- implementing the planned response
- terminating the incident

NFPA 555: Guide on Methods for Evaluating Potential for Room Flashover

This guide addresses methods for evaluating the potential for room flashover from fire involving the contents, furnishings, and interior finish of a room. The methods addressed by this guide include prevention of ignition, installation of automatic fire suppression systems, control of ventilation factors, and limitation of the heat release rate of individual and grouped room contents, furnishings, and interior finish.

• NFPA 600: Standard on Industrial Fire Brigades

This standard contains minimum requirements for organizing, operating, training, and equipping industrial fire brigades. It also contains minimum requirements for the occupational safety and health of industrial fire brigade members while performing fire fighting and related activities.

• NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response.

This standard addresses the health, flammability, instability, and related hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies.

• NFPA 901: Standard Classifications for Incident Reporting and Fire Protection Data

This document describes and defines data elements and classifications used by many departments in the United States and other countries to describe fire damage potential and experience during incidents. It does not provide guidelines for a reporting system or related forms.

• NFPA 902: Fire Reporting Field Incident Guide

This guide was developed to provide a fire department with a basic system for collecting and using data in a uniform manner based on NFPA 901. It contains the following forms:

- the Basic Incident Report (Form 902F)
- the Basic Casualty Report (Form 902G)
- and the Basic EMS Report (form 902H)

• NFPA 903: Fire Reporting Property Survey Guide

This guide provides a method for fire department personnel to use in collecting selected information regarding the pre-fire risk of the structures within their jurisdiction. This data is designed to provide a general property inventory that can yield a general building risk. The information can form the basis of a method for gradually reducing this risk. This system is not designed to produce a pre-fire plan, fire equipment readiness report, or code conformance report. The use of a property survey guide is extremely important for fire departments that are involved in the master planning process.

NFPA 904: Incident Follow-up Report Guide

This guide contains instructions for the completion of the Incident Follow-up Report, Form 904I. It is intended that Form 904I be used to record data from follow-ups. It is assumed that an incident report is already on file for each incident for which a follow-up investigation has been conducted. There are three main purposes for Form 904I:

- To document some of the findings of the follow-up
- To provide the basis for revision to or augmentation of the data reported on the incident report, or both, if the information from follow-up is more accurate.
- To provide additional details on special situations such as fires of incendiary or suspicious origin.

- NFPA 906: Guide for Fire Incident Field Notes

This guide explains a series of suggested forms that can be used during a fire investigation to record field notes. The forms serve as a reminder of the type of information that can be helpful in understanding the fire.

- 906-0 Case Supervision
- 906-1 Any fire
- 906-2 Structure Fire
- 906-3 Motor Vehicle
- 906-4 Wildland Fire
- 906-5 Casualty
- 906-6 Witness Statement
- 906-7 Evidence
- 906-8 Photograph
- 906-9 Sketch
- 906-10 Insurance Information
- 906-11 Records/Documents

- NFPA Guide for Fire and Explosion Investigation

This document is designed to assist individuals who are charged with the responsibility of investigating and analyzing fire and explosion incidents and rendering opinions as to the origin, cause, responsibility, or prevention of such incidents.

- NFPA 1000: Standards for Fire Service Professional Qualification Accreditation and Certification Systems
This standard establishes the minimum criteria for accrediting bodies; and for the assessment and validation of the process used to certify fire and related emergency response personnel to professional qualifications standards; and of non-engineering, fire-related, academic, degree-granting programs offered by institutions of higher education.

- NFPA 1001: Standard on Professional Qualification for Firefighters

This standard identifies the minimum requirements for firefighter candidates, and for those at the Firefighter I and Firefighter II levels. Requires familiarity with specific procedures, equipment, and conditions outlined in the standards. This standard is used as the basis for curriculum for Firefighter I and Firefighter II.

- NFPA 1002: Fire Department Vehicle Driver/Operator Professional Qualifications

This standard lists knowledge and skills needed to operate and maintain fire department vehicles.

- NFPA 1003: Professional Qualification for Airport Firefighters

This standard identifies minimum performance objectives for service as airport firefighter, including medical requirements; familiarity with airports and aircraft; and familiarity with equipment, procedures, and conditions specific to emergency response at airports.

- NFPA 1006: Standard for Rescue Technician Professional Qualifications

This standard establishes the minimum job performance requirements necessary for fire service and other emergency response personnel who perform technical rescue operations.

- NFPA 1021: Standard for Fire Officer Professional Qualifications

This standard identifies the performance requirements necessary to perform the duties of a fire officer and specifically identifies four levels of progression.

- Fire Officer I
- Fire Officer II
- Fire Officer III
- And Fire Officer IV

- NFPA 1031: Standard for Professional Qualifications for Fire Inspector and Plan Examiner

This purpose of this standard is to specify in terms of job performance requirements the minimum standards for professional competence for fire inspectors and plan examiners. This standard defines three levels of

progression for fire inspector and two levels of progression for plan examiner. This standard does not address the management responsibilities.

- Fire Inspector I
- Fire Inspector II
- Fire Inspector II
- Plans Examiner I
- Plans Examiner II

NFPA 1033: Standard for Professional Qualification for Fire Investigator

This standard identifies the professional level of performance required for fire investigators. It specifically identifies the job performance requirements necessary to perform as a fire investigator.

• NFPA 1035: Standard for Professional Qualifications for Public Fire and Life Safety Educator

The standard identifies the levels of professional performance required for public fire and life safety educators, public information officers, and juvenile firesetter intervention specialists. It specifically identifies the job performance requirements (JPR's) necessary to perform as a public fire and life safety educator, a public information officer, and a juvenile firesetter intervention specialist.

- Public Fire and Life Safety Educator I
- Public Fire and Life Safety Educator II
- Public Fire and Life Safety Educator III
- Public Information Officer
- Juvenile Firesetter Intervention Specialist I
- Juvenile Firesetter Intervention Specialist II

• NFPA 1041: Standard for Fire Service Instructor Professional Qualifications

This standard identifies the professional levels of competence required of fire service instructors.

- Fire Service Instructor I
- Fire Service Instructor II
- Fire Service Instructor III

• NFPA 1051: Standard for Wildland Fire Fighter Professional Qualifications

This standard identifies the minimum job performance requirements for wildland fire suppression duties. The standard is applicable to all personnel who respond to wildland fires and defines four levels of performance. It is not applicable to non-suppression administrative or management duties.

- Wildland Fire Fighter I
- Wildland Fire Fighter II
- Wildland Fire Fighter III
- Wildland Fire Fighter IV

• NFPA 1061: Standard for Professional Qualifications for Public Safety Telecommunicator

This standard identifies the minimum job performance requirements for public safety telecommunicators.

- Public Safety Telecommunicator I
- Public Safety Telecommunicator II

NFPA 1071: Standard for Emergency Vehicle Technician Professional Qualifications

This standard identifies and defines the minimum job performance requirements (JPR's) for a person to be considered qualified as an emergency vehicle technician (EVT) and shall apply to personnel who are engaged in the inspection, diagnosis, maintenance, repair, and testing of emergency response vehicles.

- Emergency Vehicle Technician I
- Emergency Vehicle Technician II

• NFPA 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting

This standard identifies minimum requirements for water supplies for structural fire-fighting purposes in rural and suburban areas where adequate and reliable water supply systems for fire-fighting purposes, as determined by the authority having jurisdiction (AHJ), do not otherwise exist.

The minimum requirements identified in this standard shall be subject to increase by the AHJ to meet particular conditions such as the following:

- Limited fire department resources
- Extended fire department response time
- Delayed alarms
- Limited access
- Hazardous vegetation
- Structural attachments, such as decks and porches
- Unusual terrain
- Special uses.

• NFPA 1145: Guide for the Use of Class A Foams in Manual Structural Fire Fighting

This document presents fundamental information for agencies planning to use Class A foam for structural fire fighting and protection. It presents necessary and useful information on foam properties and characteristics, proportioning and discharge hardware, application techniques, and safety considerations.

• NFPA 1201: Standard for Developing Fire Protection Services for the Public

This standard is intended for the use and guidance of those charged with providing fire protection (safety) services to protect lives, property, and the environment from the effects of fire and, in many cases, other perils.

• NFPA 1221: Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems

This standard covers the installation, performance, operation, and maintenance of public emergency service communication system or facility. This standard is intended neither as a design specification nor as an instructional manual.

NFPA 1250: Recommended Practice in Emergency Service Organization Risk Management

This recommended practice establishes minimum criteria to develop, implement, or evaluate an emergency service organization risk management program for effective risk identification, control, and financing.

• NFPA 1401: Recommended Practice for Fire Service Training Reports and Records

This document presents a systematic approach to providing essential information for managing the training function of the fire service organization. Included are those types of records, reports, and forms that can serve as basic information tools for effective training administration. Training programs established and implemented within the organization should be people-oriented and action-minded, and the program should reflect these concepts.

• NFPA 1402: Guide to Building Fire Service Training Centers

This document provides guidance for the planning of fire-fighting training facilities. Regardless of whether a particular situation requires inclusion of all the items specified, they are provided in order to provoke thought. This guide is intended to assist in the identification of those elements that are of the greatest benefit(s) to those involved in planning such a facility.

• NFPA 1403: Standard on Live Fire Training Evolutions

This standard establishes procedures for training structural firefighters under live fire conditions. Requirements include:

- Training center burn building that are properly procured and prepared
- Adequate water supply and room for vehicle parking and staging
- Pre-burn briefing session
- Use of fuels that have known, controllable burning characteristics
- Presence of a safety officer
- Use of a fire ground communications system, a building evacuation plan, backup safety personnel, emergency medical services and a pre-burn search
- Use of full protective clothing and equipment.

- NFPA 1404: Standard for Fire Department Self-Contained Breathing Apparatus Program

This standard contains minimum requirements for a fire service respiratory protection program. These requirements are applicable to organizations provide fire suppression, fire training, rescue and respiratory protection equipment training, and other emergency service including public, military, and private fire departments and fire brigades.

- NFPA 1405: Guide for Land-Based Fire Fighters Who Respond to Marine Vessel Fires

This guide identifies the elements of a comprehensive marine fire-fighting response program including, but not limited to, vessel familiarization, training considerations, pre-fire planning, and special hazards that enable land-based fire fighters to extinguish vessel fires safely and efficiently. In general, the practices recommended in this publication apply to vessels that call at United States ports or that are signatory to the Safety of Life at Sea (SOLAS) agreement.

- NFPA 1410: Standard on Training for Initial Emergency Scene Operations

This standard contains the minimum requirements for evaluating training for initial fire suppression and rescue procedures used by fire department personnel engaged in emergency scene operations.

- NFPA 1451: Standard for a Fire Service Vehicle Operations Training Program

This standard outlines the development of a written training program including the organizational procedures for training, vehicle maintenance, and identifying equipment deficiencies and for design, financing, and other areas. The knowledge and skills required of safety, training, maintenance, and administrative officers charged with developing and implementing the operations training program are also outlined within this standard.

- NFPA 1452: Guide for Training Fire Service Personnel to Conduct Dwelling Fire Safety Surveys

The intent and purpose of this document is to provide fire department training officers or other fire service personnel with a guide for the establishment of a dwelling fire safety program for their community.

- NFPA 1500: Standard on Fire Department Occupational Safety and Health Program

This standard provides guidelines for establishing, implementing, and managing a comprehensive safety and health program. Among the requirements are:

- Develop a risk management plan and an occupation safety and health policy
- Appoint a fire department safety officer
- Establish an occupational safety health committee
- Maintain records on all-job related incidents
- Train all fire department members to perform their assigned duties safely
- Properly specify, maintain, and repair all vehicles, and train drivers and passengers
- Use and maintain protective clothing and equipment appropriate to each member's duties
- Apply an incident management system for emergency operations, including risk management systems and acceptability systems
- Ensure that facilities comply with all applicable health, safety, building and fire codes
 - Medically evaluate and certify members
 - Provide a member assistance program.

- NFPA 1521: Standard for Fire Department Safety Officer

The purpose of this standard is to provide structure and coordination to the management of emergency incidents to help ensure the safety and health of fire department members. It requires adoption of an incident management system to manage all emergency incidents and training exercises, with written plans to anticipate incidents that require standardized procedures. Also requires the department to:

- Coordinate with other agencies involved in emergency incidents
- Create a command structure and define standard supervisory assignments for each incident
 - Develop incident commander, command staff, planning, logistics, operations, communications, staging, and finance functions
- Ensure personnel accountability and rest and rehabilitation for all members at the incident

- **NFPA 1581: Standard on Fire Department Infection Control Program**

This standard provides minimum guidelines for infection control in the fire station, at an incident scene, and other areas of operation. It covers:

- Training and education
- Appointing an infection control liaison
- Immunization and testing procedures and exposure procedures
- Disinfecting, cleaning, and storage in fire department facilities
- Emergency medical operations protection, including infection control garments and equipment and handling of sharp objects
- Cleaning, disinfecting, and disposal procedures.

- **NFPA 1582: Standard on Medical Requirements for Fire Fighters and Information for Fire Department Physicians**

This standard provides guidelines to ensure that fire fighter are physically capable of performing fire fighting tasks. It covers the medical evaluation process as well as a list of conditions that would or could prevent a fire department member or candidate from performing as a firefighter by presenting a significant risk to the health or safety of others (Note that OSHA standard 29 CFR 1910.156 also addresses physical fitness issues.)

- **NFPA 1583: Standard on Health-Related Fitness Programs for Fire Fighters**

The requirements in this standard are the minimum requirements of the development, implementation, and management for a health-related fitness program (HRFP).

- **NFPA 1600: Standard on Disaster/Emergency Management and Business Continuity Programs**

This purpose of this standard is to provide those with the responsibility for disaster and emergency management and business continuity programs the criteria to assess current programs or to develop, implement, and maintain a program to mitigate, prepare for, respond to, and recover from disasters and emergencies.

- **NFPA 1620: Recommended Practice for Pre-Incident Planning**

This document is a recommended practice for evaluating the protection, construction, and operational features of specific occupancies to develop a pre-incident plan for responding to fires and other emergencies. The pre-incident plan should be used by responding personnel to manage fire and other emergencies in these facilities using the available resources.

- **NFPA 1670: Standard on Operations and Training for Technical Rescue Incidents**

This standard identifies and establishes levels of functional capability for safety and effectively conducting operations at technical rescue incidents.

- General Requirements
- Structural Collapse
- Rope Rescue
- Confined Space
- Vehicle and Machinery
- Water
- Wilderness Search and Rescue
- Trench and Excavation

- **NFPA 1851: Standard on Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles**

This standard shall specify the minimum selection, care, and maintenance requirements for structural fire fighting protective ensembles, and the individual ensemble elements that include coats, trousers, coveralls, helmets, gloves, footwear, and interface components that are compliant with NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting.

- NFPA 1901: Standard for Automotive Fire Apparatus

This standard specifies minimum requirements for new automotive pumper fire apparatus, consisting of a vehicle equipped with a fire pump, water tank, and hose, as well as an optional water tower. Appendices to this standard provide guidance on purchasing new fire apparatus, including writing specifications, obtaining and evaluating proposals, and awarding the contract.

NFPA 1906: Standard for Wildland Fire Apparatus

This standard shall apply to new automotive fire apparatus designed primarily to support wildland fire suppression operations. The apparatus shall consist of a vehicle equipped with a pump, water tank, hose, and equipment whether designed to be integral with the chassis or as a slip-on fire fighting module mounted on the apparatus.

- NFPA 1911: Standard for Service Tests of Fire Pump Systems on Fire Apparatus.

This standard establishes the site, environmental, and equipment requirements for proper pump system performance test, as well as the frequency and procedures to be followed in performing tests.

- NFPA 1912: Standard for Fire Apparatus Refurbishing

This Standard specifies the minimum requirements for the refurbishing of automotive fire apparatus utilized for fire fighting and rescue operations, whether the refurbishing work is done at the fire department or municipal maintenance facilities or at the facilities of private contractors or apparatus manufacturers. This standard shall not apply to the repair of fire apparatus.

- NFPA 1914: Standard for Testing Fire Department Aerial Devices

This standard shall Apply to the examination and testing of all fire apparatus, regardless of year of manufacture, that are equipped with an aerial ladder, an elevating platform, or water tower as specified in NFPA 1901, Standard for Automotive Fire Apparatus.

- NFPA 1915: Standard on Fire Apparatus Preventive Maintenance Program

This standard defines the minimum requirements for establishing a preventive maintenance program for fire apparatus. These requirements shall apply to public or private organizations utilizing fire Apparatus.

- NFPA 1925: Standard on Marine Fire-Fighting Vessels

This standard shall provide minimum requirements for marine fire-fighting vessels. It shall apply to both the construction of new vessels and the conversion of existing vessels for fire-fighting purposes. This standard shall also provide minimum maintenance and testing requirements.

- NFPA 1931: Standard on Design of and Design Verification Tests for Fire Department Ground Ladders

This standard specifies requirements for the design of and the design verification tests for fire department ground ladders. The tests specified herein shall be the responsibility of ladder manufacturers only and shall not be performed by the fire department.

NFPA 1932: Standard on Use, Maintenance, and Service Testing of Fire Department Ground Ladders

This standard specifies requirements for the use, maintenance, inspection, and service testing of fire department ground ladders.

- NFPA 1936: Standard on Powered Rescue Tool Systems

This standard specifies the minimum requirements for the design, performance, testing, and certification or powered rescue tool systems and the individual components of spreaders, rams, cutters, combination tools. Power units, and power transmission cables, conduit, or hose.

- NFPA 1961: Standard on Fire Hose

The requirements of this standard shall apply to design and design verification testing of new fire hose, specified as attack hose, occupant use hose, forestry hose, and supply hose.

- NFPA 1962: Standard for the Care, Use, and Service Testing of Fire Hose Including Couplings and Nozzles

This standard shall apply to the care of all types of fire hose, coupling assemblies, and nozzles while in service, in use, and after use, including record keeping inspecting, and service testing.

- NFPA 1963: Standard for Fire Hose Connections

This standard gives the performance requirements for new fire hose couplings and adapters with nominal sizes from ¾ in. (19 mm) through 6 in. (15 mm) and the specifications for the mating surfaces.

- NFPA 1964: Standard for Spray Nozzles (Shutoff and Tip)

The purpose of this standard is to provide minimum performance and reliability requirements for spray nozzles to ensure purchasers or authority having jurisdiction that nozzles that comply with this standard are suitable for fire suppression use.

- NFPA 1971: Standard on Protective Ensemble for Structural Fire Fighting

This standard specifies the minimum design, performance, and certification requirements, and test methods for structural protective ensembles that include protective coats, protective trousers, protective coveralls, helmets, gloves, foot ware, and interface components.

- NFPA 1975: Standard on Station/Work Uniforms for Fire And Emergency Services

This standard specifies the minimum performance and certification requirements and the test methods for textiles and other materials used in the construction of station/work uniforms for fire and emergency services personnel.

- NFPA 1976: Standard on Protective Ensemble for Proximity Fire Fighting

This standard specifies the minimum design, performance, and certification requirements and test methods for proximity protective ensembles, including protective coats, protective trousers, protective coveralls, helmets, gloves, foot ware, and interface components.

- NFPA 1977: Standard on Protective Clothing and Equipment for Wildland Fire Fighting

This Standard specifies the minimum design, performance, testing, and certification requirements for protective clothing, helmets, gloves, and foot ware that are design to protect fire fighters against adverse environment effects during wildland fire-fighting operations.

- NFPA 1981: Standard on Open-Circuit Self-Contained Breathing Apparatus for the Fire Service

This standard provides minimum performance requirements and test methods, including;

- Certification, inspecting and testing by manufacturers
- Air flow, environmental temperature, vibration resistance, fabric flame and heat
- Resistance, accelerated corrosion resistance, particulate resistance, face piece lens abrasion resistance, communication performance, and heat and flame resistance performance.

- NFPA 1982: Standard on Personal Alert Safety System (PASS)

This standard specifies minimum design, performance, and certification requirements and test methods for all Personal Alert Safety Systems(PASS) to be used by the fire fighters and other emergency services personnel who engage in rescue, fire fighting, and other hazardous duties.

- NFPA 1983: Standard on Fire Service Life Safety Rope and System Components

This standard specifies the minimum design, performance, testing, and certification requirements for new life safety rope and new system components including escape rope, water rescue throwlines, life safety harness, belts, and auxiliary equipment used for rescue and training by the fire service or similar emergency service organizations.

- NFPA 1991: Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies

This standard specifies minimum design, performance, certification, and documentation requirements,; and test methods for vapor-protective ensembles and individual elements for chemical vapor protection; and additional optional criteria for chemical flash fire escape protection and liquefied gas protection.

- NFPA 1992: Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies

This standard specifies minimum design, performance certification, and documentation requirements; test methods for liquid splash-protective ensembles and liquid splash-protective clothing; and additional optional criteria for chemical flash fire protection.

- NFPA 1999: Standard on Protective Clothing for Emergency Medical Operations

This standard specifies the minimum documentation, design criteria, performance criteria, and test methods for new single-use and new multiple-use emergency medical protective clothing, including garments, gloves, and face protection devices, designed to provide a minimum level of protection to emergency medical services personnel as well as victims and patients from contact with liquid-borne pathogens during emergency medical operations.

NOTE: The information contained in this document was obtained from the following sources:
National Fire Protection Association standards
Fire Service Resource Guide, National Volunteer Fire Council, The United States Fire Administration, and
Federal Emergency Management Agency

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