
RECOMMENDATION

Available Certifications

That Certification Programs for volunteer firefighters be established in the state of Texas on a voluntary basis and said programs be administered through the State Firemen's and Fire Marshals' Association (SFFMA) office:

1. Live Fire Prerequisite program updated effective January 1, 2015;
2. NFPA Firefighter I & II programs updated effective January 1, 2015;
3. HazMat Awareness/Operations program effective January 1, 2020;
4. Master Firefighter program effective July 1, 1990;
5. Volunteer Investigation Personnel programs updated effective January 29, 2005;
6. Driver/Operator program updated effective January 1, 2020;
7. Fire Officer I & II, Public Fire Educator and Public Information Officer programs implemented January 28, 2006;
8. Instructor programs updated effective June 1, 2020;
9. Fire Inspector program updated effective February 1, 2020;
10. Fire Officer III & IV programs effective January 1, 2015;
11. Rescue Apprentice, Rope Rescue, Vehicle Rescue, Trench Rescue, Wilderness Rescue, Structural Collapse Rescue, Machinery Rescue, Surface Water Rescue and Swiftwater Rescue programs effective January 1, 2016

Additional programs will be implemented as deemed necessary by the Certification Board.

Physical Fitness

The very nature of a firefighter's actions is hazardous and extremely physically exhausting while on the fire scene. In order to render proper service to his/her department, and in keeping with this concept, a firefighter must be physically sound and free from any defect which may adversely affect his/her performance of duty. His/her personal safety and the lives of others will be endangered if the firefighter lacks the necessary physical abilities.

Emergency Medical Care

Minimum emergency medical care performance capabilities for entry-level personnel shall be developed and validated by the AHJ to include infection control, CPR, bleeding control, and shock management.

Composition

That a Board of no more than twenty-five (25) members, appointed by the President of the State Firemen's and Fire Marshals' Association of Texas (SFFMA) and known as the Texas Volunteer Firefighters' and Fire Marshals' Certification Board, administer the program.

Appointments

- a. Board Members will be appointed to serve four-year terms on the board.
- b. Vacancies of the Board will be filled by the President of the SFFMA to fill unexpired terms caused by any reason.
- c. No two Board Members are to be from the same Zone area.
- d. Prospective new Board Member's name and resume must be submitted in writing by the SFFMA District to the President and Executive Director of the SFFMA.
- e. One Board Member shall represent Texas A&M Engineering Extension Service (TEEX) as a voting liaison.
- f. One Board Member shall represent Texas A&M Forest Service (TFS) as a voting liaison.

Individual Requirements

- a. Board Member must:
 - i. reside in the Zone to be represented, and be active in that District;
 - ii. be an active, retired or honorary life member of a regularly organized volunteer or combination fire department that holds current membership in the SFFMA;
 - iii. maintain a current individual membership in the SFFMA;
 - iv. have at least eight (8) years of experience with a recognized fire department or combination of recognized fire departments;
 - v. hold at least an SFFMA Firefighter I certification;
 - vi. meet the instructional criteria for Certification Coordinator; and
 - vii. attend a majority of meetings and teleconferences each year.
 - viii. Be a proponent of the SFFMA, both for participating in the certification program but also selling the benefits of the SFFMA member.
 - ix. Be a promoter of the items our program has by educating the members at workshops.
 - x. Be aware of what cooperative agencies do. What can TEEX do, what can TFS do, TDEM, etc. What kind of training they offer.
 - xi. Represent your Zone/District and be the Primary contact for certification questions.
 - xii. Attend scheduled Certification Board Meetings and conference calls.
 - xiii. Deliver SFFMA Certification workshops at least twice a year throughout the Zone.
 - xiv. Assist Fire Departments with training documentation needs so they can ensure the delivery of training records to the SFFMA in a timely manner.
 - xv. Assist Fire Departments with certification needs so that they can ensure their members are receiving the proper training to achieve certifications via SFFMA.
 - xvi. Maintain formal lines of communications with Fire Departments regarding Certification news or issues.
 - xvii. Maintain performance standards for the Certification Program.
 - xviii. Become active with the different committees of the SFFMA Certification Board.
 - xix. Review Masters Applications on our Board use only page before any Board meeting.
 - xx. Stay up to date and informed on certification issues.
 - xxi. The Board shall maintain strict confidentiality of all complaints, allegations and actions with the exceptions of proper notifications made to the Executive Board.

- xxii. Encourage your zone departments to participate in the certification program / assist them when they may need.
- xxiii. Help the meetings be productive, if you have a relevant concern express it but do not beat a dead horse.
- xiv. Learn the mission and history of the Board.

Assistants

- a. There may be up to two (2) assistants per Zone, designated by the Board Member from that Zone.
- b. One assistant may cast a proxy vote, only in the absence of the Board member.
- c. Assistants should
 - i. be named from departments outside the Board member's county;
 - ii. Reside in the Zone to be represented, and be active in that District;
 - iii. Be an active, retired or honorary life member of a regularly organized volunteer or combination fire department that holds current membership in the SFFMA;
 - iv. Maintain a current individual membership in the SFFMA.

Procedures

Meetings

- a. The Board shall meet at such times and places in the state of Texas as it deems necessary.
- b. Meetings shall be called by the Chairman upon his/her own motion, or upon the written request of five members.
- c. Quorum – A majority of members shall constitute a quorum.
- d. Orders of Business – Robert's Rules of Order shall prevail for all meetings.

Officers

- a. Officers of the Board shall consist of a Chairman, Vice Chairman, Secretary, and Assistant Secretary.
- b. The Board shall elect its officers from the appointed members at its first meeting succeeding the June State Convention.

Objectives

- 1. The Board is to raise the level of competence of volunteer firefighting and prevention personnel by establishing and maintaining minimum standards in accordance with NFPA standards.
- 2. The Board has the authority to certify volunteer fire protection training and educational programs as having attained the minimum required standards established by the Board.

Duties

- 1. The Board has the power to revoke any certificate issued in the certification program, if the Board determines that:
 - a. the program is not being conducted properly within the member department;
 - b. the program is being abused in the department;
 - c. a certificate was wrongly issued or fraudulently obtained; or
 - d. a person's criminal conviction of a felony or misdemeanor directly relates to the duties and responsibilities of the holder of a certificate issued by the Board.
- 2. The Board may, if malfeasance or clerical error is determined:
 - a. deny to a person the opportunity to be examined for a certificate;
 - b. deny the application for a certificate;
 - c. suspend or revoke an existing certificate; or
 - d. limit the terms or practice of a certificate to areas prescribed by the Board.
- 3. The methods and procedures for any revocation herein shall be established at the discretion of the Board.

Grievance Procedure

1. All grievances shall be initiated by a written complaint submitted to the Certification Administrator in the Austin Office alleging malfeasance regarding a department's training program.
2. The written complaint shall be signed, notarized and specify the nature of the complaint.
3. Upon receipt of a properly submitted complaint, the Certification Administrator shall notify the Board of the complaint.
4. Under the instruction of the Chairman, the Zone Representative of the department in question, shall conduct a preliminary inquiry to determine the validity of the complaint and if further action is warranted. In the event the allegation involves the Zone Representative's department, a Board Member representing a different zone shall conduct the inquiry.
5. The findings of the inquiry shall be presented to the Board which will determine:
 - a. the complaint lacks the merit for further action
 - b. the issue may be resolved within the department in question
 - c. the issues may be addressed by administrative education
 - d. an audit of the department's training program and records are in order
6. In the event any audit is warranted, the Chairman shall appoint a committee to conduct the audit. The audit committee shall report its findings and recommendations to the Board which will determine the action to be taken.
7. Zone representative shall notify the Chief and Certification Coordinator of the department in question of all allegations, findings and actions taken by the Board.
8. Full documentation of the process shall be maintained in the Austin Office.
9. The Board shall maintain strict confidentiality of all complaints, allegations and actions with the exceptions of proper notifications made to the Executive Board.

General Statement

1. It shall be understood that the suggested minimum standards herein described are designated as minimum programs. Participating Fire Departments are encouraged to exceed the minimum programs wherever possible. Continuous training beyond the minimum standards and testing on a regular basis for volunteer firefighters is strongly recommended. Nothing in these regulations shall limit or be construed as limiting the powers of the fire department or other agency or department of any city, town, county, parish, or municipal corporation to enact rules and regulations which establish a higher standard of training above the minimum.

Although the Board strongly endorses and supports adequate physical ability and good moral character as entrance requirements into a fire department, the matter of establishing entrance requirements is left to the respective local department.

2. Each participating fire department must have access to a current set of training materials from the library of any of the approved publishers, and must maintain current editions as they become available. Contact the SFFMA office for a current list of manuals required, or refer to our website at www.sffma.org.

Lesson plans, binders, and all approved training materials and current prices are available from the SFFMA office in Austin at discounted prices. Purchase programs may be arranged on an individual need basis.

3. Training provided under this program should include facilities, apparatus, equipment, reference materials, and records to support a quality volunteer firefighter education and training program. The resources should provide for classroom instruction, demonstrations and practical exercises for trainee to develop the knowledge and skills required for volunteer firefighter certification.
4. Applicants for all certifications other than Certification Coordinator must complete "Courage to be Safe" coursework and provide documentation at the time of application. A permanent record of the coursework completion will be maintained at the Austin Office.
5. Effective January 1, 2019 applicants for NFPA 1001: Firefighter I (or certifications that list this as a prerequisite) must complete "Traffic Incident Management" coursework and provide documentation at the time of application. A permanent record of the coursework completion will be maintained at the Austin Office.
6. Forms to apply for certification or to maintain progress of each member are furnished upon request and are available online (www.sffma.org/certification). Forms must be submitted to the Austin Office for processing.

Definitions

Certain definitions are used in describing the minimum standards and related requirements as suggested by the Board, including but not limited to:

1. Volunteer – a non-career professional
2. Board – The Texas Volunteer Firefighters’ and Fire Marshals’ Certification Board
3. Chairman – the presiding officer of the Board
4. Department – a fire department that utilizes fire suppression and/or prevention personnel and/or search and rescue personnel
5. Fire Chief – the head of the fire department
6. Certification Coordinator – the official person in charge of setting up, maintaining and validating all of the certification records
7. Austin Office – certification department of SFFMA
8. Active Firefighter – an individual 18 years of age or older who participates in a minimum of 20 clock hours of training (including Continuing Education) per year, response participation required by the AHJ, and the Certification Program approved by the SFFMA by the submission of an annual progress report of training earned
9. Trainee – a member of the fire department who has not satisfied the requirements of the certification in question
10. School – any school, college, university, academy, or local training program which offers fire service training and includes within its meaning the combination of course curriculum, instructors and facilities
11. Requirement – a description of a provision, which relates to suggested minimum standards
12. Specification – a description of a requirement supplementing a section of the regulations
13. Examination – a Board-approved test administered by the Board and/or a Board-approved examiner, which an individual must pass as one of the requirements for accredited certification
14. Curriculum – the objectives established by the Board as a minimum requirement for certification
15. Objective – the numbered criteria required for mastery of each numbered statement
16. Eligibility – a determination of whether or not an individual has met the requirements set by the Board and would therefore be allowed to take a Board examination(s)
17. Eligibility Endorsement – a signed statement testifying to the fact that an individual has met the required training objectives of a Board-approved curriculum and is qualified to take a Board-approved examination of such level
18. Examinee – an individual who has met the Board requirements and therefore qualifies to take a Board-approved examination
19. Examiner – an individual appointed and/or approved by the Board or Board member to administer a Board-approved examination(s)
20. Certificate of Successful Completion – a document supplied by the SFFMA which identifies and shall be used as proof that an individual has completed the required training and has successfully passed the Board-approved examination(s) for certification.

21. AHJ – authority having jurisdiction
22. FEMA – Federal Emergency Management Agency
23. ICS – Incident Command System
24. IFSTA – International Fire Service Training Association
25. NFIRS – National Fire Incident Reporting System
26. NIMS – National Incident Management System
27. NFA – National Fire Academy
28. NFPA – National Fire Protection Association
29. NWCG – National Wildfire Coordinating Group
30. TCFP – Texas Commission on Fire Protection
31. IFSAC – International Fire Service Accreditation Congress
32. Pro Board – Pro Board Fire Service Professional Qualifications System

PARTICIPATION REQUIREMENTS

For the Individual

Any participating individual must have and maintain a current individual membership in the SFFMA, and be:

1. an active member in good standing of a regularly organized Fire Department; or
2. an honorably retired or honorably separated member of a regularly organized Fire Department.

For the Department

When participating through a department, the department MUST:

1. maintain a current membership in the SFFMA (participation at the district association level is strongly encouraged);
2. appoint by application a Certification Coordinator who meets and maintains participation and workshop attendance requirements;
3. report training received by participating members to the Austin office by updates to the online database or during the application process;
4. departments which do not meet the participation requirements will have applications/Progress Reports held until such time as requirements are met.

For Individuals unable to volunteer with a Department

Individuals participating as Honorably Separated/Retired MUST:

1. maintain a current membership in the SFFMA (Participation at the district association level is strongly encouraged);
2. submit all certifications and/or training records to their Zone Representative for verification.

Sources

Any course taught by a local fire department, an accredited college, university, or other agency is acceptable provided that the Certification Coordinator and the Fire Chief attest that the course meets the minimum requirements as set forth by the Certification Board.

Fire Scene

In no case shall fire scene or response to actual alarms apply towards volunteer certification. All training shall be in a controlled environment.

For-Profit Training Providers

A course taught by a commercial (for-profit) company to firefighters must abide by the following:

1. classroom instructor(s) and online training program developer(s) must hold an SFFMA Instructor I certificate;
2. The commercial company must be a sustaining member of the SFFMA;
3. A representative of the company must submit an example course outline to the Board in person to receive approval;
4. Training program developer(s) must have completed NFPA 1041: Instructor III coursework or equivalent (Texas Teaching Certification).

Electronic Media (CD/DVD)

Any course taught by means of electronic media may be approved on the following basis:

1. each training program topic must receive the approval of the Fire Chief and Certification Coordinator for the fire department utilizing the program.
2. the responsibility of documentation, review and testing of the program topics will be that of the Fire Chief and Certification Coordinator of said department. All courses must be taught in a controlled classroom environment.
3. approval of training credit will be based on the Fire Chief's and Certification Coordinator's assessment of each program topic, review and testing as well as the Austin Office Certification Administrator's assessment of the program topic.

Outside Entities

SFFMA recognizes any:

1. training conducted by an individual possessing an instructor's certificate granted by the TCFP and its approved programs;
2. training meeting the most current standards set by NFPA; or
3. testing accredited by IFSAC or ProBoard.

Older Training Records

The Certification Board accepts training with the proper verification, meeting all requirements of this program, from January 1, 1975, to the present.

1. For standard participation, all training must be attested to by the Fire Chief and the Certification Coordinator who must meet the criteria of the Board and who has been either elected by his or her department or appointed by the Fire Chief of that department.
2. For Honorably Retired/Separated participation, all training must be attested to by the Individual and the Zone Representative.

APPLICATION PROCESS

Through a Department

To file for any certification through a Fire Department:

1. Department and applicant must meet all participation requirements as listed in section IV. Participation Requirements.
2. Coordinator must:
 - a. complete the proper application form;
 - b. ensure signature by all required individuals (photocopied, stamped and pencil-written signatures are not accepted);
 - c. attach a record of all required training achieved; and
 - d. send form, along with the required twenty-five dollar (\$25) processing fee, to the Austin Office.

For Individuals unable to volunteer with a department

To file for any certification as an Honorably Separated/Retired:

1. The applicant must:
 - a. complete the proper application form;
 - b. ensure signature by their Zone Representative to the Certification Board (photocopied, stamped and pencil-written signatures are not accepted);
 - c. attach a record of all required training achieved; and
 - d. send form, along with the required twenty-five dollar (\$25) processing fee, to the Austin Office.

After Submitting

Allow 30-60 days for review. Effective dates are based on the date application is initially received in the Austin Office.

Office Processing

Upon approval of the application, the Austin Office will:

1. *without* proof of examination as a portion of coursework, issue a certificate or Endorsement of Eligibility;
2. *with* proof of examination as a portion of coursework, issue a full certification and shoulder patch, if offered; and
3. maintain a permanent record of the certification.

Patches

Certificate holders may purchase replacement certificates for \$5.00 each and/or additional shoulder patches for \$3.00 each from the Austin Office.

Individual Requirements

Applicants for Certification Coordinator must meet the definition of an active firefighter. The Certification Coordinator and the Fire Chief CANNOT be one in the same person and there can be only one Certification Coordinator per department.

Training requirements

For full certification, the applicant must hold an SFFMA Firefighter I certificate; and have successfully completed one of the following:

1. 40-Hour Methods of Teaching course;
2. Instructional Techniques for Company Officers;
3. NFPA 1041: Instructor I; or
4. Any Board-approved comparable educational instructional course

Provisional Coordinator Status

Applicants not meeting both of the above training requirements may serve on a provisional basis as follows:

1. Applicant must complete ALL of the training requirements within five (5) years of the issuance of the provisional certificate.
2. If all requirements are not met by the end of the five (5) year period, a new individual must be named to the position.
3. Upon completion of the required training, personnel MUST submit appropriate documentation to the Austin office. This documentation will then become be attached to the original application. Additional fees are not required.
4. After verification of completion of required training, the Austin office will issue a new Certification Coordinator certificate replacing the Provisional certificate previously issued.

Reinstatement

Personnel previously certified as a department's Certification Coordinator, and having left that position only to return at a later date to same-said position, MUST submit in writing to the Austin office verification from the Fire Chief that they have returned to the position of Certification Coordinator. Re-application is not necessary if the letter is signed by the Chief and can be verified as such.

Continuing Education

To maintain participation status, the Certification Coordinator MUST attend as follows:

1. Full Coordinator: at least one (1) Certification Workshop every two (2) years.
2. Provisional Coordinator:
 - a. at least once in person the first year of their provisional status
 - b. at least one (1) Certification Workshop every year of their provisional status
3. Every other Certification Workshop may be completed online by contacting the SFFMA Certification Office.

The Certification Program offers one (1) level of firefighter training completion certificate, and two (2) levels of fully accredited Firefighter certification.

NFPA 1001: Live Fire Prerequisite Training Completion (Firefighter I categories prerequisite to Live Fire Training per NFPA 1403)

1. Minimum Requirements – Applicant must:
 - a. complete and report ‘Courage to be Safe’ coursework; and
 - b. complete and report all required objectives from the SFFMA Live Fire Prerequisite curriculum.
2. Previously issued certifications are “grandfathered” to the Live Fire Prerequisite level as follows:
 - a. Introductory Fire Fighting certifications with an effective date prior to January 1, 2012; or
 - b. Basic Firefighter certifications with an effective date prior to January 1, 2012; or
 - c. Module 1: Firefighter I (Introductory) certifications with an effective date prior to January 1, 2015; or
 - b. Module 2: Firefighter I (Basic) certifications with an effective date prior to January 1, 2015.
3. The Austin office will issue a Live Fire Prerequisite training completion certificate and maintain a permanent record of the training completion.

NFPA 1001: Firefighter I

1. Firefighter I Training completion
 - a. Minimum Requirements – Applicant must:
 - i. complete and report ‘Courage to be Safe’ coursework;
 - ii. complete and report ‘Traffic Incident Management’ coursework;
 - iii. complete and report all required objectives from the SFFMA Live Fire Prerequisite curriculum (do not need to file for this level);
 - iv. complete and report all required objectives from the SFFMA Firefighter I curriculum; and
 - v. hold or apply concurrently for 472: HazMat Awareness/Operations.
 - b. Previously issued certifications are “grandfathered” to the Firefighter I level as follows:
 - i. Intermediate Firefighter certifications with an effective date prior to January 1, 2012; or
 - ii. Module 3: Firefighter I (Completion) certifications with an effective date prior to January 1, 2015.
 - c. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.
2. Full Firefighter I Certification
 - a. Minimum Requirements – Applicant must:
 - i. successfully complete the required Board-approved written and skill examinations (HazMat and Firefighter I).
 - b. Previously issued certifications are “grandfathered” to the Firefighter II level as follows:
 - i. Accredited Intermediate Firefighter certifications with an effective date prior to January 1, 2012; or
 - ii. Firefighter I certifications with an effective date prior to January 1, 2015.

- c. The Austin office will:
 - i. issue a full Firefighter I certificate and shoulder patch; and
 - ii. maintain a permanent record of the certification.

NFPA 1001: Firefighter II

1. Firefighter II Training completion
 - a. Minimum Requirements – Applicant must:
 - i. complete and report ‘Courage to be Safe’ coursework;
 - ii. complete and report ‘Traffic Incident Management’ coursework;
 - iii. complete and report all Live Fire Prerequisite objectives (do not need to file for this level);
 - iv. complete and report all Firefighter I objectives;
 - v. complete and report all Firefighter II objectives;
 - vi. hold or apply concurrently for 472: HazMat Awareness/Operations and Firefighter I training completion certificates.
 - b. Previously issued certifications are “grandfathered” to the Firefighter I level as follows:
 - i. Advanced Firefighter certifications with an effective date prior to January 1, 2012; or
 - ii. Module 4: Firefighter II (Advanced) certifications with an effective date prior to January 1, 2015.
 - c. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.
2. Full Firefighter II Certification
 - a. Minimum Requirements:
 - i. SFFMA Firefighter I certificate; and
 - ii. successfully complete the required Board-approved written and skill examinations (HazMat, Firefighter I, and Firefighter II).
 - b. Previously issued certifications are “grandfathered” to the Firefighter II level as follows:
 - i. Accredited Advanced Firefighter certifications with an effective date prior to January 1, 2012; or
 - ii. Firefighter II certifications with an effective date prior to January 1, 2015.
 - c. The Austin office will:
 - i. issue a full Firefighter II certificate and shoulder patch; and
 - ii. maintain a permanent record of the certification.

SECTION 1 ORIENTATION & FIRE SERVICE HISTORY

Live Fire Prerequisite

- 1-I.01 Trainee shall identify the organizational structure of the fire department and his/her role in it.
NFPA 1001 5.1.1
- 1-I.02 Trainee shall identify the size of the fire department, the scope of its operation, and the Standard Operational Procedures (SOPs).
NFPA 1001 5.1.1
- 1-I.03 Trainee shall identify the fire department rules and regulations as they apply to all members of the department.
NFPA 1001 5.1.1 A-B
- 1-I.04 Trainee shall identify the mission of the fire service
NFPA 1001 5.1.1
- 1-I.05 Trainee shall identify the role of other agencies as they relate to the fire department.
NFPA 1001 5.1.1
- 1-I.06 Trainee shall describe the components of the department's member assistance program.
NFPA 1001 5.1.1
- 1-I.07 Trainee shall identify the importance of physical fitness and a healthy lifestyle to the performance of duties of a firefighter
NFPA 1001 5.1.1
- 1-I.08 Trainee shall identify the critical aspects of NFPA 1500: *Standard on Fire Department Occupational Safety and Health Program*.
NFPA 1001 5.1.1
- 1-I.09 Trainee shall identify activities on a national level required by FEMA to meet its responsibilities to establish and maintain comprehensive and coordinated emergency management in the United States.
Completion of ICS-700 meets the requirements of this objective.
NFPA 1001 5.1.1
- 1-I.10 Trainee shall identify, by title, the official responsible for emergency management in the state.
Completion of ICS-800 meets the requirements of this objective.
NFPA 1001 5.1.1
- 1-I.11 Trainee shall identify, by title, the official responsible for emergency management in a county or parish.
Completion of ICS-800 meets the requirements of this objective.
NFPA 1001 5.1.1
- 1-I.12 Trainee shall identify, by title, the city official who is responsible for emergency management in a city.
Completion of ICS-800 meets the requirements of this objective.
NFPA 1001 5.1.1
- 1-I.13 Trainee shall identify department procedures for potential disasters in the area of their response.
Completion of ICS-800 meets the requirements of this objective.
NFPA 1001 5.1.1

Firefighter I – There are no objectives required for this certification level.

Firefighter II

1-II.01 Trainee shall identify and describe the purposes of an Incident Command System (ICS).
Completion of ICS-100 meets the requirements of this objective.

NFPA 1001 6.1.1

- | | |
|------------------------------|---------------------------------------|
| A. Common terminology | E. Consolidated action plans |
| B. Modular organization | F. Manageable span of control |
| C. Integrated communications | G. Pre-designated incident facilities |
| D. Unified command structure | H. Comprehensive resource management |

1-II.02 Trainee shall describe the procedure for implementing the Incident Management System
Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 6.1.1

(FD can document with Incident Management System #1 skill sheet found in appendix and retain on file)

- A. Hazard and risk analysis
1. What has occurred?
 2. What is the current status of the emergency?
 3. Is anyone trapped or injured?
 4. Can the emergency be handled with the resources on scene or en route?
 5. Does the emergency fall within the scope of the individual's training?
- B. Risk vs. benefit

1-II.03 Trainee shall define the functions necessary to manage an incident effectively and the responsibilities within the Incident Management System

Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 6.1.2

- | | |
|----------------|---------------------------|
| A. Command | E. Operations |
| B. Safety | F. Planning |
| C. Liaison | G. Logistics |
| D. Information | H. Finance/Administration |

1-II.04 Trainee shall list components and functional areas of the operations section within Incident Management System.

Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 6.1.1

- A. Incident Command
- B. Staging
- C. Branches
- D. Divisions and Groups
- E. Strike Teams and Task Forces
- F. Single Resources

1-II.05 Trainee shall describe the procedure for establishing command and the transfer of command
Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 6.1.1

(FD can document with Incident Management System #1 skill sheet found in appendix and retain on file)

- A. First on scene
 - 1. Investigation
 - 2. Command
 - 3. Pass command for fast attack/rescue
- B. Considerations for transfer of command
 - 1. Arrival of senior staff
 - 2. Specialized incident
 - 3. Resource requirements
 - 4. Time restraints
 - 5. Demobilization
- C. Methods of transferring command
 - 1. Face-to-face
 - 2. Via radio

1-II.06 Trainee shall demonstrate the procedure for Transferring command
Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 6.1.1

(FD can document with Incident Management System #1 skill sheet found in appendix and retain on file)

- A. Situation status report (Sit Stat)
- B. Communicating transfer of command

SECTION 2 FORCIBLE ENTRY

Live Fire Prerequisite

2-I.01 Trainee shall identify and demonstrate the use of various types of manual and/or powered forcible entry tools used in the AHJ

NFPA 1001 5.3.4.A-B

(FD can document with Forcible Entry #1 skill sheet found in appendix and retain on file)

- A. Cutting tools
- B. Prying tools
- C. Pushing/Pulling tools
- D. Striking tools

2-I.02 Trainee shall identify the method and procedure of proper cleaning, maintenance and inspection of various types of the following forcible entry tools and equipment.

NFPA 1001 5.5.1.A-B

- A. Axe heads and cutting edges
- B. Wooden handles
- C. Fiberglass handles
- D. Plated surfaces
- E. Unprotected metal surfaces
- F. Power equipment

2-I.03 Trainee shall identify basic construction of typical doors, windows, and walls within the AHJ.

NFPA 1001 5.3.4.A

A. Doors

(FD can document with Forcible Entry #1 skill sheet found in appendix and retain on file)

- 1. Swinging doors
 - a. Inward opening
 - b. Outward opening
 - c. Double swing
- 2. Wooden doors
- 3. Metal doors
- 4. Tempered plate glass doors
- 5. Revolving doors
- 6. Sliding doors
- 7. Overhead doors
- 8. Fire doors

B. Windows

(FD can document with Forcible Entry #2 skill sheet found in appendix and retain on file)

- 1. Checkrail windows (double-hung)
- 2. Casement windows (hinged)
- 3. Projected windows (factory)
- 4. Awning and jalousie windows
- 5. Plastic windows (high security)
- 6. Screened or barred windows

C. Walls

(FD can document with Forcible Entry #3 skill sheet found in appendix and retain on file)

1. Masonry and veneered walls
2. Metal walls
3. Wood frame walls
4. Partition walls

2-I.04 Trainee shall demonstrate operation of doors, windows, and locks;

NFPA 1001 5.3.4.A

(FD can document with Forcible Entry #1 skill sheet found in appendix and retain on file)

(FD can document with Forcible Entry #2 skill sheet found in appendix and retain on file)

(FD can document with Forcible Entry #3 skill sheet found in appendix and retain on file)

A. Doors

1. Swinging doors
 - a. Inward opening
 - b. Outward opening
 - c. Double swing
2. Wooden doors
3. Metal doors
4. Tempered plate glass doors
5. Revolving doors
6. Sliding doors
7. Overhead doors
8. Fire doors

B. Windows

1. Checkrail windows (double-hung)
2. Casement windows (hinged)
3. Projected windows (factory)
4. Awning and jalousie windows
5. Plastic windows (high security)
6. Screened or barred windows

C. Locks

1. door locking devices
2. window locking devices

2-I.05 Trainee shall identify and the dangers associated with forcing entry through doors, windows, and walls.

NFPA 1001 5.3.4.A, 5.3.10.A

2-I.06 Trainee shall identify the method and technique of forcible entry through any door, window, ceiling, roof, floor and vertical barrier.

NFPA 1001 5.3.4.B

Firefighter I – There are no objectives required for this certification level.

Firefighter II – There are no objectives required for this certification level.

SECTION 3 FIRE SERVICE LADDER PRACTICES

Live Fire Prerequisite

3-I.01 Trainee shall identify each type of ladder and define its use.

NFPA 1001 5.3.6.A-B

- A. Single ladders
- B. Roof ladders
- C. Folding ladders
- D. Extension ladders
- E. Pole ladders
- F. Combination ladders

3-I.02 Trainee, operating as an individual and as a member of a team, shall demonstrate or explain properly picking-up, carrying, raising, and lowering a ladder using the following methods:

NFPA 1001 5.3.6, 5.3.6.A-B, 5.3.12.A-B

(FD can document with Ladders #3 skill sheet found in appendix and retain on file)
(FD can document with Ladders #4 skill sheet found in appendix and retain on file)
(FD can document with Ladders #5 skill sheet found in appendix and retain on file)
(FD can document with Ladders #6 skill sheet found in appendix and retain on file)
(FD can document with Ladders #7 skill sheet found in appendix and retain on file)
(FD can document with Ladders #10 skill sheet found in appendix and retain on file)
(FD can document with Ladders #11 skill sheet found in appendix and retain on file)

- A. One-firefighter carry
 - 1. 10' collapsible
 - 2. 14' combination
 - a. Low-shoulder
 - b. Flat-Shoulder
 - 3. 14' with folding hooks
 - a. Low-shoulder
 - b. Flat-Shoulder
 - 4. 14' with folding hooks, for carrying up a ladder
 - a. Low-shoulder
- B. Two-firefighter carry
 - 1. 24' 2-section extension ladder
 - a. Low-shoulder
 - b. Arm's length on-edge
- C. Three-firefighter carry
 - 1. 35' or extension ladder
 - a. Flat-shoulder
 - b. Flat arm's length
- D. Four-firefighter carry
 - 1. 35' or extension ladder
 - a. Flat carry
- E. Roof
- F. Attic

3-I.03 Trainee shall identify the load capacities for ground ladders, according to NFPA 1931.

NFPA 1001 5.3.6, 5.3.6.A

- A. Trainee shall identify the load capacities for folding ladders, pompier ladders, single roof ladders, all extension ladders, and combination ladders, according to NFPA 1931.
- B. Trainee shall identify "ladder load."

3-I.04 Trainee shall climb the full length of each of the following types of ground ladder:

NFPA 1001 5.3.6, 5.3.12, 5.3.12.B

- A. 10' folding ladder
- B. 14' combination ladder
- C. 14' with folding hooks
- D. 24' extension ladder
- E. 35' extension ladder

3-I.05 Trainee shall identify, describe, and demonstrate the techniques of cleaning ladders.

NFPA 1001 5.5.1, 5.5.1.A-B

(FD can document with Ladders #9 skill sheet found in appendix and retain on file)

- A. Trainee shall identify the requirements pertaining to the frequency for cleaning ground ladders.
- B. Trainee shall describe and demonstrate the procedures for cleaning ground ladders.

3-I.06 Trainee shall identify and name the parts of various fire service ladders.

NFPA 1001 5.3.6.A

- A. Beam
- B. Bed Section
- C. Butt
- D. Butt Spur
- E. Fly section
- F. Guides
- G. Halyard
- H. Heat sensor label
- I. Hooks
- J. Pawls (dogs)
- K. Protection plates
- L. Pulley
- M. Rail
- N. Rung
- O. Staypole
- P. Stops
- Q. Tie rod
- R. Tip

3-I.07 Trainee shall identify the safety aspects of handling, raising, and climbing ladders:

NFPA 1001 5.3.6

(FD can document with Ladders #2 skill sheet found in appendix and retain on file)

- A. Trainee shall describe the following hazards associated with carrying a ground ladder:
 - 1. moving/guiding
 - 2. other personnel
 - 3. obstacles
- B. Trainee shall describe the following hazards associated with raising a ground ladder:
 - 1. exposure to heat or flame
 - 2. stability of building
 - 3. uneven terrain
 - a. Flat, stable surface
 - b. Non-skid surface
 - c. Soft Spots
 - 4. overhead obstruction(s):
 - a. electricity
 - b. windows
 - c. falling debris
 - d. overhangs
 - 5. High traffic areas (doorways)
- C. Raising and Climbing
 - 1. full protective equipment
 - 2. proper lifting methods
 - 3. ladder angle and spacing
 - 4. pawls locked and halyard tied
 - 5. heel person and tying ladder
 - 6. hand placement and positioning
 - 7. climbing with same hand and foot

D. Trainee shall describe and demonstrate the following techniques of working from ground ladders with tools and equipment

NFPA 1001 5.3.12

1. working off a ladder with a pike pole using a leg lock.
2. working off a ladder with an axe using a leg lock.
3. working off a ladder with a pike pole using a safety harness.
4. working off a ladder with an axe using a safety harness.
5. deployment of a roof ladder on a pitched roof.
6. climbing with and using hoses.

E. Aerial Ladders (if found in AHJ)

1. overhead obstacles
2. zone of collapse
3. proper placement

3-I.08 Trainee shall identify how to select the proper ladder for the job to be done, and the maximum working heights for fire service ladders.

(FD can document with Ladders #1 skill sheet found in appendix and retain on file)

A. Trainee shall identify and select the appropriate length ladder for a given task.

NFPA 1001 5.3.6.A-B

B. Trainee shall identify the reach for the following ground ladders set at the proper climbing angle.

NFPA 1001 5.3.6, 5.3.6.A-B, 5.3.9, 5.3.10

1. 10' folding ladder
2. 14' combination ladder
3. 14' with folding hooks
4. 24' extension ladder
5. 35' extension ladder

3-I.09 Trainee shall identify the proper placement and positioning of each type of fire service ladder for different types of jobs.

A. Trainee, given intended use, shall describe and demonstrate the proper placement of a ground ladder.

NFPA 1001 5.3.6, 5.3.12

1. Ventilation
2. Rescue
3. Vantage Point
4. Roof
5. Other factors

B. Trainee shall identify the proper "angle of inclination" for climbing ground ladders.

NFPA 1001 5.3.6

1. Roof
2. Window
 - a. Entry
 - b. Ventilation or working
 - c. Rescue set

3-I.10 Trainee shall identify the materials used in ladder construction and list the advantages and disadvantages of each type of material.

NFPA 1001 5.3.6

- A. Metal ladder construction
- B. Wooden ladder construction
- C. Fiberglass ladder construction

3-I.11 Trainee shall identify, describe, and demonstrate inspection and maintenance procedures for different types of ground ladders.

NFPA 1001 5.5.1

(FD can document with Ladders #1 skill sheet found in appendix and retain on file)

- A. Trainee shall identify the requirements pertaining to the frequency of inspection and maintenance of ground ladders.
- B. Trainee shall describe and demonstrate the inspection and maintenance procedures for ground ladders, according to NFPA 1932.
 - 1. Metal ground ladders
 - 2. Wood ground ladders
 - 3. Fiberglass ground ladders

3-I.12 Trainee shall identify and explain the annual service test for ground ladders.

NFPA 1001 5.5.1

3-I.13 Trainee shall, with or without a safety harness, climb the usable length of each type of ground and aerial ladder available to the AHJ and demonstrate:

NFPA 1001 5.3.10, 5.3.12

(FD can document with Ladders #8 skill sheet found in appendix and retain on file)

(FD can document with Ladders #13 skill sheet found in appendix and retain on file)

- A. Carrying fire fighting tools or equipment, while ascending or descending.
- B. Bringing an injured person down.
- C. The techniques of working from ground and aerial ladders with tools and appliances.

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.

SECTION 4 FIRE HOSE PRACTICES

Live Fire Prerequisite

4-I.01 Trainee shall identify the sizes, types, amounts, and use of hose carried on fire apparatus.

NFPA 1001 5.3.10

4-I.02 Trainee shall demonstrate the use of nozzles, hose adapters, and hose appliances carried on the local fire apparatus.

NFPA 1001 5.3.10.A-B

(FD can document with Hose #2 skill sheet found in appendix and retain on file)

A. Nozzles

- | | |
|------------------------|------------------------------------|
| 1. Solid stream nozzle | 4. Applicator nozzle |
| 2. Fog nozzle | 5. Master stream device (Playpipe) |
| 3. Cellar nozzle | |

B. Water Valves

- | | |
|--------------|------------|
| 1. Gate | 4. Clapper |
| 2. Ball | 5. Piston |
| 3. Butterfly | |

C. Hose Adapters

- | | |
|------------------|--------------|
| 1. Double male | 5. Elbows |
| 2. Double female | 6. Caps |
| 3. Reducers | 7. Plugs |
| 4. Increasers | 8. Blindcaps |

D. Hose Appliances

- | | |
|----------------|------------------------|
| 1. Manifold | 4. Siamese |
| 2. Water thief | 5. In-line relay valve |
| 3. Wye | 6. Intake relief valve |

E. Hose Tools

- | | |
|-------------------|--------------------------|
| 1. Spanner wrench | 7. Hose jacket |
| 2. Hydrant wrench | 8. Hose clamp |
| 3. Hose strap | 9. Suction hose strainer |
| 4. Hose rope | 10. Hose bridges |
| 5. Hose chain | 11. Hose wringers |
| 6. Hose roller | |

4-I.03 Trainee, given the necessary equipment and operating as an individual and as a member of a team, shall advance dry and charged hose lines of two different sizes, both 1½" or larger, from fire apparatus:

NFPA 1001 5.3.10.A-B, 5.3.13.A-B

(FD can document with Hose #7 skill sheet found in appendix and retain on file)

(FD can document with Hose #14 skill sheet found in appendix and retain on file)

- A. into a structure
- B. up a ladder into an upper floor window
- C. up an inside stairway to an upper floor
- D. up an outside stairway to an upper floor
- E. down an inside stairway to a lower level
- F. down an outside stairway to a lower level
- G. to an upper floor by hoisting

- 4-I.04 Trainee shall demonstrate the techniques for cleaning fire hose, couplings, and nozzles; and inspecting for damage.
NFPA 1001 5.5.2
(FD can document with Hose #16 skill sheet found in appendix and retain on file)
- 4-I.05 Trainee shall connect a fire hose to a hydrant, and fully open and close the hydrant.
NFPA 1001 5.3.15.A-B
- 4-I.06 Trainee shall demonstrate the loading of fire hose on fire apparatus and identify the purpose of at least three types of hose loads and finishes.
NFPA 1001 5.5.2.A-B
(FD can document with Hose #13 skill sheet found in appendix and retain on file)
- 4-I.07 Trainee shall demonstrate three (3) types of hose rolls.
NFPA 1001 5.5.2.A-B
(FD can document with Hose #1 TEST skill sheet found in appendix and retain on file)
- A. Straight roll
 - B. Donut roll
 - C. Twin donut roll
 - 1. Method one
 - 2. Method two
 - D. Self-locking twin donut roll
- 4-I.08 Trainee shall demonstrate two (2) types of hose carries.
NFPA 1001 5.3.10.A-B, 5.5.2
(FD can document with Hose #12 skill sheet found in appendix and retain on file)
- A. Working line drag
 - B. Wyed lines
 - C. Accordion or flat shoulder method
 - D. Pre-connected flat load
 - E. Minuteman load
 - F. Triple layer load
 - G. Horseshoe shoulder carry
- 4-I.09 Trainee shall demonstrate coupling and uncoupling fire hose.
NFPA 1001 5.3.10.A-B
(FD can document with Hose #11 skill sheet found in appendix and retain on file)
- A. Trainee, given fire hose used for fire attack, 1½" or larger, and water supply hose, 2½" or larger, shall describe and demonstrate the one-person methods of connecting hose lines.
 - 1. One firefighter foot-tilt method
 - 2. Between-the-feet method
 - 3. Across-the-leg method
 - B. Trainee, operating as a member of a team, given fire hose used for fire attack, 1½" or larger, and water supply hose, 2½" or larger, shall describe and demonstrate the two person methods of connecting hose lines.
 - C. Trainee, operating as an individual or a member of a team, shall describe and demonstrate the methods of breaking a tight screw-thread connection.
 - 1. One firefighter knee-press method
 - 2. Two firefighter stiff arm method
 - 3. Spanner wrench

- 4-I.10 Trainee shall work from a ladder with a charged attack line, 1½" or larger.
NFPA 1001 5.3.10.A-B
(FD can document with Hose #8 skill sheet found in appendix and retain on file)
- 4-I.11 Trainee, given fire hose used for fire attack, 1½" or larger, and water supply, 2½" or larger, shall demonstrate the method for extending a hose line.
NFPA 1001 5.3.10.A-B
(FD can document with Hose #1 skill sheet found in appendix and retain on file)
- 4-I.12 Trainee shall demonstrate the techniques of carrying hose into a building to be connected to a standpipe, and of advancing a hose line from a standpipe (if found in AHJ).
NFPA 1001 5.3.10.B
(FD can document with Hose #3 skill sheet found in appendix and retain on file)
- 4-I.13 Trainee, given fire hose used for fire attack, 1½" or larger, and water supply, 2½" or larger, shall describe and demonstrate replacing a burst section of hose line.
NFPA 1001 5.3.10.A-B
(FD can document with Hose #4 skill sheet found in appendix and retain on file)
- 4-I.14 Trainee shall demonstrate all hand hose lays.
NFPA 1001 5.3.15.B
- 4-I.15 Trainee shall demonstrate inspection and maintenance of fire hose, couplings, and nozzles, and recommend replacement or repair as needed.
NFPA 1001 5.5.2.A-B
(FD can document with Hose #16 skill sheet found in appendix and retain on file)
- 4-I.16 Trainee shall demonstrate all hydrant-to-fire apparatus hose connections.
NFPA 1001 5.3.15
(FD can document with Hose #15 skill sheet found in appendix and retain on file)
- 4-I.17 Trainee shall select the proper adapters, appliances, nozzles, and hose, given different fire situations.
NFPA 1001 5.3.10
- 4-I.18 Trainee shall identify hose classifications by use and construction.
NFPA 1001 5.3.8, 5.3.10
- A. Use
1. Attack hose
 2. Relay-supply hose
 3. Intake hose
 4. Extinguisher hose
- B. Construction
1. Woven-jacket hose
 2. Rubber-covered hose
 3. Braided hose
 4. Wrapped hose
- 4-I.19 Trainee shall identify types of fire hose couplings.
NFPA 1001 5.3.10.B
- A. Threaded couplings
- B. Storz-type couplings (Sexless couplings)

4-I.20 Trainee shall identify the methods of constructing fire hose couplings.

NFPA 1001 5.3.10

4-I.21 Trainee shall identify the methods of attaching couplings to fire hose.

NFPA 1001 5.3.10.B

Firefighter I – There are no objectives required for this certification level.

Firefighter II

4-II.01 Trainee shall select the proper adapters, appliances, nozzles, and hose, given different fire situations.

NFPA 1001 6.3.1.A, 6.3.2.A, 6.3.3

(FD can document with Hose #9 skill sheet found in appendix and retain on file)

A. Simulated ignitable liquid fire

B. Simulated residential structure fire

C. Simulated flammable gas cylinder fire

4-II.02 Trainee shall conduct an annual service test for fire hose.

NFPA 1001 6.5.5.A-B

(FD can document with Hose #3 skill sheet found in appendix and retain on file)

SECTION 5 SALVAGE & OVERHAUL

Live Fire Prerequisite

- 5-I.01 Trainee shall identify the purpose of salvage, and its value to the public and the fire department.
NFPA 1001 5.3.14
- 5-I.02 Trainee, as an individual and as a member of a team, shall demonstrate folds and rolls of salvage covers.
NFPA 1001 5.3.14
(FD can document with Salvage #1 skill sheet found in appendix and retain on file)
(FD can document with Salvage #2 skill sheet found in appendix and retain on file)
- A. one-firefighter roll
 - B. one-firefighter double roll
 - C. one-firefighter fold
 - D. one-firefighter donut roll
 - E. one-firefighter accordion fold
 - F. two-firefighter accordion counter-payoff fold
 - G. two-firefighter fold
- 5-I.03 Trainee, as an individual and as a member of a team, shall demonstrate salvage cover throws.
NFPA 1001 5.3.14
- A. balloon throw
 - B. single-edge snap throw
 - C. double-edge snap throw
- 5-I.04 Trainee shall demonstrate the techniques of inspection, cleaning, and maintaining salvage equipment.
NFPA 1001 5.5.1
(FD can document with Salvage #3 skill sheet found in appendix and retain on file)
- A. Salvage covers
 - B. Hand tools
- 5-I.05 Trainee shall identify the purpose of overhaul.
NFPA 1001 5.3.13
(FD can document with Overhaul #1 skill sheet found in appendix and retain on file)
- 5-I.06 Trainee shall demonstrate searching for hidden fires.
NFPA 1001 5.3.13
(FD can document with Overhaul #1 skill sheet found in appendix and retain on file)
(FD can document with Fire Cause & Origin Skill #1 skill sheet found in appendix and retain on file)
- 5-I.07 Trainee shall demonstrate exposure of hidden fires by opening ceilings, walls, floors, and pulling apart burned materials.
NFPA 1001 5.3.13
(FD can document with Overhaul #1 skill sheet found in appendix and retain on file)
(FD can document with Fire Cause & Origin Skill #1 skill sheet found in appendix and retain on file)
- 5-I.08 Trainee shall demonstrate how to separate and remove charred material from unburned material.
NFPA 1001 5.3.13
(FD can document with Overhaul #1 skill sheet found in appendix and retain on file)

5-I.09 Trainee shall define and describe the following duties of firefighters left at the scene for fire and security surveillance, and identify the proper procedures for restoration of the premises after a fire.

(FD can document with Fire Cause & Origin Skill #1 skill sheet found in appendix and retain on file)

NFPA 1001 5.3.14

- A. Making the building safe
- B. Making the contents safe
- C. Making the area safe
- D. Restoring fire protection systems
- E. Restoring utility services
- F. Securing the building
- G. Deodorizing the premises
- H. Releasing the premises

5-I.10 Trainee, given salvage equipment, operating as an individual and as a member of a team, shall demonstrate the following skills:

NFPA 1001 5.3.14

(FD can document with Salvage #4 skill sheet found in appendix and retain on file)

(FD can document with Salvage #7 skill sheet found in appendix and retain on file)

- A. use of a water chute
- B. construction of a water chute
- C. use of a water catchall
- D. construction of a water catchall

5-I.11 Trainee shall demonstrate the removal of debris, and removal and routing of water from a structure using the following techniques.

NFPA 1001 5.3.13, 5.3.14

(FD can document with Salvage #5 skill sheet found in appendix and retain on file)

- A. Water vacuums
- B. Existing drains
- C. Portable pumps
- D. Brooms and squeegees
- E. Buckets, mops, and shovels

5-I.12 Trainee shall demonstrate and describe the covering or closing of the following building openings made during fire fighting operations.

NFPA 1001 5.3.13

(FD can document with Salvage #6 skill sheet found in appendix and retain on file)

- A. Roofs
- B. Doors
- C. Windows
- D. Floors

5-I.13 Trainee shall list the procedures to follow during overhaul.

NFPA 1001 5.3.13

5-I.14 Trainee shall identify precautions to be followed when overhauling targeted hazards.

NFPA 1001 5.3.13

- A. Trainee shall identify and describe the necessary precautions to maintain safety of firefighters and others during overhaul.
- B. Trainee shall describe appropriate safety equipment and clothing for performing overhaul activities.
- C. Trainee shall describe hazards associated with overhaul operations.

5-I.15 Trainee shall list four (4) indicators of fire in walls or ceilings.

NFPA 1001 5.3.13

(FD can document with Overhaul #1 skill sheet found in appendix and retain on file)

- A. Sight
- B. Touch
- C. Sound
- D. Electronic instruments

5-I.16 Trainee shall demonstrate restoration of the premises after a fire.

NFPA 1001 5.3.14

- A. Restoring fire protection systems
- B. Restoring utility services
- C. Deodorizing the premises
- D. Releasing the premises

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.

SECTION 6 FIRE STREAMS

Live Fire Prerequisite

- 6-I.01 Trainee shall define a fire stream.
NFPA 1001 5.3.10
- 6-I.02 Trainee shall manipulate a nozzle so as to attack a Class A and a Class B fire.
NFPA 1001 5.3.10
- 6-I.03 Trainee shall define water hammer and at least one method for its prevention.
NFPA 1001 5.3.10
- 6-I.04 Trainee shall demonstrate how to open and close a nozzle and how to adjust its stream pattern and flow setting when applicable.
NFPA 1001 5.3.10
- 6-I.05 Trainee shall define the following methods of water application:
NFPA 1001 5.3.10
- A. direct
 - B. indirect
 - C. combination
- 6-I.06 Trainee, given specific fire situations, shall select the proper nozzle and hose size for each.
NFPA 1001 5.3.10
- 6-I.07 Trainee shall identify characteristics of all types of fire streams.
NFPA 1001 5.3.10
- 6-I.08 Trainee shall identify precautions to be followed while advancing hose lines to a fire.
NFPA 1001 5.3.10
- 6-I.09 Trainee shall identify three (3) conditions that result in pressure losses in a hose line.
NFPA 1001 5.3.10
- 6-I.10 Trainee shall describe the operating principles of fog and solid stream nozzles.
NFPA 1001 5.3.10
- 6-I.11 Trainee shall describe the advantages and disadvantages of solid and fog streams.
NFPA 1001 5.3.10
- 6-I.12 Trainee shall identify four (4) special stream nozzles and demonstrate at least two (2) uses or applications for each.
NFPA 1001 5.3.10
- 6-I.13 Trainee shall identify three (3) observable results that are obtained when proper application of a fire stream is accomplished.
NFPA 1001 5.3.10
- 6-I.14 Trainee shall identify three (3) types of fire streams and shall demonstrate each.
NFPA 1001 5.3.10
- A. Solid
 - B. Fog
 - C. Broken

- 6-I.15 Trainee shall diagram the types of fog nozzles, identify the major parts, and trace water flow through each.
NFPA 1001 5.3.10
- 6-I.16 Trainee, given a selection, pictures or diagrams, of nozzles and tips, shall identify the type, design, operation, nozzle pressure, and flow of each.
NFPA 1001 5.3.10
- 6-I.17 Trainee shall identify, select, and demonstrate the use of any nozzle.
NFPA 1001 5.3.10.A-B
- A. Solid stream nozzle
 - B. Fog nozzle
 - C. Cellar nozzle
 - D. Applicator nozzle
 - E. Master stream device (Playpipe)

Firefighter I - There are no objectives required for this certification level.

Firefighter II

- 6-II.01 Trainee shall identify and define foam making appliances and shall demonstrate a foam stream from each (if available in AHJ)
NFPA 1001 6.3.1
(FD can document with Fire Streams #1 skill sheet found in appendix and retain on file)
(FD can document with Fire Streams #2 skill sheet found in appendix and retain on file)
- 6-II.02 Trainee shall define the methods by which foam prevents or controls a hazard.
NFPA 1001 6.3.1
- 6-II.03 Trainee shall define the principle by which foam is generated.
NFPA 1001 6.3.1
- 6-II.04 Trainee shall define common causes for the poor generation of foam and identify the procedures for correcting each.
NFPA 1001 6.3.1
- 6-II.05 Trainee shall define the difference between hydrocarbon and polar solvent fuels and identify the type of foam concentrate required for each fuel.
NFPA 1001 6.3.1
- 6-II.06 Trainee shall define the advantages, characteristics, and precautions for use of the following types of foam:
NFPA 1001 6.3.1
- A. protein
 - B. fluoroprotein
 - C. film forming fluoroprotein (FFFP)
 - D. aqueous film forming foam (AFFF)
 - E. hazardous materials vapor mitigating foam
 - F. medium- and high-expansion foam
 - G. Class A foams
 - H. Alcohol Type Concentrate (ATC)

- 6-II.07 Trainee, given the size of the fuel surface, the types of fuel involved, and the type of foam concentrate being used, shall determine the minimum application rate necessary for extinguishment of a fire.
NFPA 1001 6.3.1
- 6-II.08 Trainee shall define the precautions that must be taken when using high expansion foam to attack structural fires.
NFPA 1001 6.3.1

SECTION 7 VENTILATION PRACTICES

Live Fire Prerequisite

- 7-I.01 Trainee shall define the principles of ventilation, and identify the advantages and effects of proper ventilation.
NFPA 1001 5.3.11
- 7-I.02 Trainee shall identify the dangers present, and the precautions to be taken in performing ventilation.
A. Trainee shall describe the considerations involving basic size-up.
NFPA 1001 5.3.11, 5.3.12.A-B
1. Life safety hazards
2. Determining the location and extent of the fire
3. Identifying building construction features
B. Trainee shall describe the considerations affecting the decision to ventilate.
NFPA 1001 5.3.11
1. Assessing the need for ventilation
2. Deciding where ventilation is needed
3. Deciding how ventilation should be accomplished
- 7-I.03 Trainee shall demonstrate opening various types of windows from inside and outside, with and without fire department tools.
NFPA 1001 5.3.11
- 7-I.04 Trainee shall demonstrate breaking window or door glass, and removing obstructions.
NFPA 1001 5.3.11
- 7-I.05 Trainee shall describe and safely demonstrate, using both hand and power tools, the ventilation of a roof and a floor.
NFPA 1001 5.3.12
(FD can document with Ventilation #1 skill sheet found in appendix and retain on file)
- 7-I.06 Trainee shall identify and describe the signs, causes, and effects of a back draft explosion.
NFPA 1001 5.3.11
- 7-I.07 Trainee shall demonstrate ventilation using a water fog.
NFPA 1001 5.3.11
- 7-I.08 Trainee shall identify characteristics of a flashover.
NFPA 1001 5.3.11
- 7-I.09 Trainee shall identify the characteristics of and describe the necessary precautions when ventilating the following roof types.
NFPA 1001 5.3.12
A. Pitched
1. Hip
2. Lantern
3. Shed
4. Mansard
5. Gambrel
6. Butterfly
B. Flat
C. Arched

- 7-I.10 Trainee shall identify the size and location of an opening for ventilation, and the precautions to be taken during ventilation.
NFPA 1001 5.3.11, 5.3.12
- A. Existing roof openings
 - B. Location of the fire
 - C. Direction in which the fire will be drawn
 - D. Type of building construction
 - E. Wind direction
 - F. Progress of the fire
 - G. Condition of the building
 - H. Safety precautions
 - I. Relative efficiency of large vs. small openings
- 7-I.11 Trainee shall identify and demonstrate natural and mechanical methods for horizontal ventilation of a structure.
NFPA 1001 5.3.11, 5.3.12
(FD can document with Ventilation #1 skill sheet found in appendix and retain on file)
- A. Trainee shall identify horizontal ventilation tools and equipment.
 - B. Trainee shall describe structural characteristics of buildings which aid in natural or mechanical ventilation.
 - 1. Scuttle hatches
 - 2. Bulkheads
 - 3. Skylights
 - 4. Monitors
 - 5. Light and ventilation shafts
 - C. Trainee shall identify and describe obstructions to horizontal ventilation.
NFPA 1001 5.3.11
 - D. Trainee shall describe weather conditions which affect horizontal ventilation.
NFPA 1001 5.3.11
- 7-I.12 Trainee shall demonstrate the removal of skylights, scuttle covers, and other covers on rooftops.
NFPA 1001 5.3.11
- 7-I.13 Trainee shall demonstrate the types of equipment used for forced mechanical ventilation.
NFPA 1001 5.3.11
- A. Trainee shall identify fire ground situations where forced ventilation procedures may be required.
 - 1. Positive pressure method
 - 2. Negative pressure method
 - B. Trainee shall describe and demonstrate the use and proper placement of gasoline or electric powered fans to effect positive pressure ventilation.
 - C. Trainee shall describe and demonstrate the use and proper placement of gasoline or electric powered fans to effect negative ventilation.
- 7-I.14 Trainee shall identify the location of the opening, the method to be used, and the precautions to be taken when ventilating a basement.
NFPA 1001 5.3.11

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.

SECTION 8 RESCUE OPERATIONS

The Trainee is not expected to be proficient in technical rescue skills. The Trainee should be able to help technical rescue teams in their efforts to safely manage structural collapses, trench collapses, cave and tunnel emergencies, water and ice emergencies, elevator and escalator emergencies, energized electrical line emergencies, and industrial accidents

Live Fire Prerequisite – There are no objectives required for this certification level.

Firefighter I

8-I.01 Trainee shall, given victims and the proper equipment, demonstrate the proper techniques for removal of injured person(s) from hazards by the use of the following carries, drags and stretchers:

NFPA 1001 5.3.9.A

(FD can document with Rescue #4 skill sheet found in appendix and retain on file)

- A. one/two person victim standing
- B. seat carry
- C. extremities carry
- D. chair carry
- E. three-person carry
- F. lift and carry
- G. blanket drag

8-I.02 Trainee shall demonstrate searching for victims in burning, smoke-filled buildings, or other hostile environments:

NFPA 1001 5.3.9.B

(FD can document with Rescue #1 skill sheet found in appendix and retain on file)

- A. given the proper information, shall list two (2) objectives to be achieved while searching for victims in a building on fire:
 - 1. Finding victims
 - 2. Obtaining information on the extent of the fire
- B. given a small one-story building filled with simulated smoke, shall demonstrate the establishing of a search pattern for the building and multiple rooms that are involved:
 - 1. With a rope or hose line
 - 2. Without a rope or hose line

8-I.03 Trainee, given the proper information, shall list the life threatening injuries that need to be observed in the proper order of priority.

NFPA 1001 5.3.9

8-I.04 Trainee shall demonstrate the techniques of packaging a victim for emergency transportation by:

NFPA 1001 5.3.9.B

- A. given a short/long spine board and wrapping materials, demonstrate the stabilizing of a victims spine and cervical area of the body, and
- B. given a packaged victim and stretcher, demonstrate the transfer procedures of victims from their rescue scene.

8-I.05 Trainee, given a 20' length of ½" rope, shall demonstrate the following knots as used in repelling:

NFPA 1001 5.1.1

- A. figure-eight
- B. figure-eight follow through
- C. bowline
- D. clove-hitch
- E. half-hitch

Firefighter II

- 8-II.01 Trainee shall define safety procedures as they apply to rescue.
NFPA 1001 6.4.1.A
- 8-II.02 Trainee shall define the uses of a lifeline.
NFPA 1001 6.4.2
- 8-II.03 Trainee shall explain search and rescue procedures for safe rescue of open water and swift water victims.
NFPA 1001 6.4.2
- 8-II.04 Trainee shall describe or demonstrate the use of water rescue tools including:
NFPA 1001 6.4.2
- | | |
|-------------------------------|---------------------|
| A. personal flotation devices | E. rescue tube |
| B. pike poles | F. towel reach |
| C. shepherd's hook | G. ladders |
| D. ring buoy | H. dragging devices |
- 8-II.05 Trainee shall assist rescue team with the techniques and safety procedures as they apply to the following rescue activities:
NFPA 1001 6.4.2
- A. structural collapses
 - B. trench collapses
 - C. caves and tunnels
 - D. water and ice emergencies
 - E. elevators and escalators
 - F. emergencies involving energized electrical lines
 - G. industrial accidents
 - H. motor vehicle accidents
 - I. other hazards particular to the local jurisdiction
- 8-II.06 Trainee shall demonstrate the use and care of the following rescue tools:
NFPA 1001 6.4.1
- | | |
|----------------------------------|-------------------------|
| A. cribbing and shoring material | E. trench jacks |
| B. block and tackle | F. water rescue devices |
| C. hydraulic devices | G. ratchet device |
| D. pneumatic devices | |
- 8-II.07 Trainee shall raise and lower a simulated victim 20 vertical feet (6m) using a rope rescue system.
NFPA 1001 6.4.2
(FD can document with Rescue #6 skill sheet found in appendix and retain on file)
- 8-II.08 Trainee shall demonstrate extricating a victim entrapped in a motor vehicle as part of a team, given stabilization and extrication tools, so that the vehicle is stabilized, the victim is disentangled without further injury, and hazards are managed.
NFPA 1001 6.4.1
- 8-II.09 Trainee shall demonstrate inspection and don a life safety harness.
NFPA 1001 6.4.2
(FD can document with Rescue #2 & #3 skill sheet found in appendix and retain on file)

SECTION 9 FIRE & LIFE SAFETY INITIATIVES

Live Fire Prerequisite – There are no objectives required for this certification level.

Firefighter I

- 9-I.01 Trainee shall explain steps taken during fire and life safety program development.
NFPA 1001 5.5.1
- 9-I.02 Trainee shall describe the components involved in fire and life safety program delivery.
NFPA 1001 5.5.1
- 9-I.03 Trainee shall explain the impact of safety hazards, messages, and target audiences on creating fire and life safety education programs.
NFPA 1001 5.5.1
- 9-I.04 Trainee shall indicate ways to identify and prevent firesetter development.
NFPA 1001 5.5.1

Firefighter II

- 9-II.01 Trainee shall identify the common causes of fires and their prevention.
NFPA 1001 6.5.1
 - A. Housekeeping practices
 - B. Smoking
 - C. Open burning
 - D. Electrical sources of ignition
- 9-II.02 Trainee shall identify life safety programs for the home.
NFPA 1001 6.5.1
- 9-II.03 Trainee shall identify local and state fire codes concerning subjects to be noted in the fire company inspection.
NFPA 1001 6.5.1
- 9-II.04 Trainee shall identify the fire hazards commonly found in manufacturing, commercial, residential, and public assembly occupancies.
NFPA 1001 6.5.1
 - A. Common Hazards
 - 1. Fuel Supply
 - 2. Heat Source
 - B. Special Hazards
 - C. Target Hazards
- 9-II.05 Trainee shall identify common deficiencies in electrical services and equipment.
NFPA 1001 6.5.1
- 9-II.06 Trainee shall identify local code requirements covering the proper storage and use of flammable liquids and gases.
NFPA 1001 6.5.1
- 9-II.07 Trainee shall identify storage codes and practices contributing to fire safety in buildings, including proper piling, aisles, clearances, access to fire equipment and exits.
NFPA 1001 6.5.1

- 9-II.08 Trainee shall identify proper outside storage and how it affects fire fighting, including aisles, roadways, access to hydrants, access to buildings, and exposure hazards.
NFPA 1001 6.5.1
- 9-II.09 Trainee shall identify water and smoke damage potential to goods, to office and manufacturing machinery, and other valuable objects.
NFPA 1001 6.5.1
- 9-II.10 Trainee shall identify legal issues concerning fire prevention inspections.
NFPA 1001 6.5.1
- A. Trainee shall identify and define the authorities and conditions giving fire service personnel the right to enter a property and perform fire prevention inspections.
- B. Trainee shall identify and define conditions or circumstances that would limit the right of fire service personnel to enter a property and perform fire prevention inspections.
- C. Trainee shall identify and define proper procedures for gaining code compliance.
- D. Trainee shall define the legal liability of fire service personnel when conducting fire prevention inspections
- 9-II.11 Trainee shall identify the fire inspection procedures.
NFPA 1001 6.5.1
- 9-II.12 Trainee shall define the importance of public relations relative to inspection programs.
NFPA 1001 6.5.1
(FD can document with Inspections #1 skill sheet found in appendix and retain on file)
- 9-II.13 Trainee shall define dwelling inspection procedures.
NFPA 1001 6.5.1
(FD can document with Inspections #1 skill sheet found in appendix and retain on file)
(FD can document with Pre-fire Plan #1 skill sheet found in appendix and retain on file)
- A. Scheduling
B. Approach and introduction
C. Conducting the inspection
D. Final interview
E. Follow-up
F. Inspection report and map
- 9-II.14 Trainee shall identify the procedure for preparing a pre-fire plan.
NFPA 1001 6.5.3, 6.5.4
- 9-II.15 Trainee shall prepare diagrams or sketches of buildings to record the locations of items of concern during pre-incident planning operations.
NFPA 1001 6.5.1
(FD can document with Pre-fire Plan #1 skill sheet found in appendix and retain on file)
- A. Trainee, when given examples of map symbols, shall be able to identify the meaning of symbols.
- B. Trainee, when preparing a sketch of a facility, shall draw the standard map symbol for:
- | | |
|-------------------------------|---------------------------|
| 1. Single hydrant | 9. Public water service |
| 2. Double hydrant | 10. Private water service |
| 3. Triple hydrant | 11. Fire escape |
| 4. Sprinkler riser | 12. Skylight |
| 5. Fire Department Connection | 13. Automatic fire alarm |
| 6. Automatic sprinklers | 14. Fire pump |
| 7. Not sprinklered | 15. Stairs |
| 8. Vertical pipe or standpipe | |

- C. Trainee shall identify and define the types of diagrams or sketches used in pre-incident planning and prepare a pre-incident plan from information gathered in a survey.
1. Plot plan
 2. Floor plan
 3. Elevation drawing
- 9-II.16 Trainee shall collect and record in writing, information required for the purpose of preparing a report on a building inspection or survey.
NFPA 1001 6.5.3
(FD can document with Pre-fire Plan #1 skill sheet found in appendix and retain on file)
- 9-II.17 Trainee shall identify common fire hazards and make recommendations for correction.
NFPA 1001 6.5.1
- 9-II.18 Trainee shall complete a building inspection report.
NFPA 1001 6.5.1
(FD can document with Inspection #2 skill sheet found in appendix and retain on file)
- 9-II.19 Trainee shall identify the types of fire extinguishers in an occupancy and ensure that they conform to the fire prevention requirements for that occupancy.
NFPA 1001 6.5.1
- 9-II.20 Trainee shall identify the procedures to be used whenever fire hazards, or suspected fire hazards, are encountered during inspections.
NFPA 1001 6.5.1
- 9-II.21 Trainee shall identify the fire exit requirements for different types of occupancies.
NFPA 1001 6.5.2
- 9-II.22 Trainee shall inspect standpipe systems for fire protection, including visual inspection of the following equipment:
NFPA 1001 6.5.1
- A. Standpipe systems
 - B. Hose and hose threads
 - C. Nozzles
 - D. Fire Department Connections
- 9-II.23 Trainee shall identify a private water system for fire protection, including fire pumps, yard hydrants, hose houses, gravity and pressure types of water storage tanks, reservoirs, and draft sources.
NFPA 1001 6.5.1
- 9-II.24 Trainee shall identify smoke, flame, and heat-detection alarm systems.
NFPA 1001 6.5.1
- 9-II.25 Trainee shall identify standard types of chimneys and flues, and recognize deficiencies likely to cause fires.
NFPA 1001 6.5.1
- 9-II.26 Trainee shall identify five (5) common causes of fire and their prevention.
NFPA 1001 6.5.1
(FD can document with Education #1 skill sheet found in appendix and retain on file)

- 9-II.27 Trainee shall define the importance of public fire education and inspection programs as they relate to the fire department public relations and to the community.
NFPA 1001 6.5.1
(FD can document with Education #1 skill sheet found in appendix and retain on file)
- 9-II.28 Trainee shall identify and demonstrate procedures for conducting a fire station tour.
NFPA 1001 6.5.2
(FD can document with Education #1 skill sheet found in appendix and retain on file)
- 9-II.29 Trainee shall identify and demonstrate the “Stop, Drop and Roll” technique for extinguishing clothing fires.
NFPA 1001 6.5.2
(FD can document with Education #1 skill sheet found in appendix and retain on file)
- 9-II.30 Trainee shall identify and demonstrate inspection procedures for private dwellings.
NFPA 1001 6.5.1
(FD can document with Education #1 skill sheet found in appendix and retain on file)
- 9-II.31 Trainee shall identify and demonstrate the proper placement, testing and maintenance of smoke detectors in private dwellings.
NFPA 1001 6.5.2
(FD can document with Education #1 skill sheet found in appendix and retain on file)
- 9-II.32 Trainee shall identify the elements of a home fire escape plan.
NFPA 1001 6.5.2
(FD can document with Education #1 skill sheet found in appendix and retain on file)

SECTION 10 WATER SUPPLIES

Live Fire Prerequisite

- 10-I.01 Trainee shall identify the water distribution system, and other alternate water sources in the area of responsibility.
NFPA 1001 5.3.15.A
- 10-I.02 Trainee shall identify a:
NFPA 1001 5.3.15.A
- A. dry-barrel hydrant
 - B. wet-barrel hydrant
- 10-I.03 Trainee shall demonstrate hydrant to pumper hose connections for forward and reverse hose lays.
NFPA 1001 5.3.15.B
- (FD can document with Water Supply #1 skill sheet found in appendix and retain on file)
(FD can document with Water Source #1 skill sheet found in appendix and retain on file)
- A. Forward hose lay
 - B. Reverse hose lay
 - C. Split hose lay
- 10-I.04 Trainee shall define, explain, and demonstrate where applicable, the use of a rural dry fire hydrant system and static water supply source.
NFPA 1001 5.3.15.A-B
- (FD can document with Water Supplies #3 skill sheet found in appendix and retain on file)
- 10-I.05 Trainee shall define a tanker shuttle.
NFPA 1001 5.3.15
- 10-I.06 Trainee shall identify the apparatus, equipment, and appliances required to provide water at rural locations by relay pumping, large diameter hose, or a tanker shuttle.
NFPA 1001 5.3.15.A
- 10-I.07 Trainee shall demonstrate deployment of a portable water tank.
NFPA 1001 5.3.15.B
- 10-I.08 Trainee shall identify the following parts of a water distribution system:
NFPA 1001 5.3.15
- A. distributors
 - B. primary feeders
 - C. secondary feeders
- 10-I.09 Trainee shall identify the following terms as they relate to water supply:
NFPA 1001 5.3.15
- A. normal operating pressure of a water distribution system
 - B. residual pressure of a water distribution system
 - C. the flow pressure from an opening that is flowing water
 - D. static pressure

- 10-I.10 Trainee shall identify the following types of water main valves:
NFPA 1001 5.3.15
- A. indicating
 - B. non-indicating
 - C. post indicator valve (P.I.V.)
 - D. outside screw and yoke (O.S. & Y.)
- 10-I.11 Trainee shall identify and explain the four (4) fundamental components of a modern water system.
NFPA 1001 5.3.15
- A. Sources of supply
 - 1. Surface water
 - 2. Ground water
 - B. Means of moving water
 - 1. Direct pumping system
 - 2. Gravity system
 - 3. Combination system
 - C. Treatment facilities
 - D. Storage facilities and distribution systems
- 10-I.12 Trainee, given a pitot tube and gauge, shall use, read, and record several flow pressures.
NFPA 1001 5.3.15
- 10-I.13 Trainee shall identify the recommended minimum pipe sizes used in the following areas:
NFPA 1001 5.3.15
- A. Residential
 - B. Business
 - C. Industrial
- 10-I.14 Trainee shall identify two (2) causes of increased resistance or friction loss in water mains.
NFPA 1001 5.3.15
- A. Mineral encrustation or tuberculation
 - B. Sedimentation

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.

SECTION 11 FIRE PROTECTION SYSTEMS

Live Fire Prerequisite - There are no objectives required for this certification level.

Firefighter I - There are no objectives required for this certification level.

Firefighter II

- 11-II.01 Trainee shall identify a fire department sprinkler connection and water motor alarm.
NFPA 1001 6.5.3
- 11-II.02 Trainee shall connect hose line(s) to a fire department connection of a sprinkler or standpipe system.
NFPA 1001 6.5.3
- 11-II.03 Trainee shall define how the automatic sprinkler activates and releases water.
NFPA 1001 6.5.3
- A. Fusible Link
 - B. Glass (Frangible) Bulb
 - C. Chemical Pellet
- 11-II.04 Trainee shall temporarily stop the flow of water from a sprinkler head.
NFPA 1001 6.5.3
(FD can document with Fire Protection Systems #5 skill sheet found in appendix and retain on file)
- 11-II.05 Trainee shall identify the main control valve on the system.
NFPA 1001 6.5.3
(FD can document with Fire Protection Systems #3 skill sheet found in appendix and retain on file)
- 11-II.06 Trainee shall operate a main control valve on the system from open to closed and back to open.
NFPA 1001 6.5.3
- 11-II.07 Trainee shall define the value of automatic sprinklers in providing safety to the occupants in a structure.
NFPA 1001 6.5.3
- 11-II.08 Trainee shall identify and define the dangers of premature closure of sprinkler main control valve, and of using hydrants to supply hose streams when the same water system is supplying the automatic sprinkler system.
NFPA 1001 6.5.3
- 11-II.09 Trainee shall identify the difference between an automatic sprinkler system that provides complete coverage and a partial sprinkler system.
NFPA 1001 6.5.3
- 11-II.10 Trainee shall identify at least three sources of water for supply to an automatic sprinkler system.
NFPA 1001 6.5.3
- 11-II.11 Trainee shall identify the following:
NFPA 1001 6.5.3
- A. wet sprinkler system
 - B. dry sprinkler system
 - C. deluge sprinkler system
 - D. residential sprinkler system
- 11-II.12 Trainee, given an alarm valve of an automatic sprinkler system, shall identify the operation of the valve.
NFPA 1001 6.5.3
- 11-II.13 Trainee shall identify the types, components and operation of standpipe systems.

NFPA 1001 6.5.3

11-II.14 Trainee shall identify various types of special extinguishing systems.

NFPA 1001 6.5.3

11-II.15 Trainee shall identify various types of supervisory circuits.

NFPA 1001 6.5.3

11-II.16 Trainee shall identify the function of a fire annunciator panel.

NFPA 1001 6.5.3

11-II.17 Trainee shall identify various alarm initiating devices.

NFPA 1001 6.5.3

SECTION 12 FIRE BEHAVIOR (FIRE SCIENCE)

Live Fire Prerequisite

- 12-I.01 Trainee shall define heat and fire.
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- 12-I.02 Trainee shall define the fire triangle and tetrahedron.
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- 12-I.03 Trainee shall identify two (2) chemical, mechanical, and electrical energy heat sources.
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- 12-I.04 Trainee shall define the following:
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- | | |
|-------------------|--------------------------|
| A. incipient | E. steady state |
| B. flame spread | F. clear or free burning |
| C. hot smoldering | G. back draft explosion |
| D. flashover | |
- 12-I.05 Trainee shall define the four (4) methods of heat transfer.
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- A. Conduction
 - B. Convection
 - C. Radiation
 - D. Direct Flame Impingement
- 12-I.06 Trainee shall define the three (3) physical states of matter in which fuels are commonly found.
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- A. solid
 - B. liquid
 - C. gaseous
- 12-I.07 Trainee shall define the hazard of finely divided fuels as they relate to the combustion process.
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- 12-I.08 Trainee shall define:
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- A. flash point
 - B. fire point
 - C. ignition temperature
 - D. upper and lower explosive limits
- 12-I.09 Trainee shall define concentrations of oxygen in air as it affects combustion.
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- 12-I.10 Trainee shall identify three (3) products of combustion commonly found in structural fires which create a life hazard.
NFPA 1001 5.3.10, 5.3.11, 5.3.12
- 12-I.11 Trainee shall identify characteristics of water as it relates to its fire extinguishing potential.
NFPA 1001 5.3.10, 5.3.11, 5.3.12

12-I.12 Trainee shall define the following units of measurements:

NFPA 1001 5.3.10, 5.3.11, 5.3.12

- A. British Thermal Unit (BTU)
- B. Fahrenheit (F°)
- C. Celsius (C°)
- D. Calorie (C)
- E. Joule, the SI unit for energy

12-I.13 Trainee shall define thermal balance and imbalance.

NFPA 1001 5.3.10, 5.3.11, 5.3.12

12-I.14 Trainee shall identify chemical by-products of combustion.

NFPA 1001 5.3.10, 5.3.11, 5.3.12

12-I.15 Trainee shall define the fire extinguishment theory.

NFPA 1001 5.3.10, 5.3.11, 5.3.12

12-I.16 Trainee shall identify pressure and velocity.

NFPA 1001 5.3.10, 5.3.11, 5.3.12

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.

SECTION 13 FIRE DEPARTMENT COMMUNICATIONS

Live Fire Prerequisite – There are no objectives required for this certification level.

Firefighter I

- 13-I.01 Trainee shall define the procedure for a citizen to report a fire or other emergency.
NFPA 1001 5.2.1.A
- 13-I.02 Trainee shall demonstrate receiving an alarm or a report of an emergency and initiate action.
NFPA 1001 5.2.1.B
(FD can document with Communications #3 skill sheet found in appendix and retain on file)
- 13-I.03 Trainee shall define the purpose and function of all alarm-receiving instruments and personnel-alerting equipment provided in the fire station.
NFPA 1001 5.2.1, 5.2.3.A
- 13-I.04 Trainee shall identify traffic control devices installed in the fire station to facilitate the response of apparatus.
NFPA 1001 5.2.1
- 13-I.05 Trainee shall identify procedures required for receipt and processing of emergency and non-emergency calls.
NFPA 1001 5.2.2
(FD can document with Communications #4 skill sheet found in appendix and retain on file)
- 13-I.06 Trainee shall define and demonstrate prescribed fire department radio procedures including:
NFPA 1001 5.2.1
A. routine traffic
B. emergency traffic
C. emergency evacuation signals
- 13-I.07 Trainee shall define policy and procedures concerning the ordering and transmitting of multiple alarms of fire and calls for special assistance from the emergency scene.
NFPA 1001 5.2.1, 5.2.1.A
(FD can document with Communications #1 skill sheet found in appendix and retain on file)
- 13-I.08 Trainee shall define all fire alarm signals, including multiple alarms and special signals, governing the movements of fire apparatus, and the action to be taken upon the receipt of each signal.
NFPA 1001 5.2.1.A

Firefighter II

- 13-II.01 Trainee shall identify areas assigned for first-alarm response.
NFPA 1001 6.2.2
(FD can document with Communications #2 skill sheet found in appendix and retain on file)
- 13-II.02 Trainee shall demonstrate both mobile and portable radio equipment.
NFPA 1001 6.2.2
(FD can document with Communications #2 skill sheet found in appendix and retain on file)
- 13-II.03 Trainee shall demonstrate the ordering of multiple alarms and other calls for assistance from the fire ground, (i.e., mutual aid).
NFPA 1001 6.2.2
(FD can document with Communications #2 skill sheet found in appendix and retain on file)

13-II.04 Trainee shall identify the fire incident reporting systems: NFIRS and TEXFIRS.

NFPA 1001 6.2.1

(FD can document with Incident Report Form #1 skill sheet found in appendix and retain on file)

13-II.05 Trainee shall identify the scope, purpose and benefits of the Texas and National Fire Incident Reporting Systems.

NFPA 1001 6.2.1

(FD can document with Incident Report Form #1 skill sheet found in appendix and retain on file)

13-11.06 Trainee shall identify the three (3) elements of a fire reporting system.

NFPA 1001 6.2.1

(FD can document with Incident Report Form #1 skill sheet found in appendix and retain on file)

13-11.07 Trainee shall identify report forms used by the local AHJ: incident report form and casualty report form.

NFPA 1001 6.2.1

(FD can document with Incident Report Form #1 skill sheet found in appendix and retain on file)

SECTION 14 FIRE CAUSE & ORIGIN

Live Fire Prerequisite - There are no objectives required for this certification level.

Firefighter I

- 14-I.01 Trainee shall explain the ways to recognize obvious signs of the area of origin.
NFPA 1001 5.3.8, 5.3.14
- 14-I.02 Trainee shall describe the relationship between the fire cause classifications and cause determination.
NFPA 1001 5.3.8, 5.3.13
- 14-I.03 Trainee shall identify factors indicating arson.
NFPA 1001 5.3.13
- 14-I.04 Trainee shall identify the importance of protecting evidence and explain the different techniques of protecting evidence at a fire scene.
NFPA 1001 5.3.8, 5.3.14

(FD can document with Fire Cause & Origin #1 skill sheet found in appendix and retain on file)

Firefighter II

- 14-II.01 Trainee shall identify the roles and responsibilities of a firefighter in determining point of origin.
NFPA 1001 6.3.4
- 14-II.02 Trainee shall identify factors indicating fire cause.
NFPA 1001 6.3.4
- 14-II.03 Trainee shall identify observations important to determining events of a fire.
NFPA 1001 6.3.4
- 14-II.04 Trainee shall define the importance of securing a fire scene to prevent unwarranted access.
NFPA 1001 6.3.4

SECTION 15 FIRE CONTROL

Live Fire Prerequisite

15-I.01 Trainee shall identify the current edition of NFPA 1403: *Standard on Live Fire Training Evolutions* and shall:

NFPA 1403

- A. identify the purpose of NFPA 1403
- B. define evolution
- C. define student
- D. define instructor
- E. define training center burn building
- F. identify subjects required prior to participating in live fire training
- G. identify the minimum flow, in gallons per minute, required by each hose line used in live fire training
- H. identify the protective equipment required during live fire training

Firefighter I

15-I.02 Trainee, operating as the nozzle person and as a member of a team, shall control and/or extinguish the following live fires using appropriate protective equipment, fire fighting tools, and extinguishing agents:

NFPA 1001 5.3.7

(FD can document with Live Fire Training #1 skill sheet found in appendix and retain on file)

(FD can document with Live Fire Training #2 skill sheet found in appendix and retain on file)

(FD can document with Live Fire Training #3 skill sheet found in appendix and retain on file)

(FD can document with Live Fire Training #4 skill sheet found in appendix and retain on file)

- A. a one (1) room fire
- B. a two (2) room fire
- C. piles/stacks of Class A combustibile materials (exterior)
- D. open pans of combustibile materials (exterior)
- E. vehicle fires
- F. ground cover fire

15-I.03 Trainee, operating as a member of a team, shall perform vertical ventilation during live fire training.

NFPA 1001 5.3.12

15-I.04 Trainee, operating as a member of a team, shall perform horizontal ventilation during live fire training.

NFPA 1001 5.3.11

15-I.05 Trainee, operating as an individual or a member of a team, shall carry and raise ladders during live fire training.

NFPA 1001 5.3.6

15-I.06 Trainee shall extinguish a Class B fire with a portable fire extinguisher.

NFPA 1001 5.3.16

Firefighter II

15-II.01 Trainee shall describe the considerations to be taken when coordinating fire ground operations

NFPA 1001 6.1.1, 6.1.2, 6.3.2

- 15-II.02 Trainee shall explain fire ground roles and responsibilities a firefighter II may need to coordinate
NFPA 1001 6.1.1, 6.1.2, 6.3.2
- 15-II.03 Trainee shall discuss the process of establishing and transferring command
NFPA 1001 6.1.1, 6.1.2, 6.3.2
- 15-II.04 Trainee shall describe the hazards that may be present at fires in underground spaces
NFPA 1001 6.3.2
- 15-II.05 Trainee shall list the safety precautions to be taken at Flammable/Combustible liquid fires incidents
NFPA 1001 6.3.1, 6.3.3
- 15-II.06 Trainee shall recognize methods used when coordinating operations at a property protected by a fire suppression system
NFPA 1001 6.3.2
- 15-II.07 Trainee shall explain how to use water to control Class B fires
NFPA 1001 6.3.1
(FD can document with Live Fire Training #5 skill sheet found in appendix and retain on file)
- 15-II.08 Trainee shall compare methods used to suppress bulk transport vehicle fires and flammable gas incidents
NFPA 1001 6.3.3
- 15-II.09 Trainee shall establish incident command and coordinate interior attack of a structure fire
NFPA 1001 6.1.2, 6.3.2
(FD can document with Live Fire Training #7 skill sheet found in appendix and retain on file)
- 15-II.10 Trainee shall control a pressurized flammable gas container fire
NFPA 1001 6.3.3
(FD can document with Live Fire Training #6 skill sheet found in appendix and retain on file)

THESE LIVE FIRE TRAINING EVOLUTIONS SHOULD CONSIST OF A COMBINATION OF VARIOUS STAGES OF HOSE HANDLING, FIRE STREAMS, VENTILATION, ETC., NECESSARY IN THE ACTUAL EXTINGUISHMENT OF A FIRE. THE TRAINING CONDUCTED UNDER THIS SECTION MUST BE CARRIED OUT AS A PREPLANNED OPERATION WITH REFERENCE TO THE STANDARDS OF NFPA 1403: *STANDARD ON LIVE FIRE TRAINING EVOLUTIONS*. UNDER NO CIRCUMSTANCES SHALL RESPONSE TO ACTUAL ALARMS BE COUNTED AS TRAINING.

SECTION 16 FIREFIGHTER SAFETY & HEALTH

Live Fire Prerequisite

- 16-I.01 Trainee shall identify dangerous building conditions created by fire.
NFPA 1001 5.3.10
- 16-I.02 Trainee shall define fire service lighting equipment.
NFPA 1001 5.3.17.A
- 16-I.03 Trainee shall identify and describe safety procedures given the following fire service lighting equipment:
NFPA 1001 5.3.17.A
(FD can document with Safety #5 skill sheet found in appendix and retain on file)
A. Power supply (portable or mounted)
B. Lights
C. Auxiliary equipment
- 16-I.04 Trainee shall demonstrate the use of portable power plants, lights, cords, and connectors.
NFPA 1001 5.3.17.B
(FD can document with Safety #3 skill sheet found in appendix and retain on file)
- 16-I.05 Trainee shall define safety procedures as they apply to emergency operations, specifically:
NFPA 1001 5.1.2, 5.3.2.A-B, 5.1.1
A. protective equipment
B. team concept
C. portable tools and equipment
D. riding on apparatus
E. hazardous materials incidents
- 16-I.06 Trainee shall identify the safety purpose of the 2 in 2 out rule per NFPA 1403.
NFPA 1403
- 16-I.07 Trainee shall identify the safety procedures and precautions during fire apparatus operations:
NFPA 1001 5.3.2.A
(FD can document with Safety #4 skill sheet found in appendix and retain on file)
(FD can document with Firefighter Safety #8 skill sheet found in appendix and retain on file)
A. attire to be worn while riding on apparatus responding to an alarm and,
B. describe/list safety precautions required while riding fire apparatus.
- 16-I.08 Trainee shall define techniques for action when trapped or disoriented in a fire situation or in a hostile environment.
(FD can document with Safety #1 skill sheet found in appendix and retain on file)
NFPA 1001 Annex 5.3.9
- 16-I.09 Trainee shall identify the elements and purpose of a Rapid Intervention Team/Crew per NFPA 1407
NFPA 1407
(FD can document with Safety #2 skill sheet found in appendix and retain on file)

16-I.10 Trainee shall define procedures to be used in electrical emergencies.

NFPA 1001 5.3.3, 5.3.18

(FD can document with Safety #2 skill sheet found in appendix and retain on file)

- A. identifying four (4) agents for extinguishing fires in electrically energized equipment.
- B. identifying minimum safe distances from which he can apply water fog pattern to electrically energized equipment as determined by the voltage.
- C. identifying safe and unsafe areas for the placement of ground ladders near electrically energized wires.
- D. identifying types of conductive vs. non-conductive ladder construction materials.
- E. explaining the safest action to be taken when aerial apparatus may come into contact with electrically energized overhead wires.
- F. defining procedures for extinguishing transformer fires on utility poles.

16-I.11 Trainee shall identify the 16 life safety initiatives.

NFPA 1001 5.1.1

Completion of "Courage to be Safe" meets the requirements of this objective.

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.

SECTION 17 GROUND COVER FIRE FIGHTING

Live Fire Prerequisite – There are no objectives required for this certification level.

Firefighter I

- 17-I.01 Trainee shall correctly define wildfire terms as used in the fire service:
NFPA 1001 5.3.19
- | | |
|---------------------------|-------------------------------------|
| A. mop-up | K. fire behavior |
| B. direct attack | L. incident commander |
| C. indirect attack | M. incendiary fire |
| D. fuel | N. mutual aid |
| E. backfire/burnout | O. fire season |
| F. barrier | P. convection column |
| G. topography | Q. tools used in ground cover fires |
| H. suppression | R. crown fires |
| I. ground fires | S. surface fires |
| J. parts of wildland fire | |
- 17-I.02 Trainee shall, given a specific wildland fire situation, describe the effect of fuel, weather and topography on wildland fire, and predict the direction and speed of the fire spread.
NFPA 1001 5.3.19
- 17-I.03 Trainee shall, given a specific wildland fire situation, construct hand and wet fire lines using safe and effective both direct and indirect line construction techniques to control the fire within less than 10% increase in the perimeter.
NFPA 1001 5.3.19
- 17-I.04 Trainee shall, given a specific wildland fire situation as reported, locate the fire relative to his present location and describe the factors involved to respond safely to that location within the response time standards of the department.
NFPA 1001 5.3.19
- 17-I.05 Trainee shall, given a specific wildland fire situation, analyze (size up) the situation and using proper procedures, shall organize this information into a clear, concise report of conditions necessary to develop an initial plan of action to control the fire within 2 hours.
NFPA 1001 5.3.19
- 17-I.06 Trainee shall, given a specific wildland fire situation with control lines established, insure complete extinguishment of the fire by employing recognized mop-up techniques.
NFPA 1001 5.3.19
- 17-I.07 Trainee shall, given a residence within a wildland area, identify typical fire hazards and recommend corrective actions which are within his authority and ability to do.
NFPA 1001 5.3.19
- 17-I.08 Trainee shall, given a specific wildland fire situation, list and describe recognized safety practices and corrective actions to be taken to ensure that the department does not have any injuries due to the wildfire suppression effort.
NFPA 1001 5.3.19

Firefighter II - There are no objectives required for this certification level.

PLEASE NOTE: IT IS RECOMMENDED THAT THE TEXAS A&M FOREST SERVICE COURSE "WILDLAND FIRE SUPPRESSION FOR VOLUNTEER DEPARTMENTS", OR ITS EQUIVALENT, IS USED AS REFERENCE MATERIALS IN MEETING THE OBJECTIVES OF THIS SECTION.

SECTION 18 HAZARDOUS MATERIALS

Effective February 1, 2020 all objectives transferred to 472: HazMat Awareness & Operations certification.

SECTION 19 FIREFIGHTER PPE & SCBA

Live Fire Prerequisite

19-I.01 Trainee shall identify the various types of fire service protective clothing such as structural, wildland, and ARFF. Trainee shall also identify their components:

NFPA 1001 5.1.2, 5.3.9

(FD can document with Personal Protective Equipment #2 skill sheet found in appendix and retain on file)

- A. turnouts
- B. helmets
- C. gloves
- D. boots
- E. SCBA

19-I.02 Trainee shall identify procedures for inspecting, cleaning, and maintaining the components of a personal protective ensemble after each use.

NFPA 1001 5.1.2

(FD can document with Personal Protective Equipment #1 skill sheet found in appendix and retain on file)

19-I.03 Trainee shall describe the limitations of personnel working in a personal protective ensemble.

NFPA 1001 5.3.1.A

19-I.04 Trainee shall identify at least four (4) hazardous respiratory environments encountered in fire fighting.

NFPA 1001 5.3.1.A

19-I.05 Trainee shall demonstrate the use of SCBA in conditions of obscured visibility.

NFPA 1001 5.3.5, 5.3.5.A-B, 5.3.9

19-I.06 Trainee shall identify the physical requirements of the wearer, the limitations of the self-contained breathing apparatus, and the safety features of types of SCBA available to local AHJ.

NFPA 1001 5.3.1.A-B

19-I.07 Trainee shall demonstrate donning SCBA while wearing protective clothing:

NFPA 1001 5.3.2.A-B

(FD can document with SCBA #2 skill sheet found in appendix and retain on file)

(FD can document with SCBA #3 skill sheet found in appendix and retain on file)

(FD can document with SCBA #7 skill sheet found in appendix and retain on file)

(FD can document with SCBA #8 skill sheet found in appendix and retain on file)

- A. in a seated position on an apparatus with a seat belt on
- B. Compartment Method
- C. Overhead Method
- D. Coat Method

19-I.08 Trainee shall demonstrate that the SCBA is in a safe condition for immediate use.

NFPA 1001 5.3.1

19-I.09 Trainee shall identify the procedure for cleaning and sanitizing SCBA for future use.

NFPA 1001 5.5.1

- 19-I.10 Trainee shall demonstrate the use of SCBA in conditions of restricted passage.
NFPA 1001 5.3.1.A-B
(FD can document with SCBA #10 skill sheet found in appendix and retain on file)
- 19-I.11 Trainee shall demonstrate replacement of an expended cylinder on an SCBA assembly with a full cylinder.
NFPA 1001 5.3.1.B
(FD can document with SCBA #13 skill sheet found in appendix and retain on file)
(FD can document with SCBA #6 skill sheet found in appendix and retain on file)
- 19-I.12 Trainee shall identify the procedure for daily inspections and maintenance of SCBA.
(FD can document with SCBA #1 & #15 skill sheets found in appendix and retain on file)
NFPA 1001 5.3.9.A, 5.5.1, 5.5.1.A-B
- 19-I.13 Trainee, given each type of SCBA, shall demonstrate the correct procedure for recharging.
NFPA 1001 5.3.1.A-B
(FD can document with SCBA #17 skill sheet found in appendix and retain on file)
- 19-I.14 Trainee shall demonstrate the following emergency techniques using SCBA to:
NFPA 1001 5.3.5.B
(FD can document with SCBA #4 skill sheet found in appendix and retain on file)
(FD can document with SCBA #5 skill sheet found in appendix and retain on file)
(FD can document with SCBA #11 skill sheet found in appendix and retain on file)
A. Emergency Preparedness
B. Control Breathing Techniques
C. Communications Procedures
- 19-I.15 Trainee shall identify and define the operational components of all types of self-contained breathing apparatus.
NFPA 1001 5.3.1, 5.3.1.A
- 19-I.16 Trainee, without compromising the rescuers respiratory protection, shall demonstrate rescue procedures for the following:
NFPA 1001 5.3.9.B
(FD can document with SCBA #14 skill sheet found in appendix and retain on file)
A. a firefighter with functioning respiratory protection
B. a firefighter without functioning respiratory protection
C. a civilian without respiratory protection
- 19-I.17 Trainee shall demonstrate the operation of a Personal Alert Safety System (PASS) device.
NFPA 1001 5.3.1.B
(FD can document with SCBA #1 skill sheet found in appendix and retain on file)

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.

SECTION 20 ROPES

Live Fire Prerequisite – There are no objectives required for this certification level.

Firefighter I

20-I.01 Trainee, when given name, picture, or actual knot used by the AHJ, shall identify it and describe the purpose for which it would be used:

NFPA 1001 5.3.20.A

- | | |
|------------------------|--------------------------------|
| A. Becket (sheet) bend | E. half hitch |
| B. bowline | F. figure-eight |
| C. clove hitch | G. figure-eight on a bight |
| D. bowline on a bight | H. figure-eight follow through |

20-I.02 Trainee shall identify rope safety procedures.

NFPA 1001 5.1.2

20-I.03 Trainee shall identify and/or demonstrate the terms used when tying a knot or hitch used by the AHJ:

NFPA 1001 5.1.2, 5.3.20.A

- A. standing part when tying a knot or hitch
- B. running part when tying a knot or hitch
- C. a bight when tying a knot or hitch
- D. a loop when tying a knot or hitch
- E. a round turn when tying a knot or hitch
- F. half hitch when tying a knot or hitch

20-I.04 Trainee shall identify the construction characteristics and appropriate uses of both natural and synthetic fiber ropes:

NFPA 1001 5.1.2, 5.3.20.A

- A. Characteristics of natural fiber (manila) ropes for utility use only:
 - 1. moisture retention
 - 2. floatability
 - 3. resistance to rot, mildew and attack by marine organisms
 - 4. resistance to surface abrasion
 - 5. resistance to acids, alkalis and solvents
 - 6. safe working strength of new rope: 3/8" manila, 1/2" manila, 5/8" manila, 3/4" manila
- B. Characteristics of synthetic ropes:
 - 1. moisture retention
 - 2. floatability
 - 3. resistance to rot, mildew and attack by marine organisms
 - 4. resistance to surface abrasion
 - 5. resistance to acids, alkalis and solvents
 - 6. safe working strength of new rope of:
 - a. 1/2" nylon, Dacron, polypropylene, braided nylon cover with nylon core;
 - b. 5/8" nylon, Dacron, polypropylene, braided nylon cover with nylon core;
 - c. 3/4" nylon, Dacron, polypropylene, braided nylon cover with nylon core
- C. Uses of ropes:
 - 1. hoisting tools and equipment
 - 2. securing tools and equipment to immovable objects

3. rescue

20-I.05 Define a life safety rope and one and two-person life safety rope including:

NFPA 1001 5.1.2, 5.3.20.A

- A. maximum working load
- B. safety factor
- C. minimum breaking strength

20-I.06 Trainee, when given the proper size and amount of rope, shall demonstrate tying the following knots used by the AHJ:

NFPA 1001 5.1.2, 5.3.20.A

(FD can document with Ropes #3 skill sheet found in appendix and retain on file)

(FD can document with Ropes #4 skill sheet found in appendix and retain on file)

- A. Becket (sheet) bend
- B. bowline
- C. clove hitch
- D. bowline on a bight
- E. half hitch
- F. figure-eight
- G. figure-eight on a bight
- H. figure-eight follow through

20-I.07 Trainee, using an approved knot, shall hoist any selected forcible entry tool, ground ladder, or appliance to a height of at least 20':

NFPA 1001 5.1.2; 5.3.20.A

(FD can document with Ropes #6 skill sheet found in appendix and retain on file)

- A. a 1½" or 1¾" dry hose with nozzle attached
- B. a 2½" or 3" dry hose with nozzle attached
- C. a 1½" or 1¾" charged hose
- D. an axe
- E. a 6' or 8' pike pole
- F. a single 14' or 16' (wall) ladder
- G. a 10' collapsible ladder
- H. a 14' combination ladder
- I. working as a member of a team, a 24' extension ladder
- J. a 15 lb. CO₂ fire extinguisher
- K. a 20 lb. dry chemical fire extinguisher
- L. an electric smoke ejector
- M. a pair of bolt cutters

20-I.08 Trainee shall demonstrate the technique of inspection, cleaning, maintaining, storage, safety procedures, and reasons for placing a rope out of service.

NFPA 1001 5.1.1, 5.3.20.A

(FD can document with Ropes #2 skill sheet found in appendix and retain on file)

20-I.09 Trainee shall use a rope to tie ladders, hose, and other equipment so as to secure them to immovable objects as follows:

NFPA 1001 5.1.1; 5.3.20.A

(FD can document with Ropes #1 skill sheet found in appendix and retain on file)

- A. secure a ladder tip to a building,
- B. secure a 1½" or larger charged line to a ladder
- C. secure a hose roller

20-I.10 Trainee shall select and tie a rope between two objects at least 15' (4.6m) apart, which will support the weight of a firefighter on the rope.

NFPA 1001 5.3.20.A

20-I.11 Trainee, given 20' tubular webbing, shall demonstrate the proper tying of a Swiss seat.

NFPA 1001 5.3.20

20-I.12 Trainee, given the proper information, shall list the equipment needed to complete rappelling procedure.

NFPA 1001 5.3.20

Firefighter II - There are no objectives required for this certification level.

SECTION 21 PORTABLE EXTINGUISHERS

Live Fire Prerequisite

21-I.01 Trainee shall identify the classification of types of fires as they relate to the use of portable extinguishers as follows:

NFPA 1001 5.3.16.A

- A. Identify the five (5) classes of fire:
 - 1. Class A
 - 2. Class B
 - 3. Class C
 - 4. Class D
 - 5. Class K
- B. Identify examples of fuels for each class of fire:
 - 1. Class A
 - 2. Class B
 - 3. Class C
 - 4. Class D
 - 5. Class K

21-I.02 Trainee, given a group of differing extinguishers, shall identify the appropriate extinguishers for each class of fire as follows:

NFPA 1001 5.3.16.A

- A. Class A fire:
 - 1. pump tank water extinguisher
 - 2. stored-pressure water
 - 3. foam
 - 4. dry chemical (multi-purpose agent)
- B. Class B fire:
 - 1. dry chemical (ordinary base)
 - 2. dry chemical (multi-purpose)
 - 3. CO₂ (carbon dioxide)
 - 4. foam
 - 5. Halon 1211
- C. Class C fire:
 - 1. dry chemical (ordinary base)
 - 2. dry chemical (multi-purpose)
 - 3. CO₂ (carbon dioxide)
 - 4. Halon 1211
- D. Class D fire:
 - 1. powder extinguishing agents for metal fires.
- E. Class K
 - 1. wet chemical systems

21-I.03 Trainee shall identify the portable fire extinguisher rating system (Underwriters Laboratories, Inc.):

NFPA 1001 5.3.16.A

- A. the basic symbols for the classes of fires
- B. the picture-symbol labeling system for the selection of fire extinguishers
- C. the numerical rating system for Class A & B fire extinguishers
- D. the test procedure for rating Class C portable extinguishers
- E. the test procedure for rating Class D portable extinguishers
- F. portable extinguishers suitable for more than one class of fire
- G. the test procedure for rating Class K portable extinguishers

21-I.04 Trainee shall demonstrate the use of portable extinguishers for each class of fire as follows:

NFPA 1001 5.3.16.B

(FD can document with Portable Fire Extinguishers #1 skill sheet found in appendix and retain on file)

- A. extinguish a class A fire using a pump tank water extinguisher
- B. extinguish a class B fire using a dry chemical extinguisher
- C. extinguish a class B fire using a CO₂ extinguisher

21-I.05 Trainee shall identify and explain the extinguishing effect needed for each class of fire as follows:

NFPA 1001 5.3.16.B

- A. Class A fire:
 - 1. cooling
 - 2. smothering
- B. Class B fire:
 - 1. smothering
 - 2. blanketing
- C. Class C fire:
 - 1. smothering & non-conductive
- D. Class D fire:
 - 1. must be non-reactive with burning material
- E. Class K fire:
 - 1. oxygen depletion & vapor suppression

21-I.06 Trainee shall identify and explain fire extinguisher characteristics and operations of:

NFPA 1001 5.3.16

- A. Pump tank water extinguishers, stored-pressure water extinguishers, aqueous film forming foam extinguishers, Halon 1211 extinguishers, CO₂ extinguishers, dry chemical extinguishers (ordinary base agent), and dry chemical extinguishers (multi-purpose base) as to their:
 - 1. size
 - 2. applicable to what class of fires
 - 3. stream reach under normal conditions
 - 4. discharge time under normal conditions
 - 5. protection from freezing
 - 6. methods of operation

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.

SECTION 22 BUILDING CONSTRUCTION

Live Fire Prerequisite

- 22-I.01 Trainee shall describe the relationship of building construction to fire behavior by:
NFPA 1001 5.3.4.A, 5.3.12.A
- A. identifying the types of loads placed on a structure
 - B. identifying loads as to the direction in which they are placed on structural members
 - C. describing the effect of loads on various materials
 - D. identifying terms associated with building construction
- 22-I.02 Trainee shall identify the various types of building construction characteristics:
NFPA 1001 5.3.12.A
- A. Type 1 – Fire Resistant
 - B. Type 2 – Noncombustible or limited combustible
 - C. Type 3 – Ordinary
 - D. Type 4 – Heavy Timber
 - E. Type 5 – Wood
- 22-I.03 Trainee shall describe the various structural elements in building construction by:
NFPA 1001 5.3.4.A, 5.3.12.A
- A. defining fire resistance
 - B. identifying foundation assemblies, foundation walls, floor assemblies, ceilings and ceiling assemblies, various types of wall construction, roof types, roof coverings, roof supports
 - C. identifying potential hidden spaces in structural elements that would allow for communication of fire and smoke
- 22-I.04 Trainee shall identify the various building services for:
NFPA 1001 5.3.4.A, 5.3.12.A
- A. movement of people throughout a structure; elevators and stairways
 - B. mechanical operations of a building; heating, ventilating and air conditioning systems, utility chases and vertical shafts
 - C. emergency accessibility in buildings; windowless walls, access panels, roof hatches, smoke and heat vents, and skylights
- 22-I.05 Trainee shall identify door and window assemblies by:
NFPA 1001 5.3.4
- A. various types
 - B. describing fire doors and their method of operation
 - C. identifying typical types of door construction
 - D. identifying various window assemblies
 - E. identifying types of windows
- 22-I.06 Trainee shall identify signs of potential collapse of a structure:
NFPA 1001 5.3.12.A
- A. cracks in walls
 - B. sagging roof
 - C. walls out of line

22-I.07 Trainee shall define the following terms as they relate to building construction:

NFPA 1001 5.3.4

- A. veneer wall (exterior)
- B. party wall
- C. fire wall
- D. partition wall
- E. cantilever or unsupported wall
- F. load bearing

Firefighter I - There are no objectives required for this certification level.

Firefighter II

22-II.01 Trainee shall identify causes of potential collapse in buildings:

NFPA 1001 6.3.2

- A. deterioration
- B. forces associated with the violence of a fire
- C. structural modifications found during pre-fire planning

22-II.02 Trainee shall describe at least three (3) hazards associated with light-weight truss construction.

NFPA 1001 6.3.2

22-II.03 Trainee shall describe the effects of fire and fire suppression activities on the following building materials:

NFPA 1001 6.3.2

- A. wood
- B. masonry, i.e. brick, block, stone
- C. cast iron
- D. steel
- E. reinforced concrete
- F. gypsum wall board
- G. glass
- H. plaster on lathe

The Certification Board does not assess processing fees for testing towards full Firefighter I or II certification.

Minimum Requirements

1. For Examinees:
 - a. In order to be certified by the Board as a full Firefighter I or II, an individual must complete the standards set forth in the SFFMA Certification Program effective January 1, 2012 with revisions.
 - b. Board-approved examination shall consist of written and skills examinations.
 - c. Reasonable accommodations will be made for individuals who cannot take a written test.
 - d. Tests may be offered at District meetings or other appropriate locations as deemed necessary by TEEX.
2. For Skills Evaluators/Coordinators:
 - a. Skills Evaluators/Coordinators must:
 1. meet the SFFMA instructional standards for full department Certification Coordinator; and/or
 2. have completed a Board-approved skills proctor course; and/or
 3. a credentialed proctor of an approved emergency services certifying entity.
 - b. Skills Evaluators/Coordinators must be certified at or above the skill level they are evaluating.
 - c. Skills Evaluators/Coordinators shall be approved by the Zone Representative and Austin Office.
 - d. Board Members may, at their discretion, monitor any skills tests.

Eligibility

In order to qualify to take a Board-approved examination, the examinee must:

1. possess and display upon request at the test site, a valid and timely endorsement of eligibility from SFFMA for the specific examination sought;
2. bring to the test site and display upon request a valid Texas Driver's License or Texas Identification Card which contains a photograph of the examinee; and
3. comply with all written and verbal instructions of the examiner.

Procedures

1. Procedures for conducting written and skills examinations are determined by the Board.
2. The Board shall prescribe the content of any certification examination that tests knowledge and/or skills of the examinee concerning the discipline addressed by the examination. Firefighter I shall cover Modules 1-3 objectives and Firefighter II shall cover Module 4 objectives.
3. An examinee who fails to pass an examination shall be given additional opportunities to pass the examination.
 - a. Upon failure of each examination, the Certification Coordinator will be notified as to the applicant's failure and the specific area(s) in which the applicant did not qualify.
 - b. After three (3) failures, the examinee will not be allowed to re-test for one (1) year after the date of the third test. It is highly recommended by the Board that additional training pertaining to the examination be completed before the examinee should attempt a re-test.
4. To apply for a Board-approved examination, the Certification Coordinator of the department must complete the application for the level to be examined.

5. Each examination must be administered by TEEEX or by a TEEEX- approved examiner.
6. The examiner(s) shall:
 - a. ensure that the examination remains secure and is conducted under conditions warranting honest results;
 - b. collect all examination materials from any examinee who is dismissed;
 - c. record the fact of examination on the endorsement of eligibility; and
 - d. collect any fraudulent or questionable endorsements.
7. The monitor(s) shall:
 - a. monitor the examination while in progress;
 - b. control the entrance and exit from the test site;
 - c. permit no one in the room while the written test is in progress except examiner(s), examinee(s), and Board member(s);
 - d. assign or re-assign seating;
 - e. ensure all cell phones and/or pagers are turned off prior to examination; and
 - f. bar admission to or dismiss any examinee who fails to comply with any of the provisions relating to eligibility.
8. All official grading and notification shall come from the Austin Office. SFFMA shall inform the examinee of the test results as soon as reasonably possible after completion of the examination.
9. Upon successful completion of the Board-approved written and performance (skills) examinations, SFFMA shall provide the appropriate Firefighter certificate. A permanent record of the Firefighter certification will be maintained in the Austin Office.

Grading

The minimum passing score of each written examination shall be seventy percent (70%).

Reciprocity

1. The holder of a TCFP Basic Firefighter certification will be issued Firefighter certificate(s), with no test required, upon submission of the proper fully-completed application forms and fees.
2. The holder of an IFSAC or ProBoard Firefighter I or II certification will be issued Firefighter certificate(s), with no test required, upon submission of the proper fully-completed application forms and fees.

Skills Examinations

1. The skills examination shall consist of three (3) practical skills which must be physically demonstrated by each examinee before an examiner.
2. Objectives for Firefighter I shall consist of one (1) skill pertaining to SCBA, and two (2) other skills which are randomly selected by the Austin office prior to the examination.
3. Objectives for Firefighter II shall consist of three (3) skills which are randomly selected by the Austin office prior to the examination.
4. An examinee shall not be notified of the specific skills objectives to be tested until the time of the examination.
5. Failure of any part of the performance skill portion of the examination requires the re-testing of that particular skill.

Minimum Requirements

1. Applicant must have:
 - a. ten (10) years of fire fighting service; and
EITHER
 - b. a minimum of forty (40) hours from five (5) categories of training; and
 - c. a minimum of four hundred (400) total hours above NFPA 1001: Firefighter I & II
OR
 - d. provide documentation of TCFP Master Firefighter certification.
2. Applicants must hold, or apply concurrently for an SFFMA-issued NFPA 1001: Firefighter II or (Accredited Advanced Firefighter certification issued prior to January 1, 2012).
3. Applicant **MUST** provide a photocopy of every training course taken.

Application Notes

1. Each course taken must be successfully completed; and only forty (40) hours per course will be applicable toward the four hundred (400) hours. Attendance certificates are not accepted toward certification.
Example: "Information Management System" is an eighty (80) hour course. Only forty (40) hours of this course can be used towards one category credit. Three hundred sixty (360) additional hours must be obtained from other courses in a minimum of four (4) other categories.
2. If there is no listing for a college or national-level course, or a course with multiple subject areas, a breakdown of the number of hours applicable toward the Master certification **MUST** accompany the application in the form of a course outline, syllabus or summary.

Courses for Master Firefighter – includes, but is not limited, to the following list of EXAMPLES:

CATEGORY 1 MEDICAL

- 1-01 Management of Emergency Medical Services
- 1-02 Texas Department of State Health Services (DSHS): ECA, EMT, EMT Specialized/EMT Intermediate, Paramedic
- 1-03 American Red Cross: First Aid, CPR, Water Safety, Instructors Courses and Basic Life Support

CATEGORY 2 MANAGEMENT/SUPERVISION OPERATIONS

- 2-01 Fire Service Officer Development II - 30 Hours

The course must cover:

- | | |
|--------------------------------------|-------------------------------|
| 2-01.01 Public Relations | 2-01.05 Public Fire Education |
| 2-01.02 Stress and Stress Management | 2-01.06 Safety |
| 2-01.03 Problem Solving | 2-01.07 Physical Fitness |
| 2-01.04 Pre-Planning | |

- 2-02 Fire Service Officer Development III - 30 Hours

The course must cover:

- | | |
|-------------------------------------|--|
| 2-02.01 Fire Ground Safety | 2-02.04 Standard Operations Procedures |
| 2-02.02 Multiple Company Operations | 2-02.05 Public Information Officers |
| 2-02.03 Functions of Command | 2-02.06 Fire Stream Management |

- 2-03 Fire Service Officer Development IV - 30 Hours

The course must cover:

- | | | | |
|---------|---------------------------------|---------|---------------------------------------|
| 2-03.01 | Fire Department Governments | 2-03.10 | Procurement |
| 2-03.02 | Fire Department Organization | 2-03.11 | Specifications |
| 2-03.03 | Internal and External Policies | 2-03.12 | Research and Development |
| 2-03.04 | Recruitment and Retention | 2-03.13 | Key Rate |
| 2-03.05 | Substance Abuse | 2-03.14 | Intergovernmental Relations |
| 2-03.06 | Officer Selection and Ethics | 2-03.15 | Documentation |
| 2-03.07 | Budgets | 2-03.16 | SOPs Rules, Regulations, and Policies |
| 2-03.08 | Funding Sources | 2-03.17 | Legal Problems |
| 2-03.09 | Planning - Short and Long Range | | |

2-04 Fire Service Officer Development V - 30 Hours

The course must cover:

- | | | | |
|---------|---------------------------------------|---------|---|
| 2-04.01 | Analyzing Behavior | 2-04.06 | MBOs and MBEs |
| 2-04.02 | Objective Task Needs | 2-04.07 | Policies |
| 2-04.03 | Information Assimilation | 2-04.08 | Instructional Techniques for Company Officers |
| 2-04.04 | Planning, Organizing, and Controlling | | |
| 2-04.05 | Writing Objectives | | |

2-05 Advanced Fire Service Supervision Phase I - 20 Hours

The course must cover:

- 2-05.01 How to Improve Professional Effectiveness
- 2-05.02 Management Styles
- 2-05.03 Time Management
- 2-05.04 Professional Development

2-06 Fire Service Supervision Phase II - 20 Hours

The course must cover:

- 2-06.01 Interpersonal Communication
- 2-06.02 Counseling
- 2-06.03 Conflict Resolution

2-07 Executive Development

2-08 Strategic Analysis of Fire Department Operations

2-09 Executive Leadership

2-10 Fire Service Leadership and Communications

2-11 Command & Control of Fire Department Major Operations

2-12 Command & Control of Fire Department Operations at Catastrophic Disasters

2-13 Interpersonal Dynamics in Fire Service Organizations

2-14 Fire Service Financial Management

2-15 Fire Service Information Management

2-16 Fire Command Operations

2-17 Community Fire Protection: Master Planning

2-18 Advanced Techniques in Recruiting, Training & Maintaining Volunteer Firefighters - 16 Hrs.

2-19 Advanced Fire Fighting Training

2-20 Human Relations

- 2-21 Training Center & Classroom Organization & Management
- 2-22 Staff and Command
- 2-23 Company Officer Training
- 2-24 Volunteer Fire Service Management
- 2-25 Command & Control of Wildland/Urban Interface Operations for the Structural Chief Officer
- 2-26 Community Risk Issues & Prevention Interventions
- 2-27 Cooperative Leadership Issues in Wildland/Urban Interface
- 2-28 Emergency Response to Terrorism: Basic Concepts
- 2-29 Emergency Response to Terrorism: Strategic Considerations for Command Officers
- 2-30 Emergency Response to Terrorism: Tactical Considerations – Company Officer
- 2-31 Emergency Response to Terrorism: Tactical Considerations – Emergency Medical Services
- 2-32 Emergency Response to Terrorism: Tactical Considerations – Hazardous Materials
- 2-33 Health and Safety Officer (Revised Course)
- 2-34 Incident Command for High Rise Operations
- 2-35 Incident Command System for Emergency Medical Services
- 2-36 Incident Command System for Structural Collapse Incidents
- 2-37 Incident Safety Officer
- 2-38 Introduction to Unified Command for Multiagency and Catastrophic Incidents
- 2-39 Introduction to Wildland and Wildland/Urban Interface Firefighting for the Structural Company Officer
- 2-40 Leadership I: Strategies for Company Success
- 2-41 Leadership II: Strategies for Personal Success
- 2-42 Leadership III: Strategies for Supervisory Success
- 2-43 Managing Company Tactical Operations: Preparation
- 2-44 Managing Company Tactical Operations: Decision-making
- 2-45 Managing Company Tactical Operations: Simulations
- 2-46 Managing a Changing Environment
- 2-47 Shaping the Future
- 2-48 Strategy and Tactics for Initial Company Operations
- 2-49 Training Operations in Small Departments
- 2-50 Firefighter Health & Safety: Program Implementation & Management
- 2-51 Firefighter Safety and Survival: Company Officer’s Responsibility
- 2-52 Infection Control for Emergency Response Personnel: The Supervisor’s Role & Responsibility
- 2-53 ICS-300: Intermediate ICS
- 2-54 ICS-400: Advanced ICS
- 2-55 IS-701: NIMS Multiagency Coordination System
- 2-56 IS-702: NIMS Public Information Systems
- 2-57 IS-703: NIMS Resource Management
- 2-58 IS-704: NIMS Communication and Information Management
- 2-59 IS-705: NIMS Preparedness

- 2-60 IS-706: NIMS Intrastate Mutual Aid
- 2-61 IS-707: NIMS Resource Typing
- 2-62 P-400: All-Hazards Incident Commander
- 2-63 P-430: All-Hazards Operations Sector Chief
- 2-64 P-440: All-Hazards Planning Section Chief
- 2-65 P-450: All-Hazards Logistics Section Chief
- 2-66 P-460: All-Hazards Finance Section Chief
- 2-67 P-480: All-Hazards Intelligence/Investigations Function
- 2-68 P-402: All-Hazards Liaison Chief
- 2-69 P-403: All-Hazards Public Information Officer
- 2-70 P-404: All-Hazards Safety Officer

CATEGORY 3 RESCUE/HAZARDOUS MATERIALS

3-01 Agro-Rescue Practices - 30 Hours

The course must cover:

- | | |
|---|--|
| 3-01.01 Basic Safety | 3-01.04 Emergency Shut Down Procedures |
| 3-01.02 Lifting and Cribbing Techniques | 3-01.05 Rescue Procedures |
| 3-01.03 Cutting Techniques | 3-01.06 Victim Care |

3-02 Rope Rescue - 40 Hours

The course must cover:

- | | |
|--|-------------------------------|
| 3-02.01 Basic Rope Characteristics | 3-02.06 Hauling Systems |
| 3-02.02 Knot Tying | 3-02.07 Rappelling |
| 3-02.03 Rescue Equipment | 3-02.08 Rope Ascension |
| 3-02.04 Anchor System Construction & Placement | 3-02.09 Traverse Systems |
| 3-02.05 Lowering Systems | 3-02.10 Confined Space Rescue |

3-03 Agricultural Chemical Fire and Spill Control - 15 Hours

The course must cover:

- | | |
|---------------------------------|---------------------------------|
| 3-03.01 Hazard Recognition | 3-03.04 Fire Control Tactics |
| 3-03.02 Information Resources | 3-03.05 Post Incident Operation |
| 3-03.03 Command Post Operations | 3-03.06 Emergency Planning |

3-04 Mass Casualty-Transportation Emergencies (Rescue III) - 30 Hours

3-05 High Rise Rescue - 30 Hours

3-06 Chemistry of Hazardous Materials

3-07 Hazardous Materials Operating Site Practices

3-08 Hazardous Waste Site Personal Protection & Safety Training EmTech Environmental Services (OSHA 29CFR1910.120) - 40 Hours

3-09 Vertical Rescue

3-10 On-Site Basic Vertical Rescue

3-11 Confined Space Rescue

3-12 Swift Water Rescue - 30 Hours

3-13 Industrial Rescue Course II

3-14 Industrial Hazardous Material Control Course II

3-15 Hazardous Materials: The Pesticide Challenge

CATEGORY 4 FIRE PREVENTION

4-01 Fire Prevention III - 30 Hours

The course must cover:

- | | |
|---|--|
| 4-01.01 Visual Aids | 4-01.07 Key Rates |
| 4-01.02 Fire Protection Systems | 4-01.08 Interviewing and Interrogation |
| 4-01.03 Fixed Systems and Sprinklers | 4-01.09 Arson Investigation |
| 4-01.04 Court Demeanor | 4-01.10 Hazardous Materials Transportation |
| 4-01.05 Building Codes | 4-01.11 Fire Inspection Practices |
| 4-01.06 Tank Vehicle Operation and Inspection | |

4-02 Public Relations - 12 Hours

The course must cover:

- | | |
|---|---------------------------------------|
| 4-02.01 What is Public Relations? | 4-02.05 General Public |
| 4-02.02 Why Public Relations | 4-02.06 Role of Publicity |
| 4-02.03 Public Opinion and Persuasion | 4-02.07 Other Tools of Communications |
| 4-02.04 Formula for Successful Public Relations Practices | |

4-03 Fire Prevention VII - 30 Hours

The course must cover:

- | | |
|--|--|
| 4-03.01 Public Fire Prevention Education | 4-03.06 Program Design |
| 4-03.02 Role of Public Fire Safety Education | 4-03.07 Field Program Presentation |
| 4-03.03 Overview of Fire Programs | 4-03.08 Classroom Program Presentation |
| 4-03.04 Audio Visual Resources | 4-03.09 Resource Networking |
| 4-03.05 Public Education Resource Books | |

4-04 Fire Prevention VIII - 30 Hours

The course must cover:

- 4-04.01 Management of Public Education
- 4-04.02 Community Support of Fire Prevention
- 4-04.03 Identifying Local Fire and Burn Problems
- 4-04.04 Selecting Fire Prevention Programs
- 4-04.05 Designing Fire Prevention Programs
- 4-04.06 Implementing Fire Prevention Programs in Your City
- 4-04.07 Shriner Burn Prevention Programs
- 4-04.08 Electrical Fire Safety
- 4-04.09 Working with the Media

4-05 Fire Prevention VI: Phase I, II, or III - 30 Hours

4-06 Strategic Analysis of Fire Prevention Programs

4-07 Management of Fire Prevention Programs

4-08 Texas A&M Fire & Arson Investigation

4-09 Code Management: A Systems Approach

4-10 Plans Review for Inspectors

4-11 Developing Fire & Life Safety Strategies

4-12 State Agency Fire Prevention & Control

4-13 Advanced Fire Prevention Training

- 4-14 Fire Prevention Inspection Training
- 4-15 Fire Prevention Inspection "C" Certification
- 4-16 Fire Prevention Inspection "B" Certification
- 4-17 Fire Prevention Inspection "A" Certification
- 4-18 Life Safety Code
- 4-19 Marketing Fire Prevention in your Community
- 4-20 Prevention and Mitigation Advocacy for Small Department Responders

CATEGORY 5 EDUCATIONAL/INSTRUCTIONAL

5-01 Methods of Teaching Fire Service Subjects - 40 Hours

The course must cover:

- | | |
|---|--|
| 5-01.01 Introduction to Training | 5-01.06 The Four Stage Plan of Instruction |
| 5-01.02 The Instructor | 5-01.07 Instructions Aids |
| 5-01.03 The Learner | 5-01.08 The Lesson |
| 5-01.04 How We Learn | 5-01.09 Writing the Lesson Plan |
| 5-01.05 Methods and Techniques of Instruction | 5-01.10 Practice Teaching |

5-02 Public Speaking - 18 Hours

The course must cover:

- | | |
|--|--|
| 5-02.01 Selecting the Subject | 5-02.05 Image Transfer to the Audience |
| 5-02.02 Organizing Subject Matter | 5-02.06 Voice Control |
| 5-02.03 Knowledge of Subject to be Presented | 5-02.07 Ability to Convey Thoughts |
| 5-02.04 Proper Attitude | 5-02.08 Clarity of Presentation |

- 5-03 Organizational Theory & Practice
- 5-04 Instructor Program: Chemistry of Hazardous Materials
- 5-05 Fire Service Instructional Methodology
- 5-06 Fire Service Course Development
- 5-07 Organization & Use of Instructional Material
- 5-08 Analysis & Course-making
- 5-09 Instructional Aids
- 5-10 Instructional Techniques for Company Officers
- 5-11 Methods of Enhancing Safety Education

CATEGORY 6 OTHER

6-01 Fire Department Pump Maintenance - 30 Hours

The course must cover:

- | | |
|--------------------------------------|--|
| 6-01.01 Pump Theory | 6-01.05 Service Test |
| 6-01.02 Pump Maintenance and Repairs | 6-01.06 Determining Net Pump or Engine Pressures |
| 6-01.03 Special Problems | |
| 6-01.04 Pump Test | |

6-02 Breathing Apparatus Specialist - 40 Hours

The course must cover:

- | | |
|--|---|
| 6-02.01 Use, Care, Maintenance, and Inspection | 6-02.05 Cascade Systems |
| 6-02.02 Toxicology | 6-02.06 Emergency Procedures |
| 6-02.03 Donning Drills | 6-02.07 Confined Space Entry Procedures with SCBA |
| 6-02.04 Time vs. Consumption Test | |

6-03 Building Construction: Wood and Ordinary Construction - 12 Hours

The course must cover:

- 6-03.01 Basic Construction Principles
- 6-03.02 Common Causes and Indicators of Failure
- 6-03.03 Hazards Related to Building Construction

6-04 Building Construction: Non-Combustible and Fire Resistive Construction - 12 Hours

The course must cover:

- 6-04.01 Basic Construction Principles
- 6-04.02 Common Causes and Indicators of Failure
- 6-04.03 Hazards Related to Building Construction

6-05 Public Safety Emergency Service Dispatcher - 30 Hours

The course must cover:

- | | |
|-------------------------------------|--|
| 6-05.01 Role of the Dispatcher | 6-05.07 History of Public Safety Communication |
| 6-05.02 Dispatcher Work Environment | 6-05.08 Communication Systems |
| 6-05.03 Telephone Usage | 6-05.09 FCC Rules and Regulations |
| 6-05.04 Telephone Techniques | 6-05.10 Communication Operations |
| 6-05.05 Disaster Communications | 6-05.11 Dispatching Practices |
| 6-05.06 Records | |

6-06 Advanced Self Contained Breathing Apparatus - 30 Hours

6-07 Protective Equipment & Practices

6-08 Annual International Aircraft Rescue & Fire Fighting Academy

6-09 Firefighter Safety & Survival

6-10 Firefighter Health & Safety

6-11 Computer Literacy, Fire Service Related

6-12 Fire Department Finance

6-13 Industrial Fire Protection Course

6-14 Industrial API Storage Tank Fire Fighting Course

6-15 Marine Fire Fighting & Emergency Training

6-16 Marine Fire Fighting Strategy & Tactics

6-17 LNG Fire Fighting

6-18 Shipboard Fire Fighting for Land Based Firefighters

6-19 Public Safety Emergency Dispatcher – Basic Concepts

Reference Materials

The jurisdictional entity in which the Fire Instructor Personnel serves must have access to the most current editions of the following training manuals:

IFSTA

Fire and Emergency Services Instructor

NFPA

NFPA 1041: Standard for Fire Service Instructor Professional Qualifications

Jones & Bartlett

Fire Service Instructor: Principles and Practice

Minimum Requirements

Individuals with SFFMA Instructor I, II, III, or Master Instructor certification are approved by the Certification Board to teach other departments' personnel as well as within the certifying department.

The certification Program offers four (4) levels of Instructor Certification:

Instructor I

- i. Applicants must have served a minimum of three (3) years in a fire department, state or federal agency, educational institute, or a public or private entity devoted to fire service training and related responsibilities.
- ii. Applicants must complete one (1) of the following:
 - a) 40-Hour Methods of Teaching course;
 - b) NFPA 1041: Instructor I;
 - c) Bachelor's Degree in any field;
 - d) Texas Teaching Certification; or
 - e) Any Board-approved comparable educational instructional course
- iii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter I;
- iv. Level II Instructor certifications with an effective date prior to June 1, 2008 are grandfathered into the Instructor I certification.

Instructor II

- i. Applicants must complete one (1) of the following:
 - a) NFPA 1041: Instructor II;
 - b) TCFP Instructor II certification;
 - c) Bachelor's Degree in Education; or
 - d) Texas Teaching Certification
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter I; and
 - b) Instructor I

Instructor III

- i. Applicants must complete one (1) of the following:
 - a) NFPA 1041: Instructor III;
 - b) TCFP Instructor III certification;
 - c) Bachelor's Degree in Education; or
 - d) Texas Teaching Certification
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter I; and
 - b) Instructor I; and
 - c) Instructor II.

Master Instructor

- i. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter I; and
 - b) Firefighter II; and
 - b) Instructor I; and
 - c) Instructor II; and
 - d) Instructor III.

Roles and Responsibilities

The following are roles and responsibilities of the Fire Instructor, divided by the three certification levels. Each list is not all inclusive and additional roles and responsibilities may be added or omitted by the Authority Having Jurisdiction (AHJ). Each instructor certification will require the ability to perform the roles and responsibilities of the previous certification levels (i.e., An Instructor III should possess the abilities of both the Instructor I and Instructor II levels).

Instructor I

- i. Delivers instruction from a prepared lesson plan;
- ii. Assembles course materials;
- iii. Reviews and adapts lesson plans to meet the needs of individual students, groups, and the AHJ
- iv. Organizes the instructional environment to maximize the learning experience while maintaining a safe learning environment;
- v. Ability to adjust the prepared lesson plan presentation as required to ensure that objectives are attained; and
- vi. Prepares and maintains training records in accordance to the AHJ requirements.

Instructor II

- i. Manages instructional resources to include facilities, personnel, time, funding, and records;
- ii. Schedules training sessions based on federal, state, local, and/or AHJ requirements;
- iii. Supervises and coordinates the activities of other instructors;
- iv. Evaluates subordinate instructors for training program improvement;
- v. Develops instructional materials to include the creation of a new or original lesson plan or the modification of existing plans;
- vi. Develops student, course, and instructor evaluation instruments; and
- vii. Analyzes the results of student evaluations to determine test validity.

Instructor III

- i. Administers organizational policy and procedures;
- ii. Administers a training record system;
- iii. Creates a selection process and management process for instructional staff;
- iv. Creates an instructor evaluation plan;
- v. Conducts organizational needs analysis;
- vi. Develops organizational training goals and implementation strategies;
- vii. Creates or modifies programs, curricula, and course requirements to fulfill the organizational training needs; and
- viii. Creates a program evaluation plan.

Curriculum for Instructor I

- FSI-01.01 Trainee shall assemble course materials, given a specific topic, so that the lesson plan and all materials, resources, and equipment needed to deliver the lesson are obtained.
NFPA 1041 4.2.2
(FD can document with Fire Instructor Skill Sheet 1-1 found in appendix and retain on file)
- FSI-01.02 Trainee shall prepare requests for resources, given training goals and current resources, so that the resources required to meet training goals are identified and documented.
NFPA 1041 4.2.3
(FD can document with Fire Instructor Skill Sheet 1-2 found in appendix and retain on file)
- FSI-01.03 Trainee shall schedule single instructional sessions, given a training assignment, department scheduling procedures, instructional resources, facilities and timeline for delivery, so that the specified sessions are delivered according to department procedure.
NFPA 1041 4.2.4
(FD can document with Fire Instructor Skill Sheet 1-3 found in appendix and retain on file)
- FSI-01.04 Trainee shall complete training records and report forms, given policies and procedures and forms, so that required reports are accurate and submitted in accordance with the procedures.
NFPA 1041 4.2.5
(FD can document with Fire Instructor Skill Sheet 1-4 found in appendix and retain on file)
- FSI-01.05 Trainee shall review instructional materials, given the materials for a specific topic, target audience, and learning environment, so that elements of the lesson plan, learning environment, and resources that need adaptation are identified.
NFPA 1041 4.3.2
(FD can document with Fire Instructor Skill Sheet 1-5 found in appendix and retain on file)
- FSI-01.06 Trainee shall adapt a prepared lesson plan, given course materials and an assignment, so that the needs of the student and the objectives of the lesson plan are achieved.
NFPA 1041 4.3.3
(FD can document with Fire Instructor Skill Sheet 1-5 found in appendix and retain on file)
- FSI-01.07 Trainee shall organize the classroom, laboratory, or outdoor learning environment, given a facility and an assignment, so that lighting, distractions, climate control or weather, noise control, seating, audiovisual equipment, teaching aids, and safety are considered.
NFPA 1041 4.4.2
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)

- FSI-01.08 Trainee shall present prepared lessons, given a prepared lesson plan that specifies the presentation method(s), so that the method (s) indicated in the plan are used and the stated objectives or learning outcomes are achieved, applicable safety standards and practices are followed, and risks are addressed.
NFPA 1041 4.4.3
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.09 Trainee shall adjust presentation, given a lesson plan and changing circumstances in the class environment, so that class continuity and the objectives or learning outcomes are achieved.
NFPA 1041 4.4.4
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.10 Trainee shall adjust to differences in learning styles, abilities, cultures, and behaviors, given the instructional environment, so that lesson objectives are accomplished, disruptive behavior is addressed, and a safe and positive learning environment is maintained.
NFPA 1041 4.4.5
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.11 Trainee shall operate audiovisual equipment and demonstration devices, given a learning environment and equipment, so that the equipment functions properly.
NFPA 1041 4.4.6
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.12 Trainee shall utilize audiovisual materials, given prepared topical media and equipment, so that the intended objectives are clearly presented, transitions between media and other parts of the presentation are smooth, and media are returned to storage.
NFPA 1041 4.4.7
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.13 Trainee shall administer oral, written, and performance tests, given the lesson plan, evaluation instruments, and evaluation procedures of the agency, so that bias or discrimination is eliminated the testing is conducted according to procedures, and the security of the materials is maintained.
NFPA 1041 4.5.2
(FD can document with Fire Instructor Skill Sheet 1-7 found in appendix and retain on file)
- FSI-01.14 Trainee shall grade student oral, written, or performance tests, given class answer sheets or skills checklists and appropriate answer keys, so the examinations are accurately graded and properly secured.
NFPA 1041 4.5.3
(FD can document with Fire Instructor Skill Sheet 1-8 found in appendix and retain on file)
- FSI-01.15 Trainee shall report test results, given a set of test answer sheets or skills checklists, a report form, and policies and procedures for reporting, so that the results are accurately recorded, the forms are forwarded according to procedure, and unusual circumstances are reported.
NFPA 1041 4.5.4
(FD can document with Fire Instructor Skill Sheet 1-9 found in appendix and retain on file)
- FSI-01.16 Trainee shall provide evaluation feedback to students, given evaluation data, so that the feedback is timely; specific enough for the student to make efforts to modify behavior; and objective, clear, and relevant; also include suggestions based on the data.
NFPA 1041 4.5.5
(FD can document with Fire Instructor Skill Sheet 1-10 found in appendix and retain on file)

Curriculum for Instructor II

- FSI-02.01 Trainee shall schedule instructional sessions, given department scheduling policy, instructional resources, staff, facilities, and timeline for delivery, so that the specified sessions are delivered according to department policy.
NFPA 1041 5.2.2
(FD can document with Fire Instructor Skill Sheet 2-1 found in appendix and retain on file)
- FSI-02.02 Trainee shall formulate budget needs, given training goals, agency budget policy, and current resources, so that the resources required to meet training goals are identified and documented.
NFPA 1041 5.2.3
(FD can document with Fire Instructor Skill Sheet 2-2 found in appendix and retain on file)
- FSI-02.03 Trainee shall acquire training resources, given an identified need, so that the resources are obtained within established timelines, budget constraints, and according to agency policy.
NFPA 1041 5.2.4
(FD can document with Fire Instructor Skill Sheet 2-2 found in appendix and retain on file)
- FSI-02.04 Trainee shall coordinate training record-keeping, given training forms, department policy, and training activity, so that all agency and legal requirements are met.
NFPA 1041 5.2.5
(FD can document with Fire Instructor Skill Sheet 2-3 found in appendix and retain on file)
- FSI-02.05 Trainee shall evaluate instructors, given an evaluation form, department policy, and JPRs, so that the evaluation identifies areas of strengths and weaknesses, recommends changes in instructional style and communication methods, and provides opportunity for instructor feedback to the evaluator.
NFPA 1041 5.2.6
(FD can document with Fire Instructor Skill Sheet 2-4 found in appendix and retain on file)
- FSI-02.06 Trainee shall create a lesson plan, given a topic, audience characteristics, and a standard lesson plan format, so that the JPRs or learning objectives for the topic are addressed, and the plan includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.
NFPA 1041 5.3.2
(FD can document with Fire Instructor Skill Sheet 2-5 found in appendix and retain on file)
- FSI-02.07 Trainee shall modify an existing lesson plan, given a topic, audience characteristics, and a lesson plan, so that the JPRs or learning objectives for the topic are addressed and the plan includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.
NFPA 1041 5.3.3
(FD can document with Fire Instructor Skill Sheet 2-6 found in appendix and retain on file)
- FSI-02.08 Trainee shall conduct a class using a lesson plan that the instructor has prepared and that involves the utilization of multiple teaching methods and techniques, given a topic and a target audience, so that the lesson objectives are achieved.
NFPA 1041 5.4.2
(FD can document with Fire Instructor Skill Sheet 2-7 found in appendix and retain on file)
- FSI-02.09 Trainee shall supervise other instructors and students during training, given a training scenario with increased hazard exposure, so that applicable safety standards and practices are followed, and instructional goals are met.
NFPA 1041 5.4.3
(FD can document with Fire Instructor Skill Sheet 2-8 found in appendix and retain on file)

FSI-02.10 Trainee shall develop student evaluation instruments, given learning objectives, audience characteristics, and training goals, so that the evaluation instrument determines if the student has achieved the learning objectives; the instrument evaluates relevant performance in an objective, reliable, and verifiable manner; and the evaluation instrument is bias-free to any audience or group.

NFPA 1041 5.5.2

(FD can document with Fire Instructor Skill Sheet 2-9 found in appendix and retain on file)

FSI-02.11 Trainee shall develop a class evaluation instrument, given agency policy and evaluation goals, so that students have the ability to provide feedback to the instructor on instructional methods, communication techniques, learning environment, course content, and student materials.

NFPA 1041 5.5.3

(FD can document with Fire Instructor Skill Sheet 2-10 found in appendix and retain on file)

Curriculum for Instructor III

FSI-03.01 Trainee shall administer a training record system, given agency policy and type of training activity to be documented, so that the information captured is concise, meets all agency and legal requirements, and can be readily accessed.

NFPA 1041 6.2.2

(FD can document with Fire Instructor Skill Sheet 3-1 found in appendix and retain on file)

FSI-03.02 Trainee shall develop recommendations for policies to support the training program, given agency policies and procedures and the training program goals, so that the training and agency goals are achieved.

NFPA 1041 6.2.3

(FD can document with Fire Instructor Skill Sheet 3-2 found in appendix and retain on file)

FSI-03.03 Trainee shall select instructional staff, given personnel qualifications, instructional requirements, and agency policies and procedures, so that staff selection meets agency policies and achievement of agency and instructional goals.

NFPA 1041 6.2.4

(FD can document with Fire Instructor Skill Sheet 3-3 found in appendix and retain on file)

FSI-03.04 Trainee shall construct a performance-based instructor evaluation plan, given agency policies and procedures and job requirements, so that instructors are evaluated at regular intervals, following agency policies.

NFPA 1041 6.2.5

(FD can document with Fire Instructor Skill Sheet 3-4 found in appendix and retain on file)

FSI-03.05 Trainee shall write equipment purchasing specifications, given curriculum information, training goals, and agency guidelines, so that the equipment is appropriate and supports the curriculum.

NFPA 1041 6.2.6

(FD can document with Fire Instructor Skill Sheet 3-5 found in appendix and retain on file)

FSI-03.06 Trainee shall present evaluation findings, conclusions, and recommendations to agency administrator, given data summaries and target audience, so that recommendations are unbiased, supported, and reflect agency goals, policies, and procedures.

NFPA 1041 6.2.7

(FD can document with Fire Instructor Skill Sheet 3-6 found in appendix and retain on file)

- FSI-03.07 Trainee shall conduct an agency needs analysis, given agency goals, so that instructional needs are identified and solutions are recommended.
NFPA 1041 6.3.2
(FD can document with Fire Instructor Skill Sheet 3-7 found in appendix and retain on file)
- FSI-03.08 Trainee shall design programs or curricula, given needs analysis and agency goals, so that the agency goals are supported, the knowledge and skills are job-related, the design is performance-based, adult learning principles are utilized, and the program meets time and budget constraints.
NFPA 1041 6.3.3
(FD can document with Fire Instructor Skill Sheet 3-8 found in appendix and retain on file)
- FSI-03.09 Trainee shall modify an existing curriculum, given the curriculum, audience characteristics, learning objectives, instructional resources, and agency training requirements, so that the curriculum meets the requirements of the agency, and the learning objectives are achieved.
NFPA 1041 6.3.4
(FD can document with Fire Instructor Skill Sheet 3-9 found in appendix and retain on file)
- FSI-03.10 Trainee shall write program and course goals, given JPRs and needs analysis information, so that the goals are clear, concise, measurable, and correlate to agency goals.
NFPA 1041 6.3.5
(FD can document with Fire Instructor Skill Sheet 3-10 found in appendix and retain on file)
- FSI-03.11 Trainee shall write course objectives, given JPRs, so that objectives are clear, concise, measurable, and reflect specific tasks.
NFPA 1041 6.3.6
(FD can document with Fire Instructor Skill Sheet 3-11 found in appendix and retain on file)
- FSI-03.12 Trainee shall construct a course content outline, given course objectives, reference sources, functional groupings and the agency structure, so that the content supports the agency structure and reflects current acceptable practices.
NFPA 1041 6.3.7
(FD can document with Fire Instructor Skill Sheet 3-12 found in appendix and retain on file)
- FSI-03.13 Trainee shall develop a system for the acquisition, storage, and dissemination of evaluation results, given agency goals and policies, so that the goals are supported and so that those affected by the information receive feedback consistent with agency policies and federal, state, and local laws.
NFPA 1041 6.5.2
(FD can document with Fire Instructor Skill Sheet 3-15 found in appendix and retain on file)
- FSI-03.14 Trainee shall develop course evaluation plan, given course objectives and agency policies, so that objectives are measured and agency policies are followed.
NFPA 1041 6.5.3
(FD can document with Fire Instructor Skill Sheet 3-13 found in appendix and retain on file)
- FSI-03.15 Trainee shall create a program evaluation plan, given agency policies and procedures, so that instructors, course components, and facilities are evaluated and student input is obtained for course improvement.
NFPA 1041 6.5.4
(FD can document with Fire Instructor Skill Sheet 3-14 found in appendix and retain on file)
- FSI-03.16 Trainee shall analyze student evaluation instruments, given test data, objectives, and agency policies, so that validity is determined and necessary changes are made.
NFPA 1041 6.5.5
(FD can document with Fire Instructor Skill Sheet 3-16 found in appendix and retain on file)

Reference Materials

The jurisdictional entity in which the Fire Inspector Personnel serves must have access to the most current editions of the following training manuals:

U.S. Department of Transportation

Emergency Response Guidebook

IFSTA

Fire Inspection and Code Enforcement

Plans Examiner for Fire and Emergency Services

NFPA

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications

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

Minimum Requirements

The certification Program offers three (3) levels of Fire Inspector Certification:

Fire Inspector I

Applicants must complete one (1) of the following:

- a) NFPA 1031: Inspector I; or
- b) TCFP Fire Inspector I curriculum; or
- c) All required objectives from the SFFMA Fire Inspector I curriculum.

Fire Inspector II

Applicants must complete one (1) of the following:

- a) NFPA 1031: Inspector II; or
- b) TCFP Fire Inspector II curriculum; or
- c) All required objectives from the SFFMA Fire Inspector II curriculum.

Applicants must also hold, or apply concurrently for, the following SFFMA certifications:

- a) Inspector I

Plans Examiner I

Applicants must complete one (1) of the following:

- a) NFPA 1031: Plans Examiner I; or
- b) TCFP Plans Examiner I curriculum; or
- c) All required objectives from the SFFMA Plans Examiner I curriculum.

Applicants must also hold, or apply concurrently for, the following SFFMA certifications:

- a) Inspector I; and
- b) Inspector II.

SFFMA Fire Inspector certifications with an effective date prior to February 1, 2020 are grandfathered to the Inspector I, Inspector II, and Plans Examiner I certifications.

SECTION 1 GENERAL

- FI1-01.01 Trainee shall identify the definitions of both hazardous material (or dangerous goods, in Canada) and WMD
- FI1 01.02 Trainee shall identify the UN/DOT hazard classes and divisions of hazardous materials/WMD and identify common examples of materials in each hazard class or division
- FI1 01.03 Trainee shall identify the primary hazards associated with each UN/DOT hazard class and division
- FI1 01.04 Trainee shall identify the difference between hazardous materials/WMD incidents and other emergencies
- FI1 01.05 Trainee shall identify typical occupancies and locations in the community where hazardous materials/WMD are manufactured, transported, stored, used, or disposed of.
- FI1 01.06 Trainee shall identify typical container shapes that can indicate the presence of hazardous materials/WMD
- FI1 01.07 Trainee shall identify facility and transportation markings and colors that indicate hazardous materials/WMD, including the following:
 - A. Transportation markings, including UN/NA identification number marks, marine pollutant mark, elevated temperature (HOT) mark, commodity marking, and inhalation hazard mark
 - B. NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response, markings
 - C. Military hazardous materials/WMD markings
 - D. Special hazard communication markings for each hazard class
 - E. Pipeline markings
 - F. Container markings
- FI1 01.08 Trainee, given an NFPA 704 marking, shall describe the significance of the colors, numbers, and special symbols
- FI1 01.09 Trainee shall identify U.S. and Canadian placards and labels that indicate hazardous materials/WMD
- FI1 01.10 Trainee shall identify the following basic information on material safety data sheets (MSDS) and shipping papers for hazardous materials:
 - A. Identify where to find MSDS
 - B. Identify major sections of an MSDS
 - C. Identify the entries on shipping papers that indicate the presence of hazardous materials
 - D. Match the name of the shipping papers found in transportation (air, highway, rail, and water) with the mode of transportation
 - E. Identify the person responsible for having the shipping papers in each mode of transportation
 - F. Identify where the shipping papers are found in each mode of transportation
 - G. Identify where the papers can be found in an emergency in each mode of transportation

- FI1 01.11 Trainee shall identify examples of clues (other than occupancy/location, container shape, markings/color, placards/labels, MSDS, and shipping papers) to include sight, sound, and odor of which indicate hazardous materials/WMD
- FI1 01.12 Trainee shall describe the limitations of using the senses in determining the presence or absence of hazardous materials/WMD
- FI1 01.13 Trainee shall identify at least four types of locations that could be targets for criminal or terrorist activity using hazardous materials/WMD
- FI1 01.14 Trainee shall describe the difference between a chemical and a biological incident
- FI1 01.15 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving chemical agents
- FI1 01.16 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving biological agents
- FI1 01.17 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving radiological agents
- FI1 01.18 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving illicit laboratories (clandestine laboratories, weapons lab, ricin lab)
- FI1 01.19 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving explosives
- FI1 01.20 Trainee shall identify at least four indicators of secondary devices

SECTION 2 SURVEYING HAZARDOUS MATERIALS/WMD INCIDENTS

- FI1 02.01 Trainee shall identify difficulties encountered in determining the specific names of hazardous materials/WMD at facilities and in transportation
- FI1 02.02 Trainee shall identify sources for obtaining the names of, UN/NA identification numbers for, or types of placard associated with hazardous materials/WMD in transportation
- FI1 02.03 Trainee shall identify sources for obtaining the names of hazardous materials/WMD at a facility

SECTION 3 COLLECTING HAZARD INFORMATION

- FI1 03.01 Trainee shall identify the three methods for determining the guidebook page for a hazardous material/WMD
- FI1 03.02 Trainee shall identify the two general types of hazards found on each guidebook page

SECTION 4 ADMINISTRATION

- FI1 04.01 Trainee shall prepare inspection reports, given agency policy and procedures, and observations from an assigned field inspection, so that the report is clear and concise and reflects the findings of the inspection in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 04.02 Trainee shall recognize the need for a permit, given a situation or condition, so that requirements for permits are communicated in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 04.03 Trainee shall recognize the need for plan review, given a situation or condition, so that requirements for plan reviews are communicated in accordance with the applicable codes and standards and the policies of the jurisdiction.

- FI1 04.04 Trainee shall investigate common complaints, given a reported situation or condition, so that complaint information is recorded, the AHJ-approved process is initiated, and the complaint is resolved.
- FI1 04.05 Trainee shall identify the applicable code or standard, given a fire protection, fire prevention, or life safety issue, so that the applicable document, edition, and section are referenced.
- FI1 04.06 Trainee shall participate in legal proceedings, given the findings of a field inspection or a complaint and consultation with legal counsel, so that all information is presented and the inspector's demeanor is professional.

SECTION 5 FIELD INSPECTION

- FI1 05.01 Trainee shall identify the occupancy classification of a single-use occupancy, given a description of the occupancy and its use, so that the classification is made according to the applicable codes and standards.
- FI1 05.02 Trainee shall compute the allowable occupant load of a single-use occupancy or portion thereof, given a detailed description of the occupancy, so that the calculated allowable occupant load is established in accordance with applicable codes and standards.
- FI1 05.03 Trainee shall inspect means of egress elements, given observations made during a field inspection of an existing building, so that means of egress elements are maintained in compliance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.04 Trainee shall verify the type of construction for an addition or remodeling project, given field observations or a description of the project and the materials being used, so that the construction type is identified and recorded in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.05 Trainee shall determine the operational readiness of existing fixed fire suppression systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.06 Trainee shall determine the operational readiness of existing fire detection and alarm systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- FI1 05.07 Trainee shall Determine the operational readiness of existing portable fire extinguishers, given field observations and test documentation, so that the equipment is in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- FI1 05.08 Trainee shall recognize hazardous conditions involving equipment, processes, and operations, given field observations, so that the equipment, processes, or operations are conducted and maintained in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.09 Trainee shall compare an approved plan to an existing fire protection system, given approved plans and field observations, so that any modifications to the system are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

- FI1 05.10 Trainee shall verify that emergency planning and preparedness measures are in place and have been practiced, given field observations, copies of emergency plans, and records of exercises, so that plans are prepared and exercises have been performed in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.11 Trainee shall inspect emergency access for an existing site, given field observations, so that the required access for emergency responders is maintained and deficiencies are identified, documented, and corrected in accordance with the applicable codes, standards, and policies of the jurisdiction.
- FI1 05.12 Trainee shall verify code compliance for incidental storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the AHJ, so that applicable codes and standards are addressed and deficiencies are identified, documented, in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.13 Trainee shall verify code compliance for incidental storage, handling, and use of hazardous materials, given field observations, so that applicable codes and standards for each hazardous material encountered are addressed and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.14 Trainee shall recognize a hazardous fire growth potential in a building or space, given field observations, so that the hazardous conditions are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.15 Trainee shall determine code compliance, given the codes, standards, and policies of the jurisdiction and a fire protection issue, so that the applicable codes, standards, and policies are identified and compliance is determined.
- FI1 05.16 Trainee shall verify fire flows for a site, given fire flow test results and water supply data, so that required fire flows are in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

SECTION 6 PLAN REVIEW

No requirements at this level per NFPA

NFPA 1031: Fire Inspector II

SECTION 1 COMPETENCIES — ANALYZING THE INCIDENT

No requirements at this level per NFPA

SECTION 2 SURVEYING HAZARDOUS MATERIALS/WMD INCIDENTS

No requirements at this level per NFPA

SECTION 3 COLLECTING HAZARD INFORMATION

No requirements at this level per NFPA

SECTION 4 ADMINISTRATION

- FI2 04.01 Trainee shall process a permit application, given a specific request, so that the application is evaluated and a permit is issued or denied in accordance with the applicable codes, standards, policies, and procedures of the jurisdiction.
- FI2 04.02 Trainee shall process a plan review application, given a specific request, so that the application is evaluated and processed in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 04.03 Trainee shall investigate complex complaints, given a reported situation or condition, so that complaint information is recorded, the investigation process is initiated, and the complaint is resolved in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 04.04 Trainee shall recommend modifications to the adopted codes and standards of the jurisdiction, given a fire safety issue, so that the proposed modifications address the problem, need, or deficiency.
- FI2 04.05 Trainee shall recommend policies and procedures for the delivery of inspection services, given management objectives, so that inspections are conducted in accordance with the policies of the jurisdiction and due process of the law is followed.

SECTION 5 FIELD INSPECTION

- FI2 05.01 Trainee shall compute the maximum allowable occupant load of a multi-use building, given field observations or a description of its uses, so that the maximum allowable occupant load calculation is in accordance with applicable codes and standards.
- FI2 05.02 Trainee shall identify the occupancy classifications of a mixed-use building, given a description of the uses, so that each area is classified in accordance with applicable codes and standards.
- FI2 05.03 Trainee shall evaluate a building's area, height, occupancy classification, and construction type, given an approved set of plans and construction features, so that it is verified that the building is in accordance with applicable codes and standards.
- FI2 05.04 Trainee shall evaluate fire protection systems and equipment provided for life safety and property protection, given field observations of the facility and documentation, the hazards protected, and the system specifications, so that the fire protection systems provided are approved for the occupancy or hazard being protected.
- FI2 05.05 Trainee shall analyze the egress elements of a building or portion of a building, given observations made during a field inspection, so that means of egress elements are provided and located in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

- FI2 05.06 Trainee shall evaluate hazardous conditions involving equipment, processes, and operations, given field observations and documentation, so that the equipment, processes, or operations are installed in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- FI2 05.07 Trainee shall evaluate emergency planning and preparedness procedures, given existing or proposed plans and procedures and applicable codes and standards, so that compliance is determined.
- FI2 05.08 Trainee shall verify code compliance for storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the authority having jurisdiction, so that deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 05.09 Trainee shall evaluate code compliance for the storage, handling, and use of hazardous materials, given field observations, so that deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 05.10 Trainee shall determine fire growth potential in a building or space, given field observations or plans, so that the contents, interior finish, and construction elements are evaluated for compliance, and deficiencies are identified, documented, and corrected in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 05.11 Trainee shall verify compliance with construction documents, given a performance-based design, so that life safety systems and building services equipment are installed, inspected, and tested to perform as described in the engineering documents and the operations and maintenance manual that accompanies the design, so that deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 05.12 Trainee shall verify code compliance of heating, ventilation, air conditioning, and other building service equipment and operations, given field observations, so that the systems and other equipment are maintained in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

SECTION 6 PLANS REVIEW

- FI2 06.01 Trainee shall classify the occupancy, given a set of plans, specifications, and a description of a building, so that the classification is made in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 06.02 Trainee shall compute the maximum allowable occupant load, given a floor plan of a building or portion of the building, so that the calculated occupant load is in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 06.03 Trainee shall review the proposed installation of fire protection systems, given shop drawings and system specifications for a process or operation, so that the system is reviewed for code compliance and installed in accordance with the approved drawings, and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 06.04 Trainee shall review the installation of fire protection systems, given an installed system, shop drawings, and system specifications for a process or operation, so that the system is reviewed for code compliance and installed in accordance with the approved drawings, and deficiencies are

identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

- F12 06.05 Trainee shall verify that means of egress elements are provided, given a floor plan of a building or portion of a building, so that all elements are identified and checked against applicable codes and standards and deficiencies are discovered and communicated in accordance with the policies of the jurisdiction.
- F12-6.06 Trainee shall verify the construction type of a building or portion thereof, given a set of approved plans and specifications, so that the construction type complies with the approved plans and applicable codes and standards.

SECTION 1 COMPETENCIES — ANALYZING THE INCIDENT

No requirements at this level per NFPA

SECTION 2 SURVEYING HAZARDOUS MATERIALS/WMD INCIDENTS

No requirements at this level per NFPA

SECTION 3 COLLECTING HAZARD INFORMATION

No requirements at this level per NFPA

SECTION 4 ADMINISTRATION

- PE1 04.01 Trainee shall prepare reports, given observations from a plan review, so that the report is clear and concise, and reflects the findings of the plan review in accordance with applicable codes and standards and the policies and procedures of the jurisdiction.
- PE1 04.02 Trainee shall facilitate the resolution of deficiencies identified during the plan review, given a submittal and the established policies and procedures of the jurisdiction, so that deficiencies are identified, documented, and reported to the plan submitter with applicable references to codes and standards.
- PE1 04.03 Trainee shall process plan review documents, given a set of plans and specifications, so that required permits are issued in accordance with the policies of the jurisdiction.
- PE1 04.04 Trainee shall determine the applicable code or standard, given a fire protection issue, so that the proper document, edition, and section are referenced.

SECTION 5 FIELD INSPECTION

No requirements at this level per NFPA

SECTION 6 PLANS REVIEW

- PE1 06.01 Trainee shall identify the requirements for fire protection or a life safety system, given a set of plans, so that deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.
- PE1 06.02 Trainee shall verify the occupancy classification, given a set of plans, specifications, and a description of a building and its intended use, so that the classification is made in accordance with the applicable codes and standards and the policies of the jurisdiction.
- PE1 06.03 Trainee shall verify the construction type, given a set of plans, including the occupancy classification area, height, number of stories, and location, so that the building is in accordance with applicable codes and standards and deficiencies are identified, documented, and reported.
- PE1 06.04 Trainee shall verify the occupant load, given a set of plans, so that the maximum allowable occupant load is in accordance with applicable codes and standards.
- PE1 06.05 Trainee shall verify that required egress is provided, given a set of plans and an occupant load, so that all required egress elements are provided and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- PE1 06.06 Trainee shall evaluate code compliance for required fire flow and hydrant location and spacing, given a plan, codes and standards, and fire flow test results, so that hydrants are correctly located, required fire flow is determined, and deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

- PE1 06.07 Trainee shall evaluate emergency vehicle access, given a plan, so that emergency access is provided in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- PE1 06.08 Trainee shall recommend policies and procedures for the delivery of plan review services, given management objectives, so that plan reviews are conducted in accordance with the policies of the jurisdiction and due process of the law is followed.
- PE1 06.09 Trainee shall participate in legal proceedings, given the findings of a plan review and consultation with legal counsel, so that testimony is accurate and the plan reviewer's demeanor is appropriate to the proceeding.
- PE1 06.10 Trainee shall evaluate plans for the installation of fire protection and life safety systems, given a plan submittal, so that the fire protection systems, including pre-engineered systems, and equipment are reviewed and deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

Fire Investigation Personnel who have received training prior to passage of this program may, upon proof to the Board member and his approval, apply the training for certification. Any training received prior to January 1, 1993 must be approved by the Board.

Reference Materials

The jurisdictional entity in which the Fire Investigation Personnel serves must have access to the most current editions of the following training manuals:

US Department of Transportation

Emergency Response Guidebook

IFSTA

Fire Inspection and Code Enforcement

Fire Investigator

Delmar

Fire Investigation

NFPA

NFPA 921: Guide for Fire and Explosion Investigations

NFPA 1033: Standard for Professional Qualifications for Fire Investigator

Texas Statutes

Texas Family Code

Texas Insurance Code

Texas Penal Code

Texas Public Information Act Handbook

Minimum Requirements

The Certification Program offers two (2) levels of Investigator Certification.

NFPA 1033: Fire Investigator

Applicants must complete the current TCFP Fire Investigation curriculum.

NFPA 1033: Arson Investigator

Applicants must complete the current TCFP Fire Investigation curriculum

AND

Hold a current Basic Peace Officer license from the Texas Commission on Law Enforcement (TCOLE) or documentation that the individual is a federal law enforcement officer.

Reference Materials

The jurisdictional entity in which the Driver/Operator Personnel serves must have access to the most current editions of following training manuals:

NFPA

NFPA 1002: *Standard for Fire Apparatus Driver/Operator Professional Qualifications*

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

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

Minimum Requirements

The Certification Program offers two (2) different of certifications for Driver/Operator:

Driver/Operator – Pumper

The applicant must:

- a. Complete one (1) of the following:
 - i. TCFP Driver/Operator – Pumper certification; or
 - ii. NFPA 1002: Apparatus Driver Operator Apparatus Equipped with a Fire Pump (Ch 5); or
 - iii. All required objectives from the following areas:
 - a) SFFMA Vehicle Training Prerequisite
 - b) SFFMA Driver/Operator – Pumper curriculum
- b. SFFMA Driver/Operator certifications with an effective date prior to January 1, 2019 are grandfathered into the Driver/Operator – Pumper certification.

Driver/Operator – Aerial

The applicant must:

- a. hold or apply concurrently for SFFMA Firefighter I
- b. complete one (1) of the following:
 - i. TCFP Driver/Operator-Aerial Apparatus certification; or
 - ii. NFPA 1002: Apparatus Driver Operator Apparatus Equipped with an Aerial Device (Ch 6); or
 - iii. All required objectives from the following areas:
 - a) SFFMA Vehicle Training Prerequisite
 - b) SFFMA Driver/Operator – Aerial curriculum

Curriculum for Vehicle Training Prerequisite

DO-VTP.01 Trainee shall perform visual and operational checks on the systems and components specified in the following list, given a fire department vehicle, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified:

NFPA 1002 – 4.2.1

- | | |
|----------------------|-------------------------------------|
| A. Battery(ies) | G. Oil |
| B. Braking system | H. Tires |
| C. Coolant system | I. Steering system |
| D. Electrical system | J. Belts |
| E. Fuel | K. Tools, appliances, and equipment |
| F. Hydraulic fluids | L. Built-in safety features |

DO-VTP.02 Trainee shall document the visual and operational checks, given maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported.

NFPA 1002 – 4.2.2

- DO-VTP.03 Trainee shall operate a fire apparatus, given a vehicle and a predetermined route on a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, so that the vehicle is operated in compliance with all applicable state and local laws and departmental rules and regulations.
NFPA 1002 – 4.3.1
- DO-VTP.04 Trainee shall back a vehicle from a roadway into restricted spaces on both the right and left sides of the vehicle, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and restricted spaces 12' (3.7m) in width, requiring 90-degree right-hand and left-hand turns from the roadway, so that the vehicle is parked within the restricted areas without having to stop and pull forward and without striking obstructions.
NFPA 1002 – 4.3.2
- DO-VTP.05 Trainee shall maneuver a vehicle around obstructions on a roadway while moving forward and in reverse, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking the obstructions.
NFPA 1002 – 4.3.3
- DO-VTP.06 Trainee shall turn a fire apparatus 180 degrees within a confined space, given a fire apparatus, a spotter for backing up, and an area in which the vehicle cannot perform a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without striking obstructions within the given space.
NFPA 1002 – 4.3.4
- DO-VTP.07 Trainee shall maneuver a fire apparatus in areas with restricted horizontal and vertical clearances, given a fire apparatus and a course that requires the operator to move through areas of restricted horizontal and vertical clearances, so that the operator judges the ability of the vehicle to pass through the openings and so that no obstructions are struck.
NFPA 1002 – 4.3.5
- DO-VTP.08 Trainee shall operate a vehicle using defensive driving techniques, given an assignment and a fire apparatus, so that control of the vehicle is maintained.
NFPA 1002 – 4.3.6
- DO-VTP.09 Trainee shall operate all fixed systems and equipment on the vehicle not addressed elsewhere in this standard, given systems and equipment, manufacturer's specifications and instructions, and departmental policies and procedures for the systems and equipment, so that each system or piece of equipment is operated in accordance with the applicable instructions and policies.
NFPA 1002 – 4.3.7
- DO-VTP.10 Trainee shall initiate the response to a reported emergency, given the report of an emergency, fire department SOPs, and communications equipment, so that all necessary information is obtained, communications equipment is operated correctly, and the information is relayed promptly and accurately to the dispatch center.
NFPA 1002 – 4.4.1
- DO-VTP.11 Trainee shall receive a telephone call, given a fire department phone, so that procedures for answering the phone are used and the caller's information is relayed.
NFPA 1002 – 4.4.2

DO-VTP.12 Trainee shall transmit and receive messages via the fire department radio, given a fire department radio and operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ.

NFPA 1002 – 4.4.3

DO-VTP.13 Trainee shall activate emergency procedures, given an emergency situation and department SOPs, so that emergency actions can be initiated.

NFPA 1002 – 4.4.4

Curriculum for Driver/Operator - Pumper

DO-P.01 Trainee shall perform the visual and operational checks on the systems and components specified in the following list in addition to those in 4.2.1, given a fire department pumper, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status of the pumper is verified:

NFPA 1002 – 5.1.2

- A. Water tank and other extinguishing agent levels (if applicable)
- B. Pumping systems
- C. Foam systems

DO-P.02 Trainee shall respond on apparatus to an emergency scene, given safety equipment as provided by the AHJ, so that the apparatus is correctly mounted and dismounted and seat belts are used while the vehicle is in motion.

NFPA 1002 – 5.2.1

DO-P.03 Trainee shall establish and operate in work areas at emergency and nonemergency scenes, given safety equipment, traffic and scene control devices, emergency and nonemergency scenes, traffic and other hazards, an assignment, and SOPs, so that procedures are followed, safety equipment is utilized, protected work areas are established as directed using traffic and scene control devices, and the driver/operator performs assigned tasks only in established, protected work areas.

NFPA 1002 – 5.2.2

DO-P.04 Trainee shall connect a fire department pumper to a water supply as a member of a team, given supply or intake hose, hose tools, and a fire hydrant or static water source, so that connections are tight and water flow is unobstructed.

NFPA 1002 – 5.2.3

DO-P.05 Trainee shall produce effective hand or master streams, given the sources specified in the following list, so that the pump is engaged, all pressure control and vehicle safety devices are set, the rated flow of the nozzle is achieved and maintained, and the apparatus is monitored for potential problems:

NFPA 1002 – 5.2.4

- A. Internal tank
- B. Pressurized source
- C. Static source
- D. Transfer from internal tank to external source

DO-P.06 Trainee shall pump a supply line of 2½" (65 mm) or larger, given a relay pumping evolution the length and size of the line and the desired flow and intake pressure, so that the correct pressure and flow are provided to the next pumper in the relay.

NFPA 1002 – 5.2.5

- DO-P.07 Trainee shall produce a foam fire stream, given foam-producing equipment, so that proportioned foam is provided.
NFPA 1002 – 5.2.6
- DO-P.08 Trainee shall supply water to fire sprinkler and standpipe systems, given specific system information and a fire department pumper, so that water is supplied to the system at the correct volume and pressure.
NFPA 1002 – 5.2.6

Curriculum for Driver/Operator - Aerial

- DO-A.01 Trainee shall perform the visual and operation checks on the systems and components specified in the following list in addition to those specified in 4.2.1, given a fire department aerial apparatus, and policies and procedures of the jurisdiction, so that the operational readiness of the aerial apparatus is verified:
NFPA 1002 – 6.1.1
- | | |
|------------------------------------|---------------------------------|
| A. Cable systems (if applicable) | F. Aerial device safety systems |
| B. Aerial device hydraulic systems | G. Breathing air systems |
| C. Slides and rollers | H. Communication systems |
| E. Stabilizing systems | |
- DO-A.02 Trainee shall maneuver and position an aerial apparatus, given an aerial apparatus, an incident location, a situation description, and an assignment, so that the apparatus is positioned for correct aerial device deployment.
NFPA 1002 – 6.2.1
- DO-A.03 Trainee shall stabilize aerial apparatus, given a positioned vehicle and the manufacturer’s recommendations, so that power can be transferred to the aerial device hydraulic system and the device can be deployed.
NFPA 1002 – 6.2.2
- DO-A.04 Trainee shall maneuver and position the aerial device from each control station, given an incident location, a situation description, and an assignment, so that the aerial device is positioned to accomplish the assignment.
NFPA 1002 – 6.2.3
- DO-A.05 Trainee shall lower an aerial device using the emergency operating system, given an aerial device, so that the aerial device is lowered to its bedded position.
NFPA 1002 – 6.2.4
- DO-A.06 Trainee shall deploy and operate an elevated master stream, given an aerial device, a master stream device, and a desired flow, so that the stream is effective.
NFPA 1002 – 6.2.5

Reference Materials

The jurisdictional entity in which the Fire Officer Personnel serves must have access to the most current editions of the following training manuals:

IFSTA

Fire and Emergency Services Company Officer

Jones & Bartlett

Fire Officer Principles and Practice

NFPA

NFPA 921: Guide for Fire and Explosion Investigations

NFPA 1021: Standard for Fire Officer Professional Qualifications

Minimum Requirements

The certification Program offers four (4) levels of Fire Officer Certification:

Fire Officer I

- i. Applicants must complete one (1) of the following:
 - a) TCFP Fire Officer I curriculum; or
 - b) All required objectives from the SFFMA Fire Officer I curriculum
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II; and
 - b) Instructor I
- iii. Applicants must be a first-line supervisory officer, and must meet all the job performance and certification requirements of Fire Officer I as defined in NFPA 1021, as follows:
 - a) Uses human resources to accomplish assignments in accordance with safety plans in an efficient manner and evaluates member task performance and supervises personnel during emergency and non-emergency work periods
 - b) Deals with inquiries from the community and projects the role of the department to the public and delivers safety, injury, and fire prevention education programs
 - c) Performs general administrative functions and implements departmental policies and procedures at the unit/company level
 - d) Performs a fire investigation to determine preliminary cause, secures the incident scene, and preserves evidence
 - e) Supervises emergency operations, conducts pre-incident planning, and deploys assigned resources in accordance with the local emergency plan
 - f) Integrates safety plans, policies, and procedures into the daily activities as well as on the emergency scene, including the donning of appropriate levels of personal protective equipment to ensure a work environment, in accordance with health and safety plans, for all assigned members

Fire Officer II

- i. Applicants must complete one (1) of the following:
 - a) TCFP Fire Officer II curriculum; or
 - b) All required objectives from the SFFMA Fire Officer II curriculum
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II; and
 - b) Instructor I; and
 - c) Fire Officer I
- iii. Applicant must be a midlevel supervisor, and must meet all the job performance and certification requirements of Fire Officer II as defined in NFPA 1021, as follows:
 - a) Evaluates member job performance
 - b) Prepares a project or divisional budget, news releases, and/or new policy or changes in existing policies
 - c) Conducts inspections to identify hazards and addresses violations and conducts fire investigations to determine origin and preliminary causes
 - d) Supervises multi-unit emergency operations, deploys assigned resources, and develops and conducts post-incident analysis
 - e) Reviews injury, accident, and health exposure reports, identifies unsafe work environments or behaviors, and takes approved action to prevent their reoccurrence

Fire Officer III

- i. Applicants must complete one (1) of the following:
 - a) TCFP Fire Officer III curriculum; or
 - b) All required objectives from the SFFMA Fire Officer III curriculum
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II; and
 - b) Instructor I; and
 - c) Fire Officer I; and
 - d) Fire Officer II

Fire Officer IV

- i. Applicants must complete one (1) of the following:
 - a) TCFP Fire Officer IV curriculum; or
 - b) All required objectives from the SFFMA Fire Officer IV curriculum
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II; and
 - b) Instructor I; and
 - c) Fire Officer I; and
 - d) Fire Officer II; and
 - e) Fire Officer III

Equivalent Training

SECTION	SUBJECT	OFFICER I	OFFICER II
1	General	4	1
2	Human Resources Management	6	10
3	Community and Government Relations	6	
4	Administration	4	10
5	Inspection and Investigation	4	10
6	Emergency Service Delivery	10	8
7	Health and Safety	8	9
	Performance Skills *	18	12
	TOTAL RECOMMENDED HOURS	60	60

* The recommended hours for skills evaluation is based on 12 students. Actual hours needed depends on the number of students, number of examiners, availability of equipment, and student skill level

Curriculum for Fire Officer I

SECTION 1 GENERAL

The Certification Board suggests it will take a class of 12 individuals 4 hours to cover the following objective in this section (actual time may vary based on class size).

- O1-01.01 Trainee shall have knowledge of the following
- A. The organizational structure of the department
 - B. Geographical configuration and characteristics of response districts
 - C. Departmental operating procedures for administration, emergency operations, incident management systems, and safety
 - D. Departmental budget process
 - E. Information management and record keeping
 - F. The fire prevention and building safety codes and ordinances applicable to the jurisdiction
 - G. Current trends, technologies, and socioeconomic and political factors that impact the fire service
 - H. Cultural diversity
 - I. Methods used by supervisors to obtain cooperation within a group of subordinates
 - J. The rights of management and members
 - K. Agreements in force between the organization and members
 - L. Generally accepted ethical practices, including a professional code of ethics
 - M. Policies and procedures regarding the operation of the department as they involve supervisors and members
- O1-01.02 Trainee shall be able to:
- A. Effectively communicate in writing utilizing technology provided by the AHJ
 - B. Write reports, letters, and memos utilizing word processing and spreadsheet programs
 - C. Operate in an information management system
 - D. Effectively operate at all levels in the incident management system utilized by the AHJ

SECTION 2 HUMAN RESOURCE MANAGEMENT

The Certification Board suggests it will take a class of 12 individuals 6 hours to cover the following objective in this section (actual time may vary based on class size).

- O1-02.01 Trainee shall utilize human resources to accomplish assignments in accordance with safety plans and in an efficient manner.
- O1-02.02 Trainee shall evaluate member performance and supervising personnel during emergency and non-emergency work periods, according to the following job performance requirements.
- A. Assign tasks or responsibilities to unit members
 - B. Give an assignment at an emergency operation, so that the instructions are complete, clear, and concise; safety considerations are addressed; and the desired outcomes are conveyed.

- O1-02.03 Trainee shall have the knowledge required to be able to perform/apply the following:
- A. Verbal communications during emergency situations utilizing the NIMS standards including but not limited to the following:
 - 1. Command presence
 - 2. Calm
 - 3. Clear
 - 4. Concise
 - 5. Accurate
 - 6. Clear text (no ten codes)
 - 7. Standard resource typing
 - 8. Standard terminology for facilities, equipment and resources
 - 9. State the desired outcome
 - B. Techniques used to make assignments under stressful situations
 - 1. SOPs/guidelines
 - 2. Maintain span of control
 - 3. Safety considerations
 - 4. Accountability
 - 5. Develop an incident action plan
 - 6. Establish tactical priorities considering, Life safety, Incident stabilization, Environmental conservation, and Property conservation
 - C. Methods of confirming understanding
 - 1. Feedback (repeat message)
 - 2. Ask for any questions/clarifications
- O1-02.04 Trainee shall assign tasks or responsibilities to unit members, given an assignment under non-emergency conditions at a station or other work location, so that the instructions are complete, clear, and concise; safety considerations are addressed; and the desired outcomes are conveyed. Firefighter shall have the knowledge to be able to perform/apply the following:
- A. Verbal communications under non-emergency situations
 - 1. Calm
 - 2. Clear
 - 3. Concise
 - 4. Accurate
 - 5. State the desired outcome
 - B. Techniques used to make assignments under routine situations
 - 1. Verbal
 - 2. Written
 - C. Methods of confirming comprehension
 - 1. Feedback (repeat message)
 - 2. Ask for any questions/clarifications

O1-02.05 Trainee shall be able to direct unit members during a training evolution, given a company training evolution and training policies and procedures, so that the evolution is performed in accordance with safety plans, efficiently, and as directed. Trainee shall have the knowledge to be able to perform/apply the following:

A. Verbal communication techniques to facilitate learning

1. Communication model consisting of:
 - a. Sender
 - b. Message
 - c. Instructional medium
 - d. Receiver
 - e. Feedback
 - f. Environment
2. Factors in effective delivery:
 - a. Voice inflection
 - b. Eye contact
 - c. Common/appropriate terminology
 - d. Appropriate terminology
 - d. Body language
 - e. Facial expressions
 - f. Tone of voice
 - g. Appropriate appearance
3. Basic rules of effective spoken communication:
 - a. Be adaptive to audience
 - b. Have a specific purpose
 - c. Be clear and concise
 - d. Be focused

O1-02.06 Trainee shall recommend action for member-related problems, given a member with a situation requiring assistance and the member assistance policies and procedures, so that the situation is identified and the actions taken are within the established policies and procedures. Trainee shall have the knowledge to be able to recognize the following:

A. The signs and symptoms of member-related problems

1. Substance abuse
2. Health problems
 - a. Mental
 - b. Physical
3. Financial problems
4. Personal/family problems
5. Behavioral problems

B. Causes of stress in emergency services personnel

1. Environmental
 - a. Weather
 - b. Workplace conditions/expectations
 - c. Emergency scenes
2. Physiological
 - a. Interrupted meals/sleep
 - b. Shift work
 - c. Constant heightened sense of awareness
3. Psychological
 - a. Multiple casualty incidents
 - b. Gruesome injuries
 - c. Co-worker injuries or deaths
 - d. Injuries or deaths involving children
4. Cultural
 - a. Age
 - b. Gender
 - c. Ethnicity
 - d. Religion

- 5. Personal
 - a. Financial
 - b. Issues outside of work
- C. Adverse effects of stress on the performance of emergency service personnel
 - 1. Failure to meet job performance requirements
 - 2. Injuries/illnesses
 - 3. Death

O1-02.07 Trainee shall apply human resource policies and procedures, given an administrative situation requiring action, so that policies and procedures are followed.

O1-02.08 Trainee should be able to deal with administrative procedures that might include transfers, promotions, compensation/member benefits, sick leave, vacation, requests for pay or benefits while acting in a temporary position, change in member benefits, commendations, disciplinary actions, and grievances.

O1-02.09 Trainee shall have the knowledgeable of human resource policies and procedures

- A. Federal laws
- B. State laws
- C. Local AHJ (e.g. Employee Assistance Program)
- D. Departmental (e.g. Wellness/fitness program)

O1-02.10 Trainee shall coordinate the completion of assigned tasks and projects by members, given a list of projects and tasks and the job requirements of subordinates, so that the assignments are prioritized, a plan for the completion of each assignment is developed, and members are assigned to specific tasks and supervised during the completion of the assignments.

O1-02.11 Trainee shall be knowledgeable of:

- A. Principles of supervision
 - 1. Delegate responsibility
 - 2. Consistent management
 - 3. Motivate
 - 4. Communicate
 - 5. Train
 - 6. Decision making
 - 7. Resource management
 - 8. Time management
 - 9. Coach/counsel
 - 10. Discipline (positive and negative)
 - 11. Accountability
 - 12. Employee performance appraisals
 - 13. Conflict resolution
 - 14. Risk management
 - 15. Leadership styles
 - a. Autocratic
 - b. Democratic
 - c. Laissez-faire
- B. Basic human resource management
 - 1. Managerial theories
 - 2. Human resource planning
 - 3. Employee relations
 - 4. Staffing
 - 5. Performance management
 - 6. Human resource development
 - 7. Compensation and benefits
 - 8. Employee health, safety and security
 - 9. Risk benefit analysis

SECTION 3 COMMUNITY AND GOVERNMENT RELATIONS

The Certification Board suggests it will take a class of 12 individuals 6 hours to cover the following objective in this section (actual time may vary based on class size).

- O1-03.01 Trainee shall be able deal with inquiries of the community and projecting the role of the department to the public and delivering safety, injury, and fire prevention education programs. Initiate action on a community need, given policies and procedures, so that the need is addressed.
- O1-03.02 Trainee shall be knowledgeable about community demographics and service organizations:
- A. Statistical analysis
 - 1. Age
 - 2. Income
 - 3. Ethnicity
 - 4. Sex
 - 5. Educational level
 - 6. Special needs
 - B. Service organizations
 - 1. Civic (e.g. Lions, Rotary)
 - 2. Religious (e.g. Knights of Columbus, Salvation Army)
 - 3. Volunteer (e.g. Red Cross, Community Emergency Response Team (CERT), Fire Corps)
- O1-03.03 Trainee shall initiate action to a citizen's concern, given policies and procedures, so that the concern is answered or referred to the correct individual for action and all policies and procedures are complied with.
- O1-03.04 Trainee shall be knowledgeable of the following:
- A. Interpersonal relationships
 - 1. Blake and Mouton's Managerial Grid
 - 2. Maslow's Hierarchy of Needs
 - B. Verbal and nonverbal communication
 - 1. Verbal communication
 - a. Voice inflection
 - b. Appropriate/common terminology
 - c. Tone of voice
 - d. Have a specific purpose
 - e. Be clear and concise
 - f. Be focused
 - 2. Nonverbal communication
 - a. Eye contact
 - b. Body language
 - c. Facial expressions
 - d. Appropriate appearance
- O1-03.05 Trainee shall respond to a public inquiry, given policies and procedures, so that the inquiry is answered accurately, courteously, and in accordance with applicable policies and procedures.

O1-03.06 Trainee shall be knowledgeable of the following:

- A. Written communication techniques
 1. Consider the reader
 2. Emphasis
 3. Concise
 4. Simplicity
 5. Summarize
- B. Oral communication techniques
 1. Voice inflection
 2. Appropriate/common terminology
 3. Tone of voice
 4. Have a specific purpose
 5. Be clear and concise
 6. Be focused

O1-03.07 Trainee shall deliver a public education program, given the target audience and topic, so that the intended message is conveyed clearly.

O1-03.08 Trainee shall be knowledgeable of fire department's public education program as it relates to the target audience according to the AHJ.

SECTION 4 ADMINISTRATION

The Certification Board suggests it will take a class of 12 individuals 4 hours to cover the following objective in this section (actual time may vary based on class size).

O1-04.01 Trainee shall recommend changes to existing departmental policies and/or implement a new departmental policy at the unit level, given a new departmental policy, so that the policy is communicated to and understood by unit members.

O1-04.02 Trainee shall have knowledge of the following:

- A. Written communication techniques
 1. Consider the reader
 2. Emphasis
 3. Concise
 4. Simplicity
 5. Summarize
- B. Oral communication techniques
 1. Voice inflection
 2. Appropriate/common terminology
 3. Tone of voice
 4. Have a specific purpose
 5. Be clear and concise
 6. Be focused

O1-04.03 Trainee shall execute routine unit-level administrative functions, given forms and record-management systems, so that the reports and logs are complete and files are maintained in accordance with policies and procedures.

O1-04.04 Trainee shall be knowledgeable of the following:

- A. Administrative policies and procedures
 1. AHJ
- B. Records management
 1. Paper-based
 2. Electronic
 3. Record retention requirements
 4. Storage and security

- O1-04.05 Trainee shall prepare a budget (purchase) request, given a need and budget (purchase) forms, so that the request is in the proper format and is supported with data.
- O1-04.06 Trainee shall be knowledgeable of policies and procedures and the revenue sources and budget process.
 - A. Policies and procedures of the AHJ
 - B. Revenue sources
 - 1. Operating Budget (e.g. program, line item)
 - C. Budget process of the AHJ

SECTION 5 INSPECTION AND INVESTIGATION

The Certification Board suggests it will take a class of 12 individuals 4 hours to cover the following objective in this section (actual time may vary based on class size).

- O1-05.01 Trainee shall be able to perform a fire investigation to determine preliminary cause, securing the incident scene, and preserving evidence, according to the following job performance requirements.
 - A. The NFPA's intent is to instill an awareness of those areas that officers might address in the performance of their duties. Organizations that desire higher levels of competency in these areas should refer to the applicable NFPA professional qualifications standards: NFPA 1031 and NFPA 1033.
 - B. Evaluate available information, given a fire incident, observations, and interviews of first-arriving members and other individuals involved in the incident, so that a preliminary cause of the fire is determined, reports are completed, and, if required, the scene is secured and all pertinent information is turned over to an investigator.
- O1-05.02 Trainee shall have knowledge of the following:
 - A. Common causes of fire
 - 1. Accidental
 - 2. Natural
 - 3. Incendiary/Suspicious
 - 4. Undetermined
 - B. Fire growth and development
 - 1. Basic fire chemistry/sciences
 - 2. Area of origin
 - C. Policies and procedures for calling for investigators
 - 1. AHJ
- O1-05.03 Trainee shall secure an incident scene, given rope or barrier tape, so that unauthorized persons can recognize the perimeters of the scene and are kept from restricted areas, and all evidence or potential evidence is protected from damage or destruction.
- O1-05.04 Trainee shall have knowledge of the following:
 - A. Types of evidence
 - 1. Demonstrative
 - 2. Documentary/circumstantial
 - 3. Testimonial
 - B. The importance of fire scene security
 - 1. Evidence protection
 - 2. Public safety

- C. Evidence preservation
 - 1. Chain of custody
 - 2. Contributes to prosecution
 - 3. Use of caution during salvage and overhaul

SECTION 6 EMERGENCY SERVICE DELIVERY

The Certification Board suggests it will take a class of 12 individuals 10 hours to cover the following objective in this section (actual time may vary based on class size).

- O1-06.01 Emergency service delivery is the component of fire department organization providing mitigation of responses to emergency incidents, such as those involving fires, emergency medical situations, mass casualties, hazardous materials, weapons of mass destruction, and terrorism, as well as other emergency events. Trainee shall be trained to supervise emergency operations, conduct pre-incident planning, and deploy assigned resources in accordance with the local emergency plan and according to job performance requirements.
- O1-06.02 Trainee shall develop a pre-incident plan, given an assigned facility and preplanning policies, procedures, and forms, so that all required elements are identified and the approved forms are completed and processed in accordance with policies and procedures.
- O1-06.03 Trainee shall be knowledgeable of the following
 - A. Elements of the local emergency plan
 - 1. AHJ
 - B. A pre-incident plan
 - C. Basic building construction
 - 1. Construction type
 - 2. Occupancy type
 - D. Basic fire protection systems and features
 - 1. Sprinkler systems
 - 2. Standpipe systems
 - 3. Alert/detection systems
 - 4. Other special extinguishing systems
 - E. Basic water supply
 - 1. Determine location(s) of water supplies
 - 2. Fire Department Connections (FDC)
 - 3. Determine required fire flow
 - F. Basic fuel loading
 - 1. Based on hazard class
 - G. Fire growth and development
 - 1. Basic fire chemistry/science
- O1-06.04 Trainee shall develop an initial action plan, given size-up information for an incident and assigned emergency response resources, so that resources are deployed to control the emergency.
- O1-06.05 Trainee shall be knowledgeable of the following:
 - A. Elements of a size-up including the many variables that the officer observes from the time of the alarm, during response, and upon arrival, in order to develop an initial action plan to control an emergency incident.
 - 1. Size up processes
 - a. Layman's 5-step process
 - b. NFA size-up system

2. Size-up elements
 - a. Building type and occupancy
 - b. Demographics
 - c. Fire and smoke conditions
 - d. Materials spilled or involved in fire
 - e. Modes of action
 - i. Defensive
 - ii. Offensive
 - iii. Transition
 - f. Number of occupants
 - g. Time of day
 - h. Water supply
 - i. Weather
 - j. Other hazards
- B. Standard operating procedures for emergency operations
 1. AHJ
- C. Fire behavior
 1. Basic fire chemistry/science

O1-06.06 Trainee shall implement an action plan at an emergency operation, given assigned resources, type of incident, and a preliminary plan, so that resources are deployed to mitigate the situation.

This requirement takes into consideration the officer's ability to give orders, direct personnel, evaluate information, and allocate resources to respond to the wide variety of emergency situations the fire service encounters.

O1-06.07 Trainee shall have knowledge of the following:

- A. Standard operating procedures
 1. AHJ
- B. Resources available for the mitigation of fire and other emergency incidents
 1. Single company
 2. One alarm
 3. Multiple alarm
 4. Mutual/automatic aid
- C. An incident management system
 1. NIMS
 2. ICS
- D. Scene safety
 1. Rapid intervention/backup team
 2. Two-in/two-out
 2. Incident safety officer
- E. Personnel accountability system

- O1-06.08 Trainee shall develop and conduct a post-incident analysis, given a single unit incident and post-incident analysis policies, procedures, and forms, so that all required critical elements are identified and communicated and the approved forms are completed and processed in accordance with policies and procedures.
- O1-06.09 Trainee shall have knowledge of the following:
- A. Elements of a post-incident analysis
 - 1. Reconstruct the incident to establish a clear picture of the events surrounding the incident
 - 2. Non-punitive
 - 3. Focus on improving emergency response
 - B. Basic building construction
 - 1. Construction type
 - 2. Occupancy type
 - C. Basic fire protection systems and features
 - 1. Sprinkler systems
 - 2. Standpipe systems
 - 3. Alert/detection systems
 - 4. Other special extinguishing systems
 - D. Basic water supply
 - 1. Determine location(s) of water supplies
 - 2. Fire Department Connections (FDC)
 - 3. Determine required fire flow
 - E. Basic fuel loading
 - 1. Based on hazard class
 - F. Fire growth and development
 - 1. Basic fire chemistry/science
 - G. Departmental procedures relating to dispatch response tactics and operations
 - 1. AHJ
 - H. Customer service
 - 1. AHJ

SECTION 7 HEALTH AND SAFETY

The Certification Board suggests it will take a class of 12 individuals 8 hour to cover the following objective in this section (actual time may vary based on class size).

- O1-07.01 Trainee shall be able to integrate safety plans, policies, and procedures into the daily activities as well as the emergency scene, including the donning of appropriate levels of personal protective equipment to ensure a work environment, in accordance with health and safety plans, for all assigned members, according to the following job performance requirements
- A. Apply safety regulations at the unit level, given safety policies and procedures, so that required reports are completed, in-service training is conducted, and member responsibilities are conveyed.
- O1-07.02 Trainee shall have knowledge of the following:
- A. The most common causes of personal injury and accident to members
 - B. Safety policies and procedures
 - C. Basic workplace safety
 - D. The components of an infectious disease control program.

- O1-07.03 Trainee shall be able to identify safety hazards and to communicate orally and in writing.
- O1-07.04 Trainee shall conduct an initial accident investigation, given an incident and investigation forms, so that the incident is documented and reports are processed in accordance with policies and procedures.
- O1-07.05 Trainee shall have knowledge of the following:
 - A. Procedures for conducting an accident investigation
 - B. Safety policies and procedures.
- O1-07.06 Trainee shall be able to communicate orally and in writing and to conduct interviews.

SECTION 8 EMERGENCY MANAGEMENT

No requirements at this level per NFPA

SECTION 1 GENERAL

The Certification Board suggests it will take a class of 12 individuals 1 hour to cover the following objective in this section (actual time may vary based on class size).

- O2-01.01 Trainee shall have knowledge of the organization of local government
- O2-01.02 Trainee shall have knowledge of enabling and regulatory legislation and the law-making process at the local, state, and federal levels
- O2-01.03 Trainee shall have knowledge of the functions of other bureaus, divisions, agencies, and organizations and their roles and responsibilities that relate to the fire service
 - A. Intergovernmental and interagency cooperation

SECTION 2 HUMAN RESOURCE MANAGEMENT

The Certification Board suggests it will take a class of 12 individuals 10 hours to cover the following objective in this section (actual time may vary based on class size).

- O2-02.01 This function involves evaluating member performance, according to the following job performance requirements. Initiate actions to maximize member performance and/or to correct unacceptable performance, given human resource policies and procedures, so that member and/or unit performance improves or the issue is referred to the next level of supervision.
- O2-02.02 Trainee shall have knowledge of the following:
 - A. Human resource evaluation policies and procedures in reference to;
 - 1. Federal (e.g. Americans with Disabilities Act)
 - 2. State (e.g. Local Government Code)
 - 3. Local/AHJ (e.g. city policies)
 - 4. Departmental (e.g. departmental policies)
 - B. Problem identification
 - 1. Performance
 - 2. Behavior
 - C. Organizational behavior
 - 1. Acceptable/unacceptable job performance
 - 2. Acceptable/unacceptable behavior
 - 3. Culture
 - 4. Change/status quo
 - D. Group dynamics
 - 1. Common binding interest
 - 2. Vital group image
 - 3. Sense of continuity
 - 4. Shared set of values
 - 5. Different roles within the group
 - E. Leadership styles
 - 1. Autocratic
 - 2. Democratic
 - 3. Laissez-faire
 - F. Types of power
 - 1. Reward
 - 2. Coercive
 - 3. Identification
 - 4. Expert
 - 5. Legitimate
 - 6. Informal

- G. Interpersonal dynamics
 - 1. Blake and Mouton's Managerial Grid
 - 2. Maslow's Hierarchy of Needs
 - 3. Other

O2-02.03 Trainee shall evaluate the job performance of assigned members, given personnel records and evaluation forms, so each member's performance is evaluated accurately and reported according to human resource policies and procedures.

O2-02.04 Trainee shall be knowledgeable of the following:

- A. Human resource evaluation policies and procedures in reference to;
 - 1. Federal (e.g. Fair Labor Standards Act)
 - 2. State (e.g. Local Government Code)
 - 3. Local/ AHJ (e.g. city policies)
 - 4. Departmental (e.g. departmental policies)
- B. Job descriptions
 - 1. General description of work
 - 2. Typical tasks
 - 3. Knowledge, skills and abilities
 - 4. Education and Experience
 - 5. Special Requirements
 - 6. Future Requirements
- C. Objectives of a member evaluation program
 - 1. Accuracy
 - 2. Fairness
 - 3. Consistency
 - 4. Thoroughness
 - 5. Identify areas of excellence or improvement
 - 6. Document member's work history
- D. Common errors in evaluating
 - 1. Halo/Horn effect
 - 2. Central tendency
 - 3. Contrast effect
 - 4. Leniency or severity
 - 5. Personal Bias
 - 6. Recency
 - 7. Frame of Reference

SECTION 3 COMMUNITY AND GOVERNMENT RELATIONS

No requirements at this level per NFPA

SECTION 4 ADMINISTRATION

The Certification Board suggests it will take a class of 12 individuals 10 hours to cover the following objective in this section (actual time may vary based on class size).

O2-04.01 This section involves preparing a project or divisional budget, news releases, and policy changes, according to the following job performance requirements.

O2-04.02 Trainee shall develop a policy or procedure, given an assignment, so that the recommended policy or procedure identifies the problem and proposes a solution.

O2-04.03 Trainee shall be knowledgeable of the following:

- A. Policies and procedures
 - 1. Develop policies/procedures
 - 2. Train members
 - 3. Implement policies/procedures
 - 4. Evaluate/revise policies/procedures
- B. Problem identification
 - 1. Be attentive
 - 2. Ask questions
 - 3. Encourage subordinates to report problems

- O2-04.04 Trainee shall develop a project or divisional budget, given schedules and guidelines concerning its preparation, so that capital, operating, and personnel costs are determined and justified.
- O2-04.05 Trainee shall have knowledge of the following:
 - A. The supplies and equipment necessary for ongoing or new projects
 - B. Repairs to existing facilities
 - C. New equipment
 - D. Apparatus maintenance
 - E. Personnel costs
 - F. Appropriate budgeting system
- O2-04.06 Trainee shall describe the process of purchasing, including soliciting and awarding bids, given established specifications, in order to ensure competitive bidding.
- O2-04.07 Trainee shall have knowledge of the following:
 - A. Purchasing laws
 - 1. AHJ
 - 2. State laws
 - B. Policies and procedures
 - 1. AHJ
- O2-04.08 Trainee shall prepare a news release, given an event or topic, so that the information is accurate and formatted correctly.
- O2-04.09 Trainee shall have knowledge of the following:
 - A. Policies and procedures for news releases
 - 1. AHJ
 - B. Format used for news releases
 - 1. Oral interview
 - a. Be prepared
 - b. Stay in control
 - c. Look and act the part
 - d. It is not over until it is over
 - 2. Written
 - a. Formulate a plan
 - b. Develop a concept and write the release
 - c. Make it unique
 - d. Well organized
 - e. Department letterhead
 - f. Release news to the media
- O2-04.10 Trainee shall prepare a concise report for transmittal to a supervisor, given fire department record(s) and a specific request for details such as trends, variances, or other related topics.
- O2-04.11 Trainee shall have knowledge of the following:
 - A. The data processing system
 - 1. Word processing software
 - 2. Spreadsheet software
 - 3. Presentation software
 - 4. Database software

SECTION 5 INSPECTION AND INVESTIGATION

The Certification Board suggests it will take a class of 12 individuals 10 hours to cover the following objective in this section (actual time may vary based on class size).

This section involves conducting inspections to identify hazards and address violations and conducting fire investigations to determine origin and preliminary cause, according to the following job performance requirements.

- O2-05.01 Trainee shall describe the procedures for conducting fire inspections, given any of the following occupancies, so that all hazards, including hazardous materials, are identified, approved forms are completed, and approved action is initiated:
- A. Assembly
 - B. Educational
 - C. Health care
 - D. Detention and correctional
 - E. Residential
 - F. Mercantile
 - G. Business
 - H. Industrial
 - I. Storage
 - J. Unusual structures
 - K. Mixed occupancies
- O2-05.02 Trainee shall have knowledge of:
- A. Inspection procedures
 - B. Fire detection, alarm, and protection systems
 - C. Identification of fire and life safety hazards
 - D. Marking and identification systems for hazardous materials
- O2-05.03 Trainee shall determine the point of origin and preliminary cause of a fire, given a fire scene, photographs, diagrams, pertinent data and/or sketches, to determine if arson is suspected.
- O2-05.04 Trainee shall have knowledge of the following:
- A. Methods used by arsonists
 1. Disabling built-in fire protection
 2. Delaying notification/making access difficult
 3. Using accelerants and trailers
 4. Setting multiple points of origin
 5. Tampering or altering equipment
 - B. Common causes of fire
 1. Accidental
 2. Natural
 3. Incendiary/Suspicious
 4. Undetermined
 - C. Basic cause and origin determination
 1. Basic fire chemistry/sciences
 2. Area of origin
 3. Fire patterns
 - D. Fire growth and development
 - E. Documentation of preliminary fire investigative procedures
 1. AHJ
 2. NFIRS
 3. NFPA 921

SECTION 6 EMERGENCY SERVICE DELIVERY

The Certification Board suggests it will take a class of 12 individuals 8 hours to cover the following objective in this section (actual time may vary based on class size).

- O2-06.01 This duty involves supervising multi-unit emergency operations, conducting pre-incident planning, and deploying assigned resources, according to the following job requirements.
- O2-06.02 Trainee shall produce operational plans, given an emergency incident requiring multiunit operations, so that required resources and their assignments are obtained and plans are carried out in compliance with approved safety procedures resulting in the mitigation of the incident.
- O2-06.03 Trainee shall have knowledge of the following:
 - A. Standard operating procedures
 - 1. AHJ
 - B. National, state/provincial, and local information resources available for the mitigation of emergency incidents
 - C. An incident management system
 - 1. NIMS
 - 2. Incident Command System
 - D. A personnel accountability system
- O2-06.04 Trainee shall develop and conduct a post-incident analysis, given multi-unit incident and post-incident analysis policies, procedures, and forms, so that all required critical elements are identified and communicated and the approved forms are completed and processed.
- O2-06.05 Trainee shall have knowledge of the following:
 - A. Elements of a post-incident analysis
 - 1. Reconstruct the incident to establish a clear picture of the events surrounding the incident
 - 2. Non-punitive
 - 3. Focus on improving emergency response
 - B. Basic building construction
 - 1. Construction type
 - 2. Occupancy type
 - C. Basic fire protection systems and features
 - 1. Sprinkler systems
 - 2. Standpipe systems
 - 3. Alert/detection systems
 - 4. Other special extinguishing systems
 - D. Basic water supply
 - 1. Pressurized sources
 - 2. Drafting points
 - 3. Fire department connections (FDC)
 - E. Basic fuel loading
 - 1. Based on hazard class
 - F. Fire growth and development
 - 1. Basic fire chemistry/science

G. Departmental procedures relating to dispatch response tactics and operations

1. AHJ

H. Customer service

1. AHJ

SECTION 7 HEALTH AND SAFETY

The Certification Board suggests it will take a class of 12 individuals 9 hours to cover the following objective in this section (actual time may vary based on class size).

O2-07.01 Trainee shall review injury, accident, and health exposure reports, identifying unsafe work environments or behaviors, and taking approved action to prevent reoccurrence, according to the following job requirements.

O2-07.02 Trainee shall analyze a member's accident, injury, or health exposure history, given a case study, so that a report including action taken and recommendations made is prepared for a supervisor.

O2-07.03 Trainee shall have knowledge of the causes of unsafe acts, health exposures, or conditions that result in accidents, injuries, occupational illnesses, or deaths.

SECTION 8 EMERGENCY MANAGEMENT

No requirements at this level per NFPA

SECTION 1 GENERAL

O3-01.01 Trainee shall have knowledge of the current national and international trends and developments related to fire service organization, management, and administrative principles, as well as public and private organizations that support the fire and emergency services and the functions of each.
NFPA 1021 6.1

SECTION 2 HUMAN RESOURCE MANAGEMENT

O3-02.01 Trainee shall identify the duty involves for establishing procedures for hiring, assigning, promoting, and encouraging professional development of members, according to the following job performance requirements.

NFPA 1021 6.2

O3-02.02 Trainee shall establish personnel assignments to maximize efficiency, given knowledge, training, and experience of the members available in accordance with policies and procedures, so that human resources are used in an effective manner for minimum staffing requirements, available human resources, and policies and procedures.

NFPA 1021 6.2.1

O3-02.03 Trainee shall develop procedures for hiring members, given policies of the AHJ and legal requirements, so that the process is valid and reliable and applicable federal, state/ provincial, and local laws; regulations and standards; and policies and procedures.

NFPA 1021 6.2.2

O3-02.04 Trainee shall develop procedures and programs for promoting members, given applicable policies and legal requirements, so that the process is valid and reliable, job-related, and nondiscriminatory and by applicable federal, state/ provincial, and local laws; regulations and standards; and policies and procedures.

NFPA 1021 6.2.3

O3-02.05 Trainee shall describe methods to facilitate and encourage members to participate in professional development, given a professional development model, so that members achieve their personal and professional goals and interpersonal and motivational techniques, professional development model, goal setting, and personal and organizational goals.

NFPA 1021 6.2.4

O3-02.06 Trainee shall develop a proposal for improving an employee benefit, given a need in the organization, so that adequate information is included to justify the requested benefit improvement.

NFPA 1021 6.2.5

O3-02.07 Trainee shall develop a plan for providing an employee accommodation, given an employee need, the requirements, and applicable law, so that adequate information is included to justify the requested change(s) using agency's policies and procedures, and legal requirements or reasonable accommodations.

NFPA 1021 6.2.6

O3-02.08 Trainee shall develop an ongoing education training program, given organizational training requirements, so that members of the organization are given appropriate training to meet the mission of the organization.

NFPA 1021 6.2.7

SECTION 3 COMMUNITY AND GOVERNMENT RELATIONS

03-03.01 Trainee shall develop a community risk reduction program, given risk assessment data, so that program outcomes are met using community demographics, resource availability, community needs, customer service principles, and program development.

NFPA 1021 6.3.1

SECTION 4 ADMINISTRATION

03-04.01 Trainee shall develop a divisional or departmental budget, given schedules and guidelines concerning its preparation, so that capital, operating, and personnel costs are determined and justified making sure the supplies and equipment necessary for existing and new programs; repairs to existing facilities; new equipment, apparatus maintenance, and personnel costs; and approved budgeting system.

NFPA 1021 6.4.1

03-04.02 Trainee shall develop a budget management system, given fiscal and financial policies, so that the division or department stays within the budgetary authority identifying revenue to date, anticipated revenue, expenditures to date, encumbered amounts, and anticipated expenditures.

NFPA 1021 6.4.2

03-04.03 Trainee shall describe the agency's process for developing requests for proposal (RFPs) and soliciting and awarding bids, given established specifications and the agency's policies and procedures, so that competitive bidding is ensured along with purchasing laws, policies, and procedures.

NFPA 1021 6.4.3

03-04.04 Trainee shall direct the development, maintenance, and evaluation of a department record and management system, given policies and procedures, so that completeness and accuracy are achieved to include the principles involved in the acquisition, implementation, and retrieval of information by data processing as it applies to the record and budgetary processes and the capabilities and limitations of information management systems.

NFPA 1021 6.4.4

03-04.05 Trainee shall analyze and interpret records and data, given a fire department records system, so that validity is determined and improvements are recommended and the principles involved in the acquisition, implementation, and retrieval of information and data.

NFPA 1021 6.4.5

03-04.06 Trainee shall develop a model plan for continuous organizational improvement, given resources for an area to be protected, so that resource utilization is maximized utilizing policies and procedures, physical and geographic characteristics and hazards, demographics, community plan, staffing requirements, response time benchmarks, contractual agreements, recognized best practice assessment programs, and local, state/provincial, and federal regulations.

NFPA 1021 6.4.6

SECTION 5 INSPECTION AND INVESTIGATION

03-05.01 Trainee shall evaluate the inspection program of the AHJ, given current program goals, objectives, performance data, and resources so that the results are evaluated to determine effectiveness according to policies and procedures, accepted inspection practices, program evaluation, and applicable codes, standards, and laws.

NFPA 1021 6.5.1

03-05.02 Trainee shall develop a plan, given an identified fire safety problem, so that the approval for a new program, piece of legislation, form of public education, or fire safety code is facilitated according to

policies and procedures and applicable codes, ordinances, and standards and their development process.

NFPA 1021 6.5.2

SECTION 6 EMERGENCY SERVICE DELIVERY

O3-06.01 Trainee shall prepare an action plan, given an emergency incident requiring multiple agency operations, so that the required re- sources are determined and the resources are assigned and placed to mitigate the incident according to policies, procedures, and standards, including the current edition of NFPA 1600, and resources, capabilities, roles, responsibilities, and authority of support agencies.

NFPA 1021 6.6.1

O3-06.02 Trainee shall develop and conduct a post-incident analysis, given a multi-agency incident and post-incident analysis policies, procedures, and forms, so that all required critical elements are identified and communicated and the appropriate forms are completed and processed in accordance with policies and procedures and insure elements of a post-incident analysis, emergency management plan, critical issues, involved agencies' resources and responsibilities, procedures relating to dispatch response, strategy tactics and operations, and customer service.

NFPA 1021 6.6.2

O3-06.03 Trainee shall develop a plan for the agency, given an unmet need for resources that exceed what is available in the organization, so that the mission of the organization is capable of being per- formed in times of extraordinary need and complete a needs assessment and planning.

NFPA 1021 6.6.3

SECTION 7 HEALTH AND SAFETY

O3-07.01 Trainee shall develop a measurable accident and injury prevention pro- gram, given relevant local and national data, so that the results are evaluated to determine effectiveness of the program in accordance with policies and procedures, accepted safety practices, and applicable codes, standards, and laws.

NFPA 1021 6.7.1

SECTION 8 EMERGENCY MANAGEMENT

O3-08.01 Trainee shall develop a plan for the integration of fire services resources in the community's emergency management plan, given the requirements of the community and the resources available in the fire department, so that the role of the fire service is in compliance with local, state/provincial, and national requirements in accordance with ole of the fire service; integrated emergency management system; preparedness-emergency management planning; emergency operations centers; and roles of local, state/provincial, and national emergency management agencies.

NFPA 1021 6.8.1

SECTION 1 GENERAL

No requirements at this level per NFPA

SECTION 2 HUMAN RESOURCE MANAGEMENT

O4-02.01 Trainee shall appraise the department's human resource demographics, given appropriate community demographic data, so that the recruitment, selection, and placement of human resources is effective and consistent with law and current best practices in accordance with policies and procedures; local, state/provincial, and federal regulations; community demographics; community issues; and formal and informal community leaders.

NFPA 1021 7.2.1

O4-02.02 Trainee shall initiate the development of a program, given current member/management relations, so that a positive and participative member/management program exists in accordance with policies and procedures, contractual agreements, and local, state/provincial, and federal regulations.

NFPA 1021 7.2.2

O4-02.03 Trainee shall establish and evaluate a list of education and in-service training goals, given a summary of the job requirements for all positions within the department, so that all members can achieve and maintain required proficiencies while utilizing training resources, community needs, internal and external customers, policies and procedures, contractual agreements, and local, state/provincial, and federal regulations.

NFPA 1021 7.2.3

O4-02.04 Trainee shall appraise a member assistance program, given data, so that the program, when used, produces stated program outcome in accordance with policies and procedures, available assistance programs, contractual agreements, and local, state/provincial, and federal regulations.

NFPA 1021 7.2.4

O4-02.05 Trainee shall evaluate an incentive program, given data, so that a determination is made regarding achievement of the desired results in accordance with policies and procedures, available incentive programs, contractual agreements, and local, state/provincial, and federal regulations.

NFPA 1021 7.2.5

SECTION 3 COMMUNITY AND GOVERNMENT RELATIONS

O4-03.01 Trainee shall attend, participate in, and assume a leadership role in community functions, in given community needs, so that the image of the organization is enhanced utilizing community demographics, community and civic issues, effective customer service methods, and formal and informal community leaders.

NFPA 1021 7.3.1

SECTION 4 ADMINISTRATION

O4-04.01 Trainee shall develop a comprehensive long-range plan, given community requirements, current department status, and resources, so that the projected needs of the community are met in accordance with policies and procedures, physical and geographic characteristics, demographics, community plan, staffing requirements, response time benchmarks, contractual agreements, and local, state/provincial, and federal regulations.

NFPA 1021 7.4.1

O4-04.02 Trainee shall evaluate and project training requirements, facilities, and buildings needs, given data that reflect community needs and resources, so that departmental training goals are met in accordance with policies and procedures, physical and geographic characteristics, building and fire codes, departmental plan, staffing requirements, training standards, needs assessment, contractual agreements, and local, state/ provincial, and federal regulations.

NFPA 1021 7.4.2

O4-04.03 Trainee shall complete a written comprehensive risk, hazard, and value analysis of the community, given the appropriate features of the service area of the organization, so that an accurate evaluation is made for service delivery decision-making utilizing risk, hazard, and value analysis methods and process, as well as community development features, community demographics, and assessed valuation of properties in the community.

NFPA 1021 7.4.3

O4-04.04 Trainee shall develop a plan for a capital improvement project or program, given an unmet need in the community, so that there is adequate information to educate citizens about the needs of the department utilizing strategic planning, capital improvement planning and budgeting, and facility planning.

NFPA 1021 7.4.4

SECTION 5 INSPECTION AND INVESTIGATION

No requirements at this level per NFPA

SECTION 6 EMERGENCY SERVICE DELIVERY

O4-06.01 Trainee shall develop a comprehensive disaster plan that integrates other agencies' resources, given risk, vulnerability, and capability data, so that the organization can mitigate the impact to the community in utilizing major incident policies and procedures, physical and geographic characteristics, demographics, target hazards, incident management systems, communications systems, intelligence data, contractual and mutual-aid agreements, and local, state/provincial, and federal regulations and resources.

NFPA 1021 7.6.1

O4-06.02 Trainee shall develop a comprehensive plan, given data (including agency data), so that the agency operates at a civil disturbance, integrates with other agencies' actions, and provides for the safety and protection of members utilizing major incident policies and procedures, physical and geographic characteristics, demographics, incident management systems, communications systems, contractual and mutual-aid agreements, and local, state/ provincial, and federal regulations and resources.

NFPA 1021 7.6.2

SECTION 7 HEALTH AND SAFETY

O4-07.01 Trainee shall maintain, develop, and provide leadership for a risk management program, given specific data, so that injuries and property damage accidents are reduced utilizing risk management concepts, retirement qualifications, occupational hazards analysis, and disability procedures, regulations, and laws.

NFPA 1021 7.7.1

SECTION 8 EMERGENCY MANAGEMENT

No requirements at this level per NFPA

Reference Materials

The jurisdictional entity in which the Incident Safety Officer serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1521: Standard for Fire Department Safety Officer

Minimum Requirements

1. Applicants must complete one (1) of the following:
 - a. Incident Safety Officer coursework meeting the requirements of NFPA 1521; or
 - b. TEEX Incident Safety Officer course.

AND

2. Applicants must hold, or apply concurrently for, the following SFFMA certifications:
 - a. Fire Officer I

Reference Materials

The jurisdictional entity in which the Public Information Officer serves must have access to the most current editions of the following training manuals:

NFPA

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

Minimum Requirements

Applicants must complete one (1) of the following:

- a. Public Information Officer coursework meeting the requirements of NFPA 1035; or
- b. TEEEX Public Information Officer course.

Reference Materials

The jurisdictional entity in which the Public Information Officer serves must have access to the most current editions of the following training manuals:

NFPA

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

Minimum Requirements

The Certification Program offers two levels of Public Fire Educator Certification:

Public Fire Educator I

Applicants must complete one (1) of the following:

- a. Public Fire Educator I coursework meeting the requirements of NFPA 1035; or
- b. TEEX Public Fire Educator I course.

Public Fire Educator II

Applicants must complete one (1) of the following:

- a. Public Fire Educator II coursework meeting the requirements of NFPA 1035; or
- b. TEEX Public Fire Educator II course.

AND

Applicants must hold, or apply concurrently for Public Fire Educator I

Reference Materials

The jurisdictional entity in which the Wildland Fire Fighting Personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1051: Standard for Wildland Fire Fighter Professional

NWCG

Firefighter Training (S-130);

Introduction to Wildland Fire Behavior Systems (S-190);

Human Factors on the Fireline (L-180);

Introduction to Incident Command System (I-100)

Minimum Requirements

Applicants must complete one (1) of the following:

- i. SFFMA Wildland Fire Fighting Curriculum; or
- ii. Wildland Fire Fighting coursework meeting the requirements of classroom-based NWCG S-130, S-190, L-180, and I-100 (including skills verification/not including online coursework); or
- iii. Texas Forest Service 40-Hour Wildland Fire Fighting course or equivalent; or
- iv. TCFP Basic Wildland Fire Protection certification or higher.

Curriculum for Wildland Fire Fighting

SECTION 1 BASIC CONCEPTS

Upon the successful completion of this section, participants will be able to recognize basic wildland fire concepts and identify the similarities and differences between structural and wildland fire fighting.

- 1-01 Trainee shall define basic terminology used in wildland fire. (25-I.01)
- 1-02 Trainee shall identify the parts of a wildland fire.
- 1-03 Trainee shall describe the ICS and how the incident management structure is organized. (1-II.01)
- 1-04 Trainee shall describe the general responsibilities of each section in the ICS. (1-II.03)
- 1-05 Trainee shall explain the benefits to crew organizations and describe the different types of crew organizations commonly used in initial attack and extended attack.
- 1-06 Trainee shall describe frequencies and how they affect radio communications.
- 1-07 Trainee shall identify the types of radios used in wildland fire fighting operations and explain the purpose/function of the basic parts and controls.
- 1-08 Trainee shall list the elements of proper radio use procedures and describe how to transmit a radio message correctly.
- 1-09 Trainee shall describe radio troubleshooting practices used to improve radio reception or transmission.
- 1-10 Trainee shall describe precautions and care to protect the radio from damage.

SECTION 2 WILDLAND FIRE BEHAVIOR

Upon the successful completion of this section, participants will be able to recognize the factors that affect a wildland fire environment.

- 2-01 Trainee shall identify the elements of the fire triangle. (25-I.02)
- 2-02 Trainee shall describe the methods of heat transfer. (25-I.05)
- 2-03 Trainee shall identify the fuel characteristics that influence the behavior of wildland fire. (25-I.02)
- 2-04 Trainee shall demonstrate the ability to apply the major fuel types to a specific geographic area, and explain why they are of concern to firefighters.
- 2-05 Trainee shall demonstrate the ability to determine fuel characteristics based on illustrations and descriptions.
- 2-06 Trainee shall describe how weather influences wildland fire behavior. (25-I.02)
- 2-07 Trainee shall describe the effect of temperature and Relative Humidity (RH), precipitation, atmospheric stability/instability, winds and wind systems, and critical fire weather conditions on wildland fire behavior.
- 2-08 Trainee shall identify the resources used to aid in the management of wildland fires.
- 2-09 Trainee shall list the basic characteristics of topography and describe how they affect wildland fire behavior.
- 2-10 Trainee shall identify indicators that fire behavior may be increasing and influences that may cause extreme fire behavior.
- 2-11 Trainee shall list fire environment factors to be aware of while monitoring fire behavior.
- 2-12 Trainee shall discuss and predict the outcomes of factors influencing fire behavior.

SECTION 3 WILDLAND FIRE FIGHTING SAFETY

Upon the successful completion of this section, participants will be able to analyze and safely apply accepted strategies and tactics in the wildland fire environment.

- 3-01 Trainee shall define safety and describe the importance of the steps of the risk management process. (25-I.08)
- 3-02 Trainee shall define situational awareness and describe its importance.
- 3-03 Trainee shall identify potential hazards in the wildland fire environment.
- 3-04 Trainee shall identify the common denominators of fire behavior on tragedy fires.
- 3-05 Trainee shall describe the communication responsibilities of the wildland firefighter.
- 3-06 Trainee shall describe actions that foster teamwork.
- 3-07 Trainee shall discuss and apply the appropriate “Watch-Out” situations and Standard Firefighting Orders to minimize the potential for serious injury or death. (25-I.08)
- 3-08 Trainee shall describe the relationship between Lookouts, Communications, Escape routes, and Safety Zones (LCES) and the Standard Firefighting Orders. (25-I.08)
- 3-09 Trainee shall analyze video presentations of incident situations where LCES was misapplied and determine what should have been done.
- 3-10 Trainee shall determine the minimum safety zone for a given set of incident facts.
- 3-11 Trainee shall describe the difference between deployment sites and safety zones.
- 3-12 Trainee shall explain the purpose of an After Action Review (AAR) and the role of the firefighter in the review process.

SECTION 4 FIREFIGHTER AND EQUIPMENT PREPAREDNESS

Upon the successful completion of this section, participants will be able to identify the requirements of the individual's preparedness and demonstrate the readiness of all tools, equipment and vehicles utilized on a wildland fire assignment.

- 4-01 Trainee shall list the benefits of maintaining a high level of physical fitness and health.
- 4-02 Trainee shall develop a list and describe types of personal gear needed for an extended period away from the wildland firefighter's home station.
- 4-03 Trainee shall explain the importance of keeping personal gear and assigned area clean and organized.
- 4-04 Trainee shall explain the importance of the proper use, maintenance, inspection, and accountability of assigned Personal Protective Equipment (PPE).
- 4-05 Trainee shall explain the functions of the fire shelter.
- 4-06 Trainee shall discuss the inspection and care of the fire shelter.
- 4-07 Trainee shall describe and demonstrate the correct deployment procedures for the fire shelter in twenty-five (25) seconds or less.
- 4-08 Trainee shall discuss commonly used hand tools in wildland fire fighting, and describe the function of each and how to inspect, maintain, and sharpen them. (25-I.01 O.)
- 4-09 Trainee shall describe the proper carrying, passing, spacing, and storing techniques for commonly used hand tools.
- 4-10 Trainee shall, given a description of fireline jobs and a choice of hand tools, select the hand tool that would be used for each job.
- 4-11 Trainee shall describe and demonstrate the safe operation of firing devices commonly used in wildland fire suppression.
- 4-12 Trainee shall discuss safety procedures to follow when traveling by:
 - 4-11.01 vehicle;
 - 4-11.02 helicopter; or
 - 4-11.02 on foot
- 4-13 Trainee shall discuss and demonstrate the safety inspection of a crew transport vehicle.
- 4-14 Trainee shall explain the importance of respecting cultural differences while on a fire assignment.

SECTION 5 WILDLAND SUPPRESSION STRATEGIES AND TACTICS

Upon the successful completion of this section, participants will be able to demonstrate proper wildland suppression activities including initial size-up, recognition of strategies, and application of tactics.

- 5-01 Trainee shall describe and perform the initial at-the-scene size-up process for wildland fire suppression. (25-I.05)
- 5-02 Trainee shall identify the information needed for successful size-up reporting. (25-I.05)
- 5-03 Trainee shall explain procedures for designating and protecting the area of fire origin for follow-up investigation.
- 5-04 Trainee shall describe three (3) methods for breaking the fire triangle.
- 5-05 Trainee shall describe the three (3) strategies of attack on a fire. (25-I.01)
- 5-06 Trainee shall describe various fire suppression techniques and their uses. (25-I.01)
- 5-07 Trainee shall describe types of firelines and the effective standards for fireline construction.
- 5-08 Trainee shall describe the threats and hazards to control lines.
- 5-09 Trainee shall describe two kinds of coordinated crew techniques used for fireline construction.
- 5-10 Trainee shall describe the proper follow-up procedures for a dozer or tractor plow fireline.
- 5-11 Trainee shall describe safety procedures to follow when working around engines, tractor plows, and dozers.
- 5-12 Trainee shall describe safety procedures to follow in an area where retardant or water drops are being made.
- 5-13 Trainee shall identify and describe common water-handling devices and delivery systems used during wildland fire suppression, and demonstrate the application of each.
- 5-14 Trainee shall identify and describe the operation of the most common type of pump used in wildland fire suppression.
- 5-15 Trainee shall identify the responsibilities and Personal Protective Equipment (PPE) of the portable pump operator.
- 5-16 Trainee shall describe safe brush truck operation techniques used in fire suppression.
- 5-17 Trainee shall describe and demonstrate how to properly retrieve, clean, inspect, and store deployed hose, fittings and accessories.
- 5-18 Trainee shall describe the hazards to hose lays and how to mark non-serviceable sections of hose and couplings.

SECTION 6 WILDLAND/URBAN INTERFACE

Upon the successful completion of this section, participants will be able to recognize the wildland/urban interface, the special considerations associated with that environment, and appropriate safety practices when responding to wildland/urban interface fires.

- 6-01 Trainee shall discuss the challenges associated with wildland/urban interface fires. (25-I.07)
- 6-02 Trainee shall discuss personnel safety concerns and the associated "Watch-Out" Situations in wildland/urban interface fires. (25-I.07)
- 6-03 Trainee shall define hazardous materials and explain the general guidelines when reacting to a possible hazardous material emergency.
- 6-04 Trainee shall list and describe the six (6) steps in the D.E.C.I.D.E. process.
- 6-05 Trainee shall list and explain the six (6) clues for detecting the presence of hazardous materials.

SECTION 7 MOP UP AND PATROLING

Upon the successful completion of this section, participants will be able to recognize the importance of effective mop-up and patrol activities on wildland fire.

- 7-01 Trainee shall describe how to extinguish burning materials during mop-up activities. (25-I.06)
- 7-02 Trainee shall describe systematic methods of mop up.
- 7-03 Trainee shall explain how four (4) of the senses aid in detecting burning materials.
- 7-04 Trainee shall discuss the technique of cold trailing on a fire perimeter and the importance of breaking up and dispersing machine piles and berms adjacent to the control line.
- 7-05 Trainee shall discuss the factors that determine the amount of additional work required for a water or retardant line and the associated safety concerns.
- 7-06 Trainee shall describe the process of strengthening the fire control line to facilitate holding.
- 7-07 Trainee shall describe factors to consider when patrolling a fire, such as looking for spot fire conditions and responding to them.

SECTION 8 FIELD EXERCISE

Upon the successful completion of this section, participants will be able to apply the knowledge and skills associated with wildland fire suppression to safely respond to wildland fire incidents.

- 8-01 Trainee shall demonstrate proper travel procedures en route to and from a fire. (25-I.03)
- 8-02 Trainee shall demonstrate the proper use and maintenance of appropriate hand tools and equipment during fire suppression activities.
- 8-03 Trainee shall, using appropriate PPE, demonstrate the proper inspection, maintenance, sharpening, carrying, passing, and spacing techniques for commonly used hand tools.
- 8-04 Trainee shall construct progressive and leap frog firelines.
- 8-05 Trainee shall demonstrate the ability to choose escape routes to promptly retreat to a safety zone.
- 8-06 Trainee shall demonstrate the ability to apply clear and concise communications on the fire ground.
- 8-07 Trainee shall demonstrate how to properly operate and maintain the backpack pump.
- 8-08 Trainee shall select, prepare, and demonstrate the safe use of the appropriate firing device for a given situation.
- 8-09 Trainee shall construct simple and progressive hose lays.
- 8-10 Trainee shall select and operate the appropriate system for the delivery of water on a wildland fire.
- 8-11 Trainee shall demonstrate the proper mop-up and patrol techniques.
- 8-12 Trainee shall participate in an After Action Review (AAR).

Reference Materials

The jurisdictional entity in which the Public Safety Telecommunicator serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1061: Professional Qualifications for Public Safety Telecommunicator

Minimum Requirements

The Certification Program offers two (2) levels of Public Safety Telecommunicator Certification:

Public Safety Telecommunicator I

Applicants must complete one (1) of the following:

- i. Public Safety Telecommunicator I coursework meeting the requirements of NFPA 1061; or
- ii. TEEX Public Safety Telecommunicator I course.

Public Safety Telecommunicator II

Applicants must complete one (1) of the following:

- i. Public Safety Telecommunicator II coursework meeting the requirements of NFPA 1061; or
- ii. TEEX Public Safety Telecommunicator II course.

Applicants must hold or apply concurrently for the following SFFMA certification:

- i. Public Safety Telecommunicator I

Reference Materials

The jurisdictional entity in which the Support Personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1584: Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises

Minimum Requirements

Applicants must complete each of the following:

1. the most current version of FEMA NIMS IS-100: Introduction to ICS;
2. the most current version of FEMA NIMS IS-700: Introduction to NIMS;
3. Emergency Vehicle Operator Course (EVOC) or Emergency Vehicle Driver Training (EVDT);
4. Traffic Safety or Traffic Management; and
5. First Aid including CPR and AED

This program is designed to provide specialty certification and training for Volunteer Firefighters, Volunteer Search & Rescue Technicians, Volunteer Emergency Medical Technicians and others as the Board may determine.

Technical Search & Rescue Personnel who have received training prior to passage of this program may, upon providing proof to a Board member and receiving approval, apply the training hours for certification. Any training hours earned prior to January 1, 2015 must be approved by the Board.

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following reference materials:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Principles of Vehicle Extrication

Other

Jurisdictionally developed codes and protocols

Minimum Requirements

1. Applicants must successfully pass:
 - a. all skills requirements; and
 - b. a comprehensive final examination
2. Applicants must complete all required objectives from the SFFMA Rescue Apprentice curriculum.

SECTION 1 SITE OPERATIONS

RA-01.01 Trainee shall identify the needed support resources, given a specific type of rescue incident, so that a resource cache is managed, scene lighting is provided for the tasks to be undertaken, environmental concerns are managed, personnel rehabilitation is facilitated, and the support operation facilitates rescue operational objectives.

NFPA 1006 5.2.1

RA-01.02 Trainee shall size up a rescue incident, given background information and applicable reference materials, so that the type of rescue is determined, the number of victims is identified, the last reported location of all victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, search parameters are identified, and information required to develop an incident action plan is obtained.

NFPA 1006 5.2.2

RA-01.03 Trainee shall manage incident hazards, given scene control barriers, personal protective equipment, requisite equipment, and available specialized resources, so that all hazards are identified, resource application fits the operational requirements, hazard isolation is considered, risks to rescuers and victims are minimized, and rescue time constraints are taken into account.

NFPA 1006 5.2.3

RA-01.04 Trainee shall manage resources in a rescue incident, given incident information, a means of communication, resources, tactical worksheets, personnel accountability protocol, applicable references, and standard operating procedures, so that references are utilized, personnel are accounted for, deployed resources achieve desired objectives, incident actions are documented, rescue efforts are coordinated, the command structure is established, task assignments are communicated and monitored, and actions are consistent with applicable regulations.

Completion of ICS-100 & 200 meets the requirements of this objective.

NFPA 1006 5.2.4

RA-01.05 Trainee shall conduct a discipline-specific search, given hazard-specific personal protective equipment, equipment pertinent to search mission, an incident location, and victim investigative information, so that search parameters are established; the victim profile is established; the entry and exit of all people either involved in the search or already within the search area are questioned and the information is updated and relayed to command; the personnel assignments match their expertise; all victims are located as quickly as possible; applicable technical rescue concerns are managed; risks to searchers are minimized; and all searchers are accounted for.

NFPA 1006 5.2.5

RA-01.06 Trainee shall perform ground support operations for helicopter activities, given a rescue scenario/incident, helicopter, operational plans, personal protective equipment, requisite equipment, and available specialized resources, so that rescue personnel are aware of the operational characteristics of the aircraft and demonstrate operational proficiency in establishing and securing landing zones and communicating with aircraft personnel until the assignment is complete.

NFPA 1006 5.2.6

RA-01.07 Trainee shall terminate a technical rescue operation, given an incident scenario, assigned resources, and site safety data, so that rescuer risk and site safety are managed, scene security is maintained and custody transferred to a responsible party, personnel and resources are returned to a state of readiness, record keeping and documentation occur, and post event analysis is conducted.

NFPA 1006 5.2.7

SECTION 2 VICTIM MANAGEMENT

RA-02.01 Trainee shall triage victims, given triage tags and local protocol, so that rescue versus recovery factors are assessed, triage decisions reflect resource capabilities, severity of injuries is determined, and victim care and rescue priorities are established in accordance with local protocol.

NFPA 1006 5.3.1

RA-02.02 Trainee shall move a victim in a low-angle environment, given victim transport equipment, litters, other specialized equipment, and victim removal systems specific to the rescue environment, so that the victim is moved without undue further injuries, risks to rescuers are minimized, the integrity of the victim's securement within the transfer device is established and maintained, the means of attachment to the rope rescue system is maintained, and the victim is removed from the hazard.

NFPA 1006 5.3.2

RA-02.03 Trainee shall access, assess, stabilize, package, and transfer victims, given diagnostic and packaging equipment and an actual or simulated EMS agency, so that rescuers and victim are protected from hazards, the victim's injuries or illnesses are managed, and the victim is delivered to the appropriate EMS provider with information regarding the history of the rescue activity and victim's condition.

NFPA 1006 5.3.3

SECTION 3 MAINTENANCE

RA-03.01 Trainee shall inspect and maintain hazard-specific personal protective equipment, given clothing or equipment for the protection of the rescuers, including respiratory protection, cleaning and sanitation supplies, maintenance logs or records, and such tools and resources as are indicated by the manufacturer's guidelines for assembly or disassembly of components during repair or maintenance, so that damage, defects, and wear are identified and reported or repaired, equipment functions as designed, and preventive maintenance has been performed and documented consistent with the manufacturer's recommendations.

NFPA 1006 5.4.1

RA-03.02 Trainee shall inspect and maintain rescue equipment, given maintenance logs and records, tools, and resources as indicated by the manufacturer's guidelines, equipment replacement protocol, and organizational standard operating procedure, so that the operational status of equipment is verified and documented, all components are checked for operation, deficiencies are repaired or reported as indicated by standard operating procedure, and items subject to replacement protocol are correctly disposed of and changed.

NFPA 1006 5.4.2

SECTION 4 ROPES AND RIGGING

RA-04.01 Trainee shall tie knots, bends, and hitches, given ropes and webbing, so that the knots are dressed, recognizable, and backed up as required.

NFPA 1006 5.5.1

RA-04.02 Trainee shall construct a single-point anchor system, given life safety rope and other auxiliary rope rescue equipment, so that the chosen anchor system fits the incident needs, meets or exceeds the expected load, and does not interfere with rescue operations, an efficient anchor point is chosen, the need for redundant anchor points is assessed and used as required, the anchor system is inspected and loaded prior to being placed into service, and the integrity of the system is maintained throughout the operation.

NFPA 1006 5.5.2

- RA-04.03 Trainee shall place edge protection, given life safety rope or webbing traversing a sharp or abrasive edge, edge protection, and other auxiliary rope rescue equipment, so that the rope or webbing is protected from abrasion or cutting, the rescuer is safe from falling while placing the edge protection, the edge protection is secure, and the rope or webbing is securely placed on the edge protection.
NFPA 1006 5.5.3
- RA-04.04 Trainee shall construct a simple rope mechanical advantage system, given life safety rope, carabiners, pulleys, rope grab devices, and auxiliary rope rescue equipment, so that the system constructed can accommodate the load, is efficient, and is connected to an anchor system and the load.
NFPA 1006 5.5.4
- RA-04.05 Trainee shall direct a team in the operation of a simple rope mechanical advantage system in a low-angle raising operation, given rescue personnel, a specified minimum travel distance for the load, an established rope rescue system incorporating a simple rope mechanical advantage system, a load to be moved, and an anchor system, so that the movement is controlled; a reset is accomplished; the load can be held in place when needed; operating methods do not stress the system to the point of failure; commands are used to direct the operation; and potential problems are identified, communicated, and managed.
NFPA 1006 5.5.5
- RA-04.06 Trainee shall function as a litter tender in a low-angle lowering or hauling operation, given a rope rescue system, a specified minimum travel distance for the litter tender, life safety harnesses, litters, bridles, and specialized equipment necessary for the environment, so that risks to victims and rescuers are minimized; the means of attachment to the rope rescue system is secure; and the terrain is negotiated while minimizing risks to equipment or persons.
NFPA 1006 5.5.6
- RA-04.07 Trainee shall construct a lowering system, given an anchor system, life safety rope(s), descent control device, and auxiliary rope rescue equipment, so that the system can accommodate the load, is efficient, is capable of controlling the descent, is capable of holding the load in place or lowering with minimal effort over the required distance, and is connected to an anchor system and the load.
NFPA 1006 5.5.7
- RA-04.08 Trainee shall direct a lowering operation in a low-angle environment, given rescue personnel, an established lowering system, a specified minimum travel distance for the load, and a load to be moved, so that the movement is controlled; the load can be held in place when needed; operating methods do not stress the system to the point of failure; rope commands are used to direct the operation; and potential problems are identified, communicated, and managed.
NFPA 1006 5.5.8
- RA-04.09 Trainee shall construct a belay system, given life safety rope, anchor systems, personal protective equipment, and rope rescue equipment, so that the system is capable of arresting a fall, a fall will not result in system failure, the system is not loaded unless actuated, actuation of the system will not injure or otherwise incapacitate the belayer, the belayer is not rigged into the equipment components of the system, and the system is suitable to the site and is connected to an anchor system and the load.
NFPA 1006 5.5.9

RA-04.10 Trainee shall operate a belay system during a lowering or raising operation, given an operating lowering or hauling system, a specified minimum travel distance for the load, a belay system, and a load, so that the belay device system is not actuated during operation of the primary rope rescue system, the belay system is prepared for actuation at all times during the operation, the belayer is attentive at all times during the operation, the load's position is continually monitored, and the belayer moves rope through the belay device as designed.

NFPA 1006 5.5.10

RA-04.11 Trainee shall belay a falling load in a high-angle environment, given a belay system and a dropped load, so that the belay line is not taut until the load is falling, the belay device is actuated when the load falls, the fall is arrested, the belayer utilizes the belay system as designed, and the belayer is not injured or otherwise incapacitated during actuation of the belay system.

NFPA 1006 5.5.10

RA-04.12 Trainee shall conduct a system safety check, given a rope rescue system and rescue personnel, so that a physical/visual check of the system is made to ensure proper rigging, a load test is performed prior to life-loading the system, and verbal confirmation of these actions is announced and acknowledged before life-loading the rope rescue system.

NFPA 1006 5.5.11

This program is designed to provide specialty certification and training for Volunteer Firefighters, Volunteer Search & Rescue Technicians, Volunteer Emergency Medical Technicians and others as the Board may determine.

Technical Search & Rescue Personnel who have received training prior to passage of this program may, upon providing proof to a Board member and receiving approval, apply the training hours for certification. Any training hours earned prior to January 1, 2015 must be approved by the Board.

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following reference materials:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Principles of Vehicle Extrication

Other

Jurisdictionally developed codes and protocols

Minimum Requirements

The Certification Program offers two (2) levels of Rope Rescue Technician Certification:

Rope Rescue Level I

Applicants must:

1. meet all qualifications for, **and hold or apply concurrently for** the SFFMA Rescue Apprentice
AND
2. have completed or hold one of the following:
 - a. Rope Rescue Level I as defined by NFPA 1006;
 - b. TEEX Rope Rescue I; or
 - c. SFFMA Rope Rescue Level I coursework

Rope Rescue Level II

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Rope Rescue Level IAND
2. have completed or hold one of the following:
 - a) Rope Rescue Level II as defined by NFPA 1006;
 - b) TEEX Rope Rescue II; or
 - c) SFFMA Rope Rescue Level II coursework

Curriculum for Rope Rescue Level I

RR-01.01 Trainee shall direct a team in the operation of a simple rope mechanical advantage system in a high-angle raising operation, given rescue personnel, an established rope rescue system incorporating a simple rope mechanical advantage system, a specified minimum travel distance for the load, a load to be moved, and an anchor system, so that the movement is controlled, a reset is accomplished, the load can be held in place when needed, operating methods do not stress the system to the point of failure, commands are used to direct the operation, and potential problems are identified, communicated, and managed.

NFPA 1006 6.1.1

RR-01.02 Trainee shall direct a lowering operation in a high-angle environment, given rescue personnel, an established lowering system, a specified minimum travel distance for the load, and a load to be moved, so that the movement is controlled, the load can be held in place when needed, operating methods do not stress the system to the point of failure, rope commands are used to direct the operation, and potential problems are identified, communicated, and managed, held in place when needed, operating methods do not stress the system to the point of failure, rope commands are used to direct the operation, and potential problems are identified, communicated, and managed.

NFPA 1006 6.1.2

RR-01.03 Trainee shall construct a multiple-point anchor system, given life safety rope and other auxiliary rope rescue equipment, so that the chosen anchor system fits the incident needs, the system strength meets or exceeds the expected load and does not interfere with rescue operations, equipment is visually inspected prior to being put in service, the nearest anchor point that will support the load is chosen, the anchor system is system safety checked prior to being placed into service, the integrity of the system is maintained throughout the operation, and weight will be distributed between more than one anchor point.

NFPA 1006 6.1.3

RR-01.04 Trainee shall construct a compound rope mechanical advantage system, given a load, an anchor system, life safety rope, carabiners, pulleys, rope grab devices, and rope rescue equipment, so that the system constructed accommodates the load and reduces the force required to lift the load, operational interference is factored and minimized, the system is efficient, a system safety check is completed, and the system is connected to an anchor system and the load.

NFPA 1006 6.1.4

RR-01.05 Trainee shall construct a fixed rope system, given an anchor system, a life safety rope, and rope rescue equipment, so that the system constructed can accommodate the load, is efficient, and is connected to an anchor system and the load, and a system safety check is performed and the results meet the incident requirements for descending or ascending operations.

NFPA 1006 6.1.5

RR-01.06 Trainee shall direct the operation of a compound rope mechanical advantage system in a high-angle environment, given a rope rescue system incorporating a compound rope mechanical advantage system and a load to be moved, and a specified minimum travel distance for the load, so that a system safety check is performed; a reset is accomplished, and the movement is controlled; the load can be held in place when needed; operating methods do not stress the system to the point of failure; operational commands are clearly communicated; and potential problems are identified, communicated, and managed.

NFPA 1006 6.1.6

RR-01.07 Trainee shall ascend a fixed rope in a high-angle environment, given an anchored fixed rope system, a specified minimum distance for the rescuer, a system to allow ascent of a fixed rope, a structure, a belay system, a life safety harness worn by the person ascending, and personal protective equipment, so that the person ascending is secured to the fixed rope in a manner that will not allow him or her to fall; the person ascending is attached to the rope by means of an ascent control device(s) with at least two points of contact; injury to the person ascending is minimized; the person ascending can stop at any point on the fixed rope and rest suspended by his or her harness; the system will not be stressed to the point of failure; the person ascending can convert his or her ascending system to a descending system; obstacles are negotiated; the system is suitable for the site; and the objective is reached.

NFPA 1006 6.1.7

RR-01.08 Trainee shall descend a fixed rope in a high-angle environment, given an anchored fixed-rope system, a specified minimum travel distance for the rescuer, a system to allow descent of a fixed rope, a belay system, a life safety harness worn by the person descending, and personal protective equipment, so that the person descending is attached to the fixed rope in a manner that will not allow him or her to fall; the person descending is attached to the rope by means of a descent control device; the speed of descent is controlled; injury to the person descending is minimized; the person descending can stop at any point on the fixed rope and rest suspended by his or her harness; the system will not be stressed to the point of failure; the system is suitable for the site; and the objective is reached.

NFPA 1006 6.1.8

Curriculum for Rope Rescue Level II

RR-02.01 Trainee shall complete an assignment while suspended from a rope rescue system in a high-angle environment, given a rope rescue system, an assignment, life safety harnesses, litters, bridles, and specialized equipment necessary for the environment, so that risks to victims and rescuers are minimized; the means of attachment to the rope rescue system is secure; selected specialized equipment facilitates efficient rescuer movement; and specialized equipment does not unduly increase risks to rescuers or victims.

NFPA 1006 6.2.1

RR-02.02 Trainee shall manage the movement of the victim as the rescuer in a high-angle environment, given a rope rescue system, a specified minimum travel distance for the victim, victim transfer devices, and specialized equipment necessary for the environment, so that risks to victims and rescuers are minimized; undesirable victim movement within the transfer device is minimized; the means of attachment to the rope rescue system is maintained; the victim is removed from the hazard; selected specialized equipment facilitates efficient victim movement; and the victim can be transported to the local EMS provider.

NFPA 1006 6.2.2

RR-02.03 Trainee shall function as a litter tender in a high-angle lowering or hauling operation, given a rope rescue system, a specified minimum travel distance for the litter tender, life safety harnesses, litters, bridles, and specialized equipment necessary for the environment, so that risks to victims and rescuers are minimized; the means of attachment to the rope rescue system is secure; and the terrain is negotiated while minimizing risks to equipment or persons.

NFPA 1006 6.2.3

RR-02.04 Trainee shall direct a team in the removal of a victim suspended from rope or webbing in a high-angle environment, given a victim suspended by a harness attached to anchored rope or webbing, devices for removal of the victim from the rope or webbing, and a means of removal of the victim to the ground or other safe area, so that risks to victims and rescuers are minimized, injury to the victim is minimized, the means of attachment to the rope rescue system is maintained, the victim is removed from the rope or webbing, and the victim is brought to a safe area for transfer to EMS.

NFPA 1006 6.2.4

RR-02.05 Trainee shall direct a team in the construction of a system intended to move a suspended rescue load along a horizontal path to avoid an obstacle, given rescue personnel, life safety rope, rope rescue equipment, and a suitable anchor capable of supporting the load, so that personnel assignments are made and clearly communicated; the system constructed can accommodate the load; tension applied within the system will not exceed the rated capacity of any of its components' parts; a system safety check is performed; movement on the load is efficient; and loads can be held in place or moved with minimal effort over the required distance.

NFPA 1006 6.2.5

RR-02.06 Trainee shall direct a team in the operation of a rope system to move a suspended rescue load along a horizontal path, given rescue personnel, an established system, a target for the load, a load to be moved, and personal protective equipment, so that the movement is controlled; the load is held in place when needed; operating methods do not stress the system to the point of failure; personnel assignments are made; tasks are communicated; and potential problems are identified, communicated and managed.

NFPA 1006 6.2.6

RR-02.07 Trainee shall access a victim in a high-angle environment using techniques that require rescuers to climb up or down natural or manmade structures given a belay, a belay system, or other mechanisms, so that the risks from a fall are minimized or eliminated; the patient is accessed; and the objective is achieved.

NFPA 1006 6.2.7

RR-02.08 Trainee shall isolate and manage potentially harmful energy sources found in erected structures, including power systems and construction materials, given personal protective equipment, so that all hazards are identified, systems are managed, beneficial system use is evaluated, and hazards to rescue personnel and victims are minimized.

NFPA 1006 6.2.8

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Confined Space Rescue Certification:

Confined Space Rescue Level I

Applicants must:

1. meet all qualifications for, **and hold or apply concurrently for** the SFFMA Rescue Apprentice
AND
2. have completed or hold one of the following:
 - a. SFFMA Confined Space Rescue Level I coursework
 - b. Confined Space Rescue Level I as defined by NFPA 1006;
 - c. TEEK Confined Space Rescue I.

Confined Space Rescue Level II

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Confined Space Rescue Level I
AND
2. have completed or hold one of the following:
 - a. SFFMA Confined Space Rescue Level II coursework
 - b. Confined Space Rescue Level II as defined by NFPA 1006;
 - c. TEEK Confined Space Rescue II

Curriculum for Confined Space Rescue Level I

- CS-01.01 Conduct monitoring of the environment, given monitoring equipment reference material, personal protective equipment, accurately calibrated detection and monitoring equipment, and size-up information, so that a representative sample of the space is obtained, accurate readings are made, readings are documented, and effects of ventilation in determining atmospheric conditions and the conditions of the space have been determined for exposures to existing or potential environmental hazards.
NFPA 1006 7.1.1
- CS-01.02 Prepare for entry into the confined space, given a confined space and a confined space rescue tool kit, so that victim communication is established when possible, continuous atmospheric monitoring is initiated, rescuer readiness is verified, rescuers' limitations are identified and evaluated, rescuers unsuitable to entry operations are reassigned and replaced, route and methods of entry are determined, and rescuer evacuation is planned.
NFPA 1006 7.1.2
- CS-01.03 Enter a confined space, given personal protective equipment; safety, communication, and operational protocols; and a confined space rescue tool kit, so that the victim is contacted, controlled entry is established and maintained, atmosphere is continuously monitored, the victim's mental and physical conditions are further assessed, patient care is initiated, the patient is packaged to restrictions of the space, and patient removal can be initiated
NFPA 1006 7.1.3
- CS-01.04 Package the victim for removal from a confined space, given a confined space rescue tool kit, so that damage to the rescue/retrieval equipment is prevented, the victim is given the smallest possible profile, and further harm to the victim is minimized
NFPA 1006 7.1.4
- CS-01.05 Remove all entrants from a confined space, given personal protective equipment, rope and related rescue and retrieval systems, personnel to operate rescue and retrieval systems, and a confined space rescue tool kit, so that internal obstacles and hazards are negotiated, all persons are extricated from a space in the selected transfer device, the victim and rescuers are decontaminated as necessary, and the victim is delivered to the EMS provider.
NFPA 1006 7.1.5

Curriculum for Confined Space Rescue Level II

CS-02.01 Preplan a confined space incident, given applicable guidelines and regulations and a preplan form, so that a standard approach is used during a confined space rescue emergency, hazards are recognized and documented, isolation methods are identified and documented, all accesses to the location of the entry opening are identified and documented, all types of entry openings are identified and documented, and internal configurations and special resource needs are documented for future rescuer use.

NFPA 1006 7.2.1

CS-02.02 Assess the incident, given a preplan of the space or size-up information, information from technical resources, monitoring equipment, and personal protective equipment required to perform the assessment, so that general area and space-specific hazards are identified, bystanders and victims are interviewed, immediate and ongoing monitoring of the space is performed, the victims' conditions and location are determined, a risk–benefit analysis is performed, methods of ingress and egress for rescuer and victims are identified, rescue systems for victim removal are determined, and an emergency means of retrieval for rescue entrants is established.

NFPA 1006 7.2.2

CS-02.03 Control hazards, given personal protective equipment and a confined space tool kit, so that the rescue area is established; access to the incident scene is controlled; rescuers are protected from exposure to hazardous materials and atmospheres, all forms of harmful energy releases, and physical hazards; and victims are protected from further harm.

NFPA 1006 7.2.3

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Trench Rescue Certification:

Trench Rescue Level I

Applicants must:

1. meet all qualifications for, **and hold or apply concurrently for** the SFFMA Rescue Apprentice AND
2. have completed or hold one of the following:
 - a. SFFMA Trench Rescue Level I coursework
 - b. Trench Rescue Level I as defined by NFPA 1006;
 - c. TEEX Trench Rescue I.

Trench Rescue Level II

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Trench Rescue Level IAND
2. have completed or hold one of the following:
 - a. SFFMA Trench Rescue Level II coursework
 - b. Trench Rescue Level II as defined by NFPA 1006;
 - c. TEEX Trench Rescue II

Curriculum for Trench Rescue Level I

(NFPA 1670/1006 Awareness/Operations Level)

TR-01.01 Trainee shall conduct a size-up of a collapsed trench, given an incident and background information and applicable reference material, so that the size-up is conducted within the scope of the incident management system; the existing and potential conditions are evaluated within the trench and the rescue area; general hazards are identified; a witness or “competent person” is secured; the probability of victim existence, number, condition, and location is determined; potential for rapid, non-entry rescues or victim self-rescue is recognized; needed personnel, supply, and equipment resources are evaluated; and utility involvement and location are determined.

NFPA 1006 8.1.1

TR-01.02 Trainee shall implement a trench emergency action plan, given size-up information and a trench incident, so that initial size-up information is utilized; pre-briefing is given to rescuers; documentation is ongoing; the collapse zone is established; a risk–benefit analysis is conducted; rapid, non-entry rescues or victim self-rescues are performed; the rescue area and general area are made safe; strategy and tactics are confirmed and initiated for existing and potential conditions; rapid intervention team and operational tasks are assigned; other hazards are mitigated; rescue resources are staged; and a protective system is being utilized.

NFPA 1006 8.1.2

TR-01.03 Trainee shall implement support operations at trench emergencies, given an assignment, and equipment and other resources, so that a resource cache is managed, scene lighting is provided for the tasks to be undertaken, environmental concerns are managed, a cut station is established, supplemental power is provided for all equipment, atmospheric monitoring and ventilation are implemented, personnel rehab is facilitated, operations proceed without interruption, extrication methods are in place, and the support operations facilitate rescue operational objectives.

NFPA 1006 8.1.3

TR-01.04 Trainee shall support a nonintersecting straight wall trench of 2.4 m (8 ft) or less as a member of a team, given size-up information, an action plan, a trench tool kit, and an assignment, so that strategies to minimize the further movement of soil are implemented effectively; trench walls, lip, and spoil pile are monitored continuously; rescue entry team(s) remains in a safe zone; any slough-in and wall shears are mitigated; emergency procedures and warning systems are established and understood by participating personnel; incident-specific personal protective equipment is utilized; physical hazards are identified and managed; victim and rescuer protection is maximized; victim extrication methods are considered; and a rapid intervention team is staged.

NFPA 1006 8.1.4

TR-01.05 Release a victim from soil entrapment by components of a nonintersecting collapsed trench of 2.4 m (8 ft) or less in depth, given personal protective equipment, a trench rescue tool kit, and specialized equipment, so that hazards to rescue personnel and victims are minimized, considerations are given to crush syndrome and other injuries, techniques are used to enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing trench shoring system.

NFPA 1006 8.1.5

TR-01.06 Trainee shall remove a victim from a trench, given a disentangled victim, a basic first aid kit, and victim packaging resources, so that basic life functions are supported as required, the victim is evaluated for signs of crush syndrome, methods and packaging devices selected are compatible with intended routes of transfer, universal precautions are employed to protect personnel from blood-borne pathogens, and extraction times meet time constraints for medical management.

NFPA 1006 8.1.6

TR-01.07 Trainee shall disassemble support systems at a trench emergency incident, given personal protective equipment, trench tool kit, and removal of victim(s), so that soil movement is minimized, all rescue equipment is removed from the trench, sheeting and shoring are removed in the reverse order of their placement, emergency protocols and safe zones in the trench are adhered to, rescue personnel are removed from the trench, the last supporting shores are pulled free with ropes, equipment is cleaned and serviced, reports are completed, and a post-briefing is performed.

NFPA 1006 8.1.7

Curriculum for Trench Rescue Level II
(NFPA 1670/1006 Technician Level)

TR-02.01 Trainee shall support an intersecting trench as a member of a team, given size-up information and an action plan, a trench tool kit, and an assignment, so that strategies to minimize the further movement of soil are implemented effectively; trench walls, lip, and spoil pile are monitored continuously; rescue entry team(s) in the trench remains in a safe zone; any slough-in and wall shears are mitigated; emergency procedures and warning systems are established and understood by participating personnel; incident-specific personal protective equipment is utilized; physical hazards are identified and managed; victim protection is maximized; victim extrication methods are considered; and a rapid intervention team is staged.

NFPA 1006 8.2.1

TR-02.02 Trainee shall install supplemental sheeting and shoring for each 2 ft (0.61 m) of depth dug below an existing approved shoring system, given size-up information, an action plan, and a trench tool kit, so that the movement of soil is minimized effectively, initial trench support strategies are facilitated, rescue entry team safe zones are maintained, excavation of entrapping soil is continued, victim protection is maximized, victim extrication methods are considered, and a rapid intervention team is staged.

NFPA 1006 8.2.2

TR-02.03 Trainee shall construct load stabilization systems, given an assignment, personal protective equipment, and a trench tool kit, so that the stabilization system will support the load safely, the system is stable, and the assignment is completed.

NFPA 1006 8.2.3

TR-02.04 Trainee shall lift a load, given a trench tool kit, so that the load is lifted the required distance to gain access; settling or dropping of the load is prevented; control and stabilization are maintained before, during, and after the lift; and operational objectives are attained.

NFPA 1006 8.2.4

TR-02.05 Trainee shall coordinate the use of heavy equipment, given personal protective equipment, means of communication, equipment and operator, and an assignment, so that operator capabilities and limitations for task are evaluated, common communications are maintained, equipment usage supports the operational objectives, and hazards are avoided.

NFPA 1006 8.2.5

TR-02.06 Trainee shall release a victim from entrapment by components of a collapsed trench, given personal protective equipment, a trench rescue tool kit, and specialized equipment, so that hazards to rescue personnel and victims are minimized, considerations are given to crush syndrome and other injuries, techniques are used to enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing trench shoring system

NFPA 1006 8.2.6

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Structural Collapse Rescue Certification:

- Level I shall apply to individuals who identify hazards, use equipment, and apply **limited** techniques specified in this standard to perform technical rescue operations.
- Level II shall apply to individuals who identify hazards, use equipment, and apply **advanced** techniques specified in this standard to perform technical rescue operations

Structural Collapse Rescue Level I

The applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the SFFMA Rescue Apprentice AND
2. Applicants must complete the following:
 - a. SFFMA Structural Collapse Rescue Level I coursework; or
 - b. Structural Collapse Rescue Level I as defined by NFPA 1006; or
 - c. TEEK Structural Collapse Rescue I.

Structural Collapse Rescue Level II

The applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Structural Collapse Rescue Level IAND
2. have completed or hold one of the following:
 - a. SFFMA Structural Collapse Rescue Level II coursework; or
 - b. Structural Collapse Rescue Level II as defined by NFPA 1006; or
 - c. TEEK Structural Collapse Rescue II

Curriculum for Structural Collapse Rescue Level I

- SC-01.01 Conduct a size-up of a light frame collapsed structure, given an incident and specific incident information, so that existing and potential conditions within the structure and the immediate periphery are evaluated, needed resources are defined, hazards are identified, construction and occupancy types are determined, collapse type is identified if possible, the need for rescue is assessed, a scene security perimeter is established, and the size-up is conducted within the scope of the incident management system.
NFPA 1006 9.1.1
- SC-01.02 Determine potential victim locations in light frame construction collapse incidents, given size-up information, a structural collapse tool kit, the type of construction and occupancy, time of day, and collapse pattern, so that search areas are established and victims can be located.
NFPA 1006 9.1.2
- SC-01.03 Develop a collapse rescue incident action plan, given size-up information and a light frame collapsed structure, so that initial size-up information is utilized, an incident management system is incorporated, existing and potential conditions within the structure and the immediate periphery are included, specialized resource needs are identified, work perimeters are determined, collapse type/category and associated hazards are identified, construction and occupancy types are determined, incident objectives are established, and scene security measures are addressed.
NFPA 1006 9.1.3
- SC-01.04 Implement a collapse rescue incident action plan, given an action plan and a light frame collapsed structure, so that pertinent information is used, an incident management system is established and implemented, monitoring of dynamic conditions internally and externally is established, specialized resources are requested, hazards are mitigated, victim rescue and extraction techniques are consistent with collapse and construction type, and perimeter security measures are established.
NFPA 1006 9.1.4
- SC-01.05 Search a light frame collapsed structure, given personal protective equipment, the structural collapse tool kit, an assignment, operational protocols, and size-up information, so that all victim locations and potential hazards are identified, marked, and reported; protocols are followed; the mode of operation can be determined; and rescuer safety is maintained.
NFPA 1006 9.1.5
- SC-01.06 Stabilize a collapsed light frame structure as a member of a team, given size-up information, a specific pattern of collapse, a basic structural collapse tool kit, and an assignment, so that strategies to effectively minimize the movement of structural components are identified and implemented; hazard warning systems are established and understood by participating personnel; incident-specific personal protective equipment is identified, provided, and utilized; physical hazards are identified; confinement, containment, and avoidance measures are discussed; and a rapid intervention team is established and staged.
NFPA 1006 9.1.6
- SC-01.07 Implement collapse support operations at a rescue incident, given an assignment and available resources, so that scene lighting is adequate for the tasks to be undertaken, environmental concerns are managed, personnel rehabilitation is facilitated, and the support operations facilitate rescue operational objectives.
NFPA 1006 9.1.7

- SC-01.08 Release a victim from entrapment by components of a light frame collapsed structure, given personal protective equipment and resources for breaching, breaking, lifting, prying, shoring, and/or otherwise moving or penetrating the offending structural component, so that hazards to rescue personnel and victims are minimized, considerations are given to crush syndrome, techniques enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing structure or structural support systems.
NFPA 1006 9.1.8
- SC-01.09 Remove a victim from a light frame collapse incident, given a disentangled victim, a basic first aid kit, and victim packaging resources, so that basic life functions are supported as required, victim is evaluated for signs of crush syndrome, advanced life support is called if needed, methods and packaging devices selected are compatible with intended routes of transfer, universal precautions are employed to protect personnel from blood-borne pathogens, and extraction times meet time constraints for medical management.
NFPA 1006 9.1.9
- SC-01.10 Lift a heavy load as a team member, given a structural collapse tool kit and a load to be lifted, so that the load is lifted; control and stabilization are maintained before, during, and after the lift; and access can be gained.
NFPA 1006 9.1.10
- SC-01.11 Move a heavy load as a team member, given a structural collapse tool kit, so that the load is moved the required distance to gain access and so that control is constantly maintained.
NFPA 1006 9.1.11
- SC-01.12 Breach light frame structural components, given an assignment, personal protective equipment, various types of construction materials, and a structural collapse tool kit, so that the opening supports the rescue objectives, the necessary tools are selected, structural stability is maintained, and the methods utilized are safe and efficient.
NFPA 1006 9.1.12
- SC-01.13 Construct cribbing systems, given an assignment, personal protective equipment, a structural collapse tool kit, various lengths and dimensions of construction-grade lumber, wedges, and shims, so that the cribbing system will safely support the load, the system is stable, and the assignment is completed.
NFPA 1006 9.1.13

Curriculum for Structural Collapse Rescue Level II

- SC-02.01 Conduct a size-up of a collapsed heavy construction–type structure, given an incident and specific incident information, so that existing and potential conditions within the structure and the immediate periphery are evaluated, needed resources are defined, hazards are identified, construction and occupancy types are determined, collapse type is identified if possible, the need for rescue is assessed, a scene security perimeter is established, and the size-up is conducted within the scope of the incident management system.
NFPA 1006 9.2.1
- SC-02.02 Determine potential victim locations in a heavy construction–type incident, given size-up information, a structural collapse tool kit, the type of construction and occupancy, time of day, and collapse pattern, so that search areas are established and victims can be located.
NFPA 1006 9.2.2
- SC-02.03 Develop a collapse rescue incident action plan, given size-up information and a heavy collapsed structure, so that initial size-up information is utilized, an incident management system is incorporated, existing and potential conditions within the structure and the immediate periphery are included, specialized resource needs are identified, work perimeters are determined, collapse type/category and associated hazards are identified, construction and occupancy types are determined, incident objectives are established, and scene security measures are addressed.
NFPA 1006 9.2.3
- SC-02.04 Implement a collapse rescue incident action plan, given an action plan and a heavy construction–type collapsed structure, so that pertinent information is used, an incident management system is established and implemented, monitoring of dynamic conditions internally and externally is established, specialized resources are requested, hazards are mitigated, victim rescue and extraction techniques are consistent with collapse and construction type, and perimeter security measures are established.
NFPA 1006 9.2.4
- SC-02.05 Search a heavy construction–type collapsed structure, given personal protective equipment, the structural collapse tool kit, an assignment, operational protocols, and size-up information, so that all victim locations and potential hazards are identified, marked, and reported; protocols are followed; the mode of operation can be determined; and rescuer safety is maintained.
NFPA 1006 9.2.5
- SC-02.06 Stabilize a collapsed heavy construction–type structure as a member of a team, given size-up information, a specific pattern of collapse, a basic structural collapse tool kit, and an assignment, so that strategies to effectively minimize the movement of structural components are identified and implemented; hazard warning systems are established and understood by participating personnel; incident-specific personal protective equipment is identified, provided, and utilized; physical hazards are identified; confinement, containment, and avoidance measures are discussed; and a rapid intervention team is established and staged.
NFPA 1006 9.2.6
- SC-02.07 Implement collapse support operations at a rescue incident, given an assignment and available resources, so that scene lighting is adequate for the tasks to be undertaken, environmental concerns are managed, personnel rehabilitation is facilitated, and the support operations facilitate rescue operational objectives.
NFPA 1006 9.2.7
- SC-02.08 Release a victim from entrapment by components of a heavy construction–type collapsed structure, given personal protective equipment and resources for breaching, breaking, lifting, prying, shoring,

and/or otherwise moving or penetrating the offending structural component, so that hazards to rescue personnel and victims are minimized, considerations are given to crush syndrome, techniques enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing structure or structural support systems.

NFPA 1006 9.2.8

SC-02.09 Remove a victim from a heavy construction–type collapse incident, given a disentangled victim, a basic first aid kit, and victim packaging resources, so that basic life functions are supported as required, victim is evaluated for signs of crush syndrome, advanced life support is called if needed, methods and packaging devices selected are compatible with intended routes of transfer, universal precautions are employed to protect personnel from blood-borne pathogens, and extraction times meet time constraints for medical management.

NFPA 1006 9.2.9

SC-02.10 Lift a heavy load as a team member, given a structural collapse tool kit and a load to be lifted, so that the load is lifted; control and stabilization are maintained before, during, and after the lift; and access can be gained.

NFPA 1006 9.2.10

SC-02.11 Move a heavy load as a team member, given a structural collapse tool kit, so that the load is moved the required distance to gain access and so that control is constantly maintained.

NFPA 1006 9.2.11

SC-02.12 Breach heavy structural components, given an assignment, personal protective equipment, various types of construction materials, and a structural collapse tool kit, so that the opening supports the rescue objectives, the necessary tools are selected, structural stability is maintained, and the methods utilized are safe and efficient.

NFPA 1006 9.2.12

SC-02.13 Construct cribbing systems, given an assignment, personal protective equipment, a structural collapse tool kit, various lengths and dimensions of construction-grade lumber, wedges, and shims, so that the cribbing system will safely support the load, the system is stable, and the assignment is completed.

NFPA 1006 9.2.13

SC-02.14 Stabilize a collapsed heavy construction–type structure as a member of a team, given size-up information, hazard-specific personal protective equipment, an assignment, a specific pattern of collapse, a structural collapse tool kit, specialized equipment necessary to complete the task, and engineering resources if needed, so that hazard warning systems are established and understanding by team members is verified, all unstable structural components that can impact the work and egress routes are identified, alternative egress routes are established when possible, expert resource needs are determined and communicated to command, load estimates are calculated for support system requirements, all shoring systems meet or exceed loadbearing demands, shoring systems are monitored continuously for integrity, safety protocols are followed, a rapid intervention crew (RIC) is established and staged to aid search and rescue personnel in the event of entrapment, an accountability system is established, atmospheric monitoring is ongoing, and progress is communicated as required.

NFPA 1006 9.2.14

SC-02.15 Cut through structural steel, given a structural collapse tool kit, personal protective equipment, and an assignment, so that the steel is efficiently cut, the victim and rescuer are protected, fire control measures are in place, and the objective is accomplished.

NFPA 1006 9.2.15

SC-02.16 Coordinate the use of heavy equipment, given personal protective equipment, means of communication, equipment and operator, and an assignment, so that common communications are established, equipment usage supports the operational objective, hazards are avoided, and rescuer and operator safety protocols are followed.

NFPA 1006 9.2.16

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following reference materials:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Principles of Vehicle Extrication

Other

Jurisdictionally developed codes and protocols

Minimum Requirements

The Certification Program offers two (2) levels of Vehicle Rescuer Certification:

Vehicle Rescue Level I

Applicants must:

1. meet all qualifications for, **and hold or apply concurrently for** the SFFMA Rescue Apprentice AND
2. have completed or hold one of the following:
 - a. SFFMA Vehicle Rescue Level I coursework;
 - b. Vehicle Rescue Level I as defined by NFPA 1006; or
 - c. TEEX Vehicle Extrication Technician **I & II** coursework (this also includes courses like Katy Rescue School, etc.)
3. Vehicle Extrication Technician II certifications with an effective date prior to January 1, 2015 are grandfathered into the Vehicle Rescue Level I certification.
4. The Certification Board suggests it will take a class of 40 individuals 24 hour to cover the objectives in this section (actual time may vary based on class size).

Vehicle Rescue Level II

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Vehicle Rescue Level I (or Vehicle Extrication Technician II issued prior to January 1, 2015)
 2. have completed or hold one of the following:
 - a. SFFMA Vehicle Rescue Level II coursework;
 - b. Vehicle Rescue Level II as defined by NFPA 1006; or
 - c. TEEX Vehicle Extrication Technician III coursework.
 3. Vehicle Extrication Technician III certifications with an effective date prior to January 1, 2015 are grandfathered into the Vehicle Rescue Level II certification.
 4. The Certification Board suggests it will take a class of 40 individuals 24 hour to cover the objectives in this section (actual time may vary based on class size).
- C. Curriculum for Vehicle Extrication Technician

Curriculum for Vehicle Rescue Level I

- VR-01.01 Trainee shall plan for a vehicle incident, and conduct an initial and ongoing size-up, given agency guidelines, planning forms, and an operations-level vehicle incident or simulation, so that a standard approach is used during training and operational scenarios; emergency situation hazards are identified; isolation methods and scene security measures are considered; fire suppression and safety measures are identified; vehicle stabilization needs are evaluated; and resource needs are identified and documented for future use.
NFPA 1006 10.1.1
- VR-01.02 Trainee shall establish “scene” safety zones, given scene security barriers, incident location, incident information, and personal protective equipment, so that action hot, warm, and cold safety zones are designated, zone perimeters are consistent with incident requirements, perimeter markings can be recognized and understood by others, zone boundaries are communicated to incident command, and only authorized personnel are allowed access to the rescue scene.
NFPA 1006 10.1.2
- VR-01.03 Trainee shall establish fire protection, given an extrication incident and fire control support, so that fire and explosion potential is managed and fire hazards and rescue objectives are communicated to the fire support team.
NFPA 1006 10.1.3
- VR-01.04 Trainee shall stabilize a common passenger vehicle, given a vehicle tool kit and personal protective equipment, so that the vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 10.1.4
- VR-01.05 Trainee shall isolate and manage potentially harmful energy sources, including propulsion power, restraint systems, and construction materials, given passenger vehicle, vehicle tool kit, and personal protective equipment, so that all hazards are identified; systems are managed; beneficial system use is evaluated; and hazards to rescue personnel and victims are minimized.
NFPA 1006 10.1.5
- VR-01.06 Trainee shall determine the common passenger vehicle access and egress points, given the structural and damage characteristics and potential victim location(s), so that the victim location(s) is identified; entry and exit points for victims, rescuers, and equipment are designated; flows of personnel, victim, and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise vehicle stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are enforced.
NFPA 1006 10.1.6
- VR-01.07 Trainee shall create access and egress openings for rescue from a common passenger vehicle, given a vehicle tool kit, specialized tools and equipment, personal protective equipment, and an assignment, so that the movement of rescuers and equipment complements victim care and removal; an emergency escape route is provided; the technique chosen is expedient; victim and rescuer protection is afforded; and vehicle stability is maintained.
NFPA 1006 10.1.7

- VR-01.08 Trainee shall disentangle victim(s), given an operations-level extrication incident, a vehicle tool kit, personal protective equipment, and specialized equipment, so that undue victim injury is prevented; victim protection is provided; and stabilization is maintained.
NFPA 1006 10.1.8
- VR-01.09 Trainee shall remove a packaged victim to a designated safe area, as a member of a team, given a victim transfer device, a designated egress route, and personal protective equipment, so that the team effort is coordinated; the designated egress route is used; the victim is removed without compromising victim packaging; undue injury is prevented; and stabilization is maintained.
NFPA 1006 10.1.9

Curriculum for Vehicle Rescue Level II

VR-02.01 Trainee shall plan for a commercial/heavy vehicle incident, and conduct initial and ongoing size-up, given agency guidelines, planning forms, and an operations-level vehicle incident or simulation, so that a standard approach is used during training and operational scenarios; emergency situation hazards are identified; isolation methods and scene security measures are considered; fire suppression and safety measures are identified; vehicle stabilization needs are evaluated; and resource needs are identified and documented for future use.

NFPA 1006 10.2.1

VR-02.02 Trainee shall stabilize commercial/heavy vehicles, given a vehicle and machinery tool kit and personal protective equipment, so that the vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.

NFPA 1006 10.2.2

VR-02.03 Trainee shall determine the heavy vehicle access and egress points, given the structural and damage characteristics and potential victim location(s), so that the victim location(s) is identified; entry and exit points for victims, rescuers, and equipment are designated; flows of personnel, the victim(s), and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise vehicle stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are enforced.

NFPA 1006 10.2.3

VR-02.04 Trainee shall create access and egress openings for rescue from a heavy vehicle, given vehicle tool kit, specialized tools and equipment, personal protective equipment, and an assignment, so that the movement of rescuers and equipment complements victim care and removal; an emergency escape route is provided; the technique chosen is expedient; victim and rescuer protection is afforded; and vehicle stability is maintained.

NFPA 1006 10.2.4

VR-02.05 Trainee shall disentangle victim(s), given an extrication incident, a vehicle tool kit, personal protective equipment, and specialized equipment, so that undue victim injury is prevented; victim protection is provided; and stabilization is maintained.

NFPA 1006 10.2.5

VR-02.06 Trainee shall isolate and manage potentially harmful energy sources, including propulsion power, restraint systems, and construction materials, given heavy vehicle, vehicle tool kit, and personal protective equipment, so that all hazards are identified; systems are managed; beneficial system use is evaluated; and hazards to rescue personnel and victims are minimized.

NFPA 1006 10.2.6

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Surface Water Rescue Certification:

Surface Water Rescue Level I

- Level I is for rescue situations with water moving **less than 1 knot**.
- Level I water rescue skills are applicable only to basic swimming and support of Surface Water Rescue Level II.

Applicants must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Rope Rescue Level I; AND
 - c. Rope Rescue Level II; ANDAND
2. have completed or hold one of the following:
 - a. SFFMA Surface Water Rescue Level I coursework
 - b. Surface Water Rescue Level I as defined by NFPA 1006;
 - c. TEEX Surface Water Rescue I.

Surface Water Rescue Level II

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Rope Rescue Level I; AND
 - c. Rope Rescue Level II; AND
 - d. Surface Water Rescue Level IAND
2. have completed or hold one of the following:
 - a. SFFMA Surface Water Rescue Level II coursework
 - b. Surface Water Rescue Level II as defined by NFPA 1006;
 - c. TEEX Surface Water Rescue II

Curriculum for Surface Water Rescue Level I

SW-01.01 Develop a site survey for an existing water hazard, given historical data, specific personal protective equipment for conducting site inspections, flood insurance rate maps, tide tables, and meteorological projections, so that life safety hazards are anticipated, risk–benefit analysis is included, site inspections are completed, water conditions are projected, site-specific hazards are identified, routes of access and egress are identified, boat ramps (put-in and take-out points) are identified, method of entrapment is considered, and areas with high probability for victim location are determine

NFPA 1006 11.1.1

SW-01.02 Select water rescue personal protective equipment, given a water rescue assignment and assorted items of personal protective and life-support equipment, so that rescuer is protected from temperature extremes and environmental hazards, correct buoyancy is maintained, AHJ protocols are complied with, swimming ability is maximized, routine and emergency communications are established between components of the team, self-rescue needs have been evaluated and provided for, and pre-operation safety checks have been conducted.

NFPA 1006 11.1.2

SW-01.03 Define search parameters for a water rescue incident, given topographical maps of a search area, descriptions of all missing persons and incident history, hydrologic data including speed and direction of current or tides, so that areas with high probability of detection are differentiated from other areas, witnesses are interviewed, critical interview information is recorded, passive and active search tactics are implemented, personnel resources are considered and used, and search parameters are communicated.

NFPA 1006 11.1.3

S-OW1.04 Develop an action plan for a shore-based rescue of a single or multiple water-bound victim(s), given an operational plan and a water rescue tool kit, so that all information is factored, risk–benefit analysis is conducted, protocols are followed, hazards are identified and minimized, personnel and equipment resources will not be exceeded, assignments are defined, consideration is given to evaluating changing conditions, and the selected strategy and tactics fit the conditions.

NFPA 1006 11.1.4

SW-01.05 Conduct a witness interview, given witnesses and checklists, so that witnesses are secured, information is gathered, last seen point can be determined, last known activity can be determined, procedures to re-contact the witnesses are established, and reference objects can be utilized.

NFPA 1006 11.1.5

SW-01.06 Deploy a water rescue reach device to a water-bound victim, given required equipment and personal protective equipment so that the deployed equipment reaches the victim(s), the rescue equipment does not slip through the rescuer’s hands, the victim is moved to the rescuer’s shoreline, the victim is not pulled beneath the surface by rescuer efforts, the rescuer is not pulled into the water by the victim, and neither the rescuer nor the victim is tied to or entangled in the device.

NFPA 1006 11.1.6

- SW-01.07 Deploy a water rescue rope to a water-bound victim, given a water rescue rope in a throw bag, a coiled water rescue rope 50 ft to 75 ft (15.24m to 22.86 m) in length, and personal protective equipment, so that the deployed rope lands within reach of the victim, the rescue rope does not slip through the rescuer's hands, the victim is moved to the rescuer's shoreline, the victim is not pulled beneath the surface by rescuer efforts, the rescuer is not pulled into the water by the victim, and neither the rescuer nor the victim is tied to or entangled in the throw line.
NFPA 1006 11.1.7
- SW-01.08 Use watercraft for rescue operations, given watercraft, policies, and procedures used by the AHJ, so that watercraft pre-deployment checks are completed, watercraft launch or recovery is achieved as stipulated by AHJ operational protocols, divers are deployed and recovered, both on-board and dive rescue operations conform with watercraft operational protocols and capabilities, communications are clear and concise, and the candidate is familiar with watercraft nomenclature, operational protocols, design limitations, and launch/recovery site issues.
NFPA 1006 11.1.8
- SW-01.09 Define procedures to provide support for helicopter water rescue operations within the area of responsibility for the AHJ, given a helicopter service, operational protocols, helicopter capabilities and limitations, water rescue procedures, and risk factors influencing helicopter operations, so that air-to-ground communications are established and maintained, applications are within the capabilities and skill levels of the helicopter service, the applications facilitate victim extraction from water hazards that are representative of the bodies of water existing or anticipated within the geographic confines of the AHJ, air crew and ground personnel safety are not compromised, landing zones are designated and secured, and fire suppression resources are available at the landing zone.
NFPA 1006 11.1.9
- SW-01.10 Negotiate a designated water course in a watercraft, given a watercraft that is available to the team, a course that is representative of the bodies of water existing or anticipated within the geographic confines of the AHJ, a range of assignments, and water rescue personal protective equipment, so that the specified objectives are attained, all performance parameters are achieved, movement is controlled, hazards are continually assessed, launch does not proceed if the watercraft is inadequate or incapable of operating in the existing condition, distress signals are communicated, and rapid intervention for the watercraft crew has been staged for deployment.
NFPA 1006 11.1.10
- SW-01.11 Use techniques appropriate for the water environment to extricate an incapacitated water-bound victim from the water, as a member of a team, given a water hazard that is representative of the bodies of water existing or anticipated within the geographic confines of the AHJ, watercraft that is available to the team (if applicable), nets, webbing, blankets, tarpaulins or ropes, a means of securement, and water rescue personal protective equipment, so that the watercraft is not broached; control of the watercraft is maintained; risks to the victim and rescuers are minimized; and the victim is removed from the hazard expediently and efficiently.
NFPA 1006 11.1.11
- SW-01.12 Demonstrate fundamental watermanship skills, given safety equipment, props, and a confined water body, so that basic skills are demonstrated in a controlled environment, performance parameters are achieved, and problems can be identified prior to work in a high-stress environment.
NFPA 1006 11.1.12
- SW-01.13 Escape from a simulated life-threatening situation, given water rescue personal protective equipment, swim aids as required, and flotation aids, so that the rescuer reaches safety at a predetermined area.

NFPA 1006 11.1.13

SW-01.14 Identify procedures for operation of rope systems particular to the water rescue needs of the AHJ, given rescue personnel, an established rope system, a load to be moved, and personal protective equipment, so that the movement is controlled, the load is held in place when needed, and operating methods do not stress the system.

NFPA 1006 11.1.14

SW-01.15 Support Level II operations, given a designated mission, safety equipment, props, and water body, so that skills are demonstrated in a controlled environment, performance parameters are achieved, hazards are continually assessed, correct buoyancy control is maintained, and emergency procedures are demonstrated.

NFPA 1006 11.1.15

Curriculum for Surface Water Rescue Level II

SW-02.01 Swim a designated water course, given a course that is representative of the bodies of water existing or anticipated within the geographic confines of the AHJ, water rescue personal protective equipment, and swim aids as required, so that the specified objective is reached, all performance parameters are achieved, movement is controlled, hazards are continually assessed, distress signals are communicated, and rapid intervention for the rescuer has been staged for deployment.

NFPA 1006 11.2.1

SW-02.02 Perform a swimming surface water rescue, given water rescue personal protective equipment, swim aids as required, flotation aids for victims, and reach/extension devices, so that victim contact is maintained, the rescuer maintains control of the victim, the rescuer and the victim reach safety at a predetermined area, and medical conditions and treatment options are considered.

NFPA 1006 11.2.2

SW-02.03 Demonstrate defensive tactics in the water rescue environment, given a water-bound victim in a stressed or panicked situation so that the rescuer can maintain separation from the victim to create or maintain personal safety, and can perform self-defense techniques to prevent rescuer submersion if direct contact is made between a panicked victim and the rescuer.

NFPA 1006 11.2.3

SW-02.04 Supervise, coordinate, and lead rescue teams during operations, given incident checklists, maps, topographic surveys, and charts, so that teams are managed, personnel are supervised, hazards are assessed and identified, safety and health of team is ensured, qualifications/abilities of rescuers are verified, pre-entry briefing is conducted, and debriefing is performed

NFPA 1006 11.2.4

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Swiftwater Rescue Certification:

Swiftwater Rescue Level I

- Level I water rescue skills are applicable only to basic swimming and support of Swiftwater Rescue Level II.

Applicants must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Rope Rescue Level I; AND
 - c. Rope Rescue Level II; AND

AND

2. have completed or hold one of the following:
 - a. SFFMA Swiftwater Rescue Level I coursework
 - b. Swiftwater Rescue Level I as defined by NFPA 1006;
 - c. TEEX Swiftwater Rescue I.

Swiftwater Rescue Level II

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Rope Rescue Level I; AND
 - c. Rope Rescue Level II; AND
 - d. Swiftwater Rescue Level I

AND

2. have completed or hold one of the following:
 - a. SFFMA Swiftwater Rescue Level II coursework
 - b. Swiftwater Rescue Level II as defined by NFPA 1006;
 - c. TEEX Swiftwater Rescue II

Curriculum for Swiftwater Rescue Level I

STW-01.01 Develop a site survey for an existing water hazard, given historical data, specific personal protective equipment for conducting site inspections, flood insurance rate maps, tide tables, and meteorological projections, so that life safety hazards are anticipated, risk–benefit analysis is included, site inspections are completed, water conditions are projected, site-specific hazards are identified, routes of access and egress are identified, boat ramps (put-in and take-out points) are identified, method of entrapment is considered, and areas with high probability for victim location are determine

NFPA 1006 11.1.1 (Prerequisite)

STW-01.02 Construct rope systems particular to the swiftwater rescue needs of the AHJ, given rescue personnel, rope equipment, a load to be moved, and personal protective equipment, so that the movement is controlled, the load is held in place when needed, and operating methods do not stress the system.

NFPA 1006 12.1.1

STW-01.03 Support Level II operations, given a designated mission, safety equipment, props, and water body, so that skills are demonstrated in a controlled environment, performance parameters are achieved, hazards are continually assessed, and emergency procedures are demonstrated.

NFPA 1006 12.1.2

STW-01.04 Assess moving water conditions, characteristics, and features in terms of hazards to the rescuer and victims, given an incident scenario and swiftwater tool kit, so that flow and conditions are estimated accurately, mechanisms of entrapment are considered, hazards are assessed, depth and surrounding terrain are evaluated, and findings are documented.

NFPA 1006 12.1.3

STW-01.05 Perform a non-entry rescue in the swiftwater/flooding environment, given an incident scenario, personal protective equipment, and swiftwater rescue tool kit, so that rescue is accomplished, and adopted policies and safety procedures are followed.

NFPA 1006 12.1.4

Curriculum for Swiftwater Rescue Level II

STW-02.01 Perform an entry rescue in the swiftwater/flooding environment, given an incident scenario, personal protective equipment, and swiftwater rescue tool kit, so that rescue is accomplished, and adopted policies and safety procedures are followed.

NFPA 1006 12.2.1

STW2.02 Negotiate a designated swiftwater course, given a course that is representative of the bodies of swiftwater existing or anticipated within the geographic confines of the AHJ, water rescue personal protective equipment, and swim aids as required, so that the specified objective is reached, all performance parameters are achieved, movement is controlled, hazards are continually assessed, distress signals are communicated, and rapid intervention for the rescuer has been staged for deployment.

NFPA 1006 12.2.2

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Wilderness Rescue Certification:

Wilderness Rescue Level I

Applicants must:

1. meet all qualifications for, **and hold or apply concurrently for** the SFFMA Rescue Apprentice
AND
2. have completed or hold one of the following:
 - a. SFFMA Wilderness Rescue Level I coursework
 - b. Wilderness Rescue Level I as defined by NFPA 1006;
 - c. TEEK Wilderness Rescue I.

Wilderness Rescue Level II

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Wilderness Rescue Level I
AND
2. have completed or hold one of the following:
 - a. SFFMA Wilderness Rescue Level II coursework
 - b. Wilderness Rescue Level II as defined by NFPA 1006;
 - c. TEEK Wilderness Rescue II

Curriculum for Wilderness Rescue Level I

- WR-01.01 Interview witness(es), given witness recording forms, so that available information as to the potential location, habits, mental and physical condition, clothing, and appearance of the victim can be determined; subject profile can be established; victim's last known location is identified; and search urgency and area(s) can be prioritized.
NFPA 1006 16.1.1
- WR-01.02 Collect, interpret, and document evidence to determine victim's potential location, given various pieces of evidence and collection and documentation equipment and wilderness tool kit, so that the scene (area) is thoroughly searched and evidence is protected, documented, cataloged, and collected.
NFPA 1006 16.1.2
- WR-01.03 Prepare to work in a wilderness environment for a 24-hour period of time, given survival equipment, so that the rescuer can be self-sustaining in the wilderness environment.
NFPA 1006 16.1.3
- WR-01.04 Navigate in the wilderness to a specified location, given navigation equipment, topographical maps of the area to be navigated, and communication equipment, so that the specified location is identified and reached, search patterns are conducted, teams are guided to the desired location, and all clues relative to the location of the search victim are identified and communicated back to the command post.
NFPA 1006 16.1.4
- WR-01.05 Construct an emergency shelter in a wilderness environment, given the natural resources of the area, so that the rescuer is protected from the elements.
NFPA 1006 16.1.5
- WR-01.06 Collect and purify water, given a natural source of water in the wilderness environment, so that the rescuer can have potable water to consume.
NFPA 1006 16.1.6
- WR-01.07 Identify potential natural food sources in a wilderness environment, given the natural food resources of the area, so that the rescuer is able to survive in an emergency situation for an extended period of time.
NFPA 1006. 16.1.7
- WR-01.08 Establish the need for specialized resources in wilderness search and rescue operations, such as aircraft, watercraft, or specialized vehicles, given operational protocols and specialized vehicle resources, so that resources are allocated and utilized during the operation to locate and/or remove the subject.
NFPA 1006 16.1.8
- WR-01.09 Locate a victim in a wilderness environment, given a lost person profile, established search area, navigation equipment, topographical maps, and communication equipment, so that the victim's location can be determined.
NFPA 1006 16.1.9
- WR-01.10 Manage a victim in a wilderness environment, given a victim, basic life support kit, and wilderness tool kit, so that the basic medical care of the victim is managed during transport, and the potential for further injury is minimized.
NFPA 1006 16.1.10
- WR-01.11 Move a victim in a wilderness environment a minimum of 0.25 mi (0.4 km), given victim transport equipment, litters, other specialized equipment, and victim removal systems specific to the rescue

environment, so that the victim is moved without undue further injuries, risks to rescuers are minimized, the integrity of the victim's packaging within the transfer device is established and maintained, and the victim is removed from the hazard.

NFPA 1006 16.1.11

Curriculum for Wilderness Rescue Level II

WR-02.01 Develop profile(s) for the victim(s) in a wilderness environment, given victim information and collected evidence, so that a search plan can be developed and implemented.

NFPA 1006 16.2.1

WR-02.02 Develop a wilderness rescue incident action plan, given an incident, size-up information, and local weather forecasts and current conditions, so that the incident management system is utilized, communication needs are addressed, existing and potential conditions are identified, the search area is designated, operations periods are identified, safety plans are developed, and objectives are established.

NFPA 1006 16.2.2

WR-02.03 Manage and direct a team at a wilderness search and rescue incident, given rescue personnel, capabilities and limitations of rescue members, and incident and site information, so that an incident management system is established, needed support resources are identified, the rescue action plan is communicated, tasks are communicated, resources are allocated, the incident is stabilized, personnel assignments are made, potential problems are identified and managed, and accountability is provided.

NFPA 1006 16.2.3

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

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

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Machinery Rescue Certification:

Machinery Rescue Level I

The applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the SFFMA Rescue Apprentice
AND
2. have completed or hold one of the following:
 - a. SFFMA Machinery Rescue Level I coursework;
 - b. Machinery Rescue Level I as defined by NFPA 1006;
 - c. TEEK Machinery Rescue I

Machinery Rescue Level II

The applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rescue Apprentice; AND
 - b. Machinery Rescue Level I
AND
2. have completed or hold one of the following:
 - a. SFFMA Machinery Rescue Level II coursework;
 - b. Machinery Rescue Level II as defined by NFPA 1006;
 - c. TEEK Machinery Rescue II

Curriculum for Machinery Rescue Level I

MR-01.01 Plan for a machinery incident, and conduct an initial and ongoing size-up, given agency guidelines, planning forms, and an operations-level machinery incident or simulation, so that a standard approach is used during training and operational scenarios; emergency situation hazards are identified; isolation methods and scene security measures are considered; fire suppression and safety measures are identified; machinery stabilization needs are evaluated; and resource needs are identified and documented for future use.

NFPA 1006 19.1.1

MR-01.02 Establish “scene” safety zones, given scene security barriers, incident location, incident information, and personal protective equipment, so that hot, warm, and cold safety zones are designated; zone perimeters are consistent with incident requirements; perimeter markings can be recognized and understood by others; zone boundaries are communicated to incident command; and only authorized personnel are allowed access to the rescue scene.

NFPA 1006 19.1.2

MR-01.03 Establish fire protection, given an extrication incident and fire control support, so that fire and explosion potential is managed and fire hazards and rescue objectives are communicated to the fire support team.

NFPA 1006 19.1.3

MR-01.04 Stabilize a small or simple machine, given a machinery tool kit and personal protective equipment, so that the machinery is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise machinery stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.

NFPA 1006 19.1.4

MR-01.05 Isolate potentially harmful energy sources, given machinery tool kit and personal protective equipment, so that all hazards are identified; systems are managed; beneficial system use is evaluated; and hazards to rescue personnel and victims are minimized.

NFPA 1006 19.1.5

MR-01.06 Determine small machinery access and egress points, given the structural and damage characteristics and potential victim location(s), so that victim location(s) is identified; entry and exit points for victims, rescuers, and equipment are designated; flows of personnel, victims(s), and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are enforced.

NFPA 1006 19.1.6

MR-01.07 Create access and egress openings for rescue from a small or simple machine, given a machinery tool kit, specialized tools and equipment, personal protective equipment, and an assignment, so that the movement of rescuers and equipment complements victim care and removal; an emergency escape route is provided; the technique chosen is expedient; victim and rescuer protection is afforded; and stability is maintained.

NFPA 1006 19.1.7

MR-01.08 Disentangle victim(s), given an extrication involving a small or simple machine, a machinery tool kit, personal protective equipment, and specialized equipment, so that undue victim injury is prevented; victim protection is provided; and stabilization is maintained.

NFPA 1006 19.1.8

MR-01.09 Remove a packaged victim to a designated safe area, as a member of a team, given a victim transfer device, a designated egress route, and personal protective equipment, so that the team effort is coordinated; the designated egress route is used; the victim is removed without compromising victim packaging; undue injury is prevented; and stabilization is maintained.

NFPA 1006 19.1.9

MR-01.10 Terminate a Level I machinery incident, given personal protective equipment specific to the incident, isolation barriers, and an extrication tool kit, so that rescuers and bystanders are protected during termination operations; the party responsible for the operation, maintenance, or removal of the affected machinery is notified of any modification or damage created during the extrication process; scene control is transferred to a responsible party; potential or existing hazards are communicated to that responsible party; and command is terminated.

NFPA 1006 19.1.10

Curriculum for Machinery Rescue Level II

MR-02.01 Plan for a large machinery incident, and conduct initial and ongoing size-up, given agency guidelines, planning forms, and operations-level machinery incident or simulation, so that a standard approach is used during training and operational scenarios; emergency situation hazards are identified; isolation methods and scene security measures are considered; fire suppression and safety measures are identified; machinery stabilization needs are evaluated; and resource needs are identified and documented for future use.

NFPA 1006 19.2.1

MR-02.02 Stabilize large machinery, given a machinery tool kit and personal protective equipment, so that the machinery is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise machinery stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.

NFPA 1006 19.2.2

MR-02.03 Determine large machinery access and egress points, given the structural and damage characteristics and potential victim location(s), so that victim location(s) is identified; entry and exit points for victims, rescuers, and equipment are designated; flows of personnel, victim(s), and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise machinery stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are enforced.

NFPA 1006 19.2.3

MR-02.04 Create access and egress openings for rescue from large machinery, given a machinery tool kit, specialized tools and equipment, personal protective equipment, and an assignment, so that the movement of rescuers and equipment complements victim care and removal; an emergency escape route is provided; the technique chosen is expedient; victim and rescuer protection is afforded; and stability is maintained.

NFPA 1006 19.2.4

MR-02.05 Disentangle victim(s), given a Level II extrication incident, a machinery tool kit, personal protective equipment, and specialized equipment, so that undue victim injury is prevented; victim protection is provided; and stabilization is maintained.

NFPA 1006 19.2.5

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents

Training Completion

Applicant must:

- i. complete 'Courage to be Safe' coursework; and
- ii. complete and report all required objectives from the SFFMA HazMat Awareness & Operations curriculum.

Previously issued certifications are "grandfathered" to the Hazardous Materials Awareness & Operations as follows:

- i. Firefighter I training completion with an effective date prior to January 1, 2020.

The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.

Full Hazardous Materials Awareness & Operations Certification

Applicant must successfully complete the required Board-approved written examination.

Previously issued certifications are "grandfathered" to the Firefighter II level as follows:

- a. Firefighter I certifications with an effective date prior to January 1, 2020.

The Austin office will:

- a. issue a full Hazardous Materials Awareness & Operations certificate and shoulder patch; and
- b. maintain a permanent record of the certification.

Curriculum for HazMat Awareness & Operations

Objectives moved from Chapter 18 of 1001: Firefighter I

For qualification at Level I, the firefighter candidate shall meet the general knowledge requirements in 5.1.1; the general skill requirements in 5.1.2; the JPRs defined in Sections 5.2 through 5.5 of this standard; and the requirements defined in Chapter 5, Core Competencies for Operations Level Responders, and Section 6.6, Mission-Specific Competencies: Product Control, of *NFPA 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents*.

18-I.01 Trainee shall identify and discuss the federal regulations and national standards that pertain to Hazardous Materials (HazMat) response.

NFPA 472-4.1, 472-5.1, 472-6.1

18-I.02 Trainees shall analyze an incident to determine the presence of hazardous materials/WMD, along with appropriate basic hazard and response information for each by completing the following tasks:

NFPA 472-4.1.2.2

- A. Demonstrate knowledge of what hazardous materials are, and the risks associated with them in an incident.
- B. Demonstrate knowledge of the potential outcomes associated with an emergency created when hazardous materials are present. Detect and recognize the presence of hazardous materials/WMD.
- C. Identify the hazardous materials/WMD involved.
- D. Collect hazard information from the current edition of the DOT *Emergency Response Guidebook* (ERG),
- E. Demonstrate knowledge of the role of the first responder awareness individual in the role of the department's emergency response plan including site and security control.

- 18-I.03 Trainee shall identify the definitions of both:
A. Hazard Materials
B. Weapons of Mass Destruction (WMD)
NFPA 472 4.2.1 (1)
- 18-I.04 Trainee shall identify the hazard classes and divisions of hazardous materials/WMD and identify common examples of materials and primary hazards in each hazard class or division.
NFPA 472 4.2.1 (2, 3)
A. Class 1 – Explosives
B. Class 2 – Flammable Gases
C. Class 3 – Flammable Liquids
D. Class 4 – Flammable Solids
E. Class 5 – Oxidizers
F. Class 6 – Toxic Substances & Infections substances
G. Class 7 – Radioactive Materials
H. Class 8 – Corrosive Materials
I. Class 9 – Miscellaneous
- 18-I.05 Trainee shall identify the differences between hazardous materials/WMD incidents and other emergencies
NFPA 472 4.2.1 (4)
A. Size
B. Complexity
C. Intent
D. Crime scene management
E. Secondary devices/attacks & armed
- 18-I.06 Trainee shall identify typical occupancies and locations in the community where hazardous materials/WMD are manufactured, transported, stored, used, or disposed of.
NFPA 472 4.2.1 (5)
- 18-I.07 Trainee shall identify typical container shapes that can indicate the presence of hazardous materials/WMD.
NFPA 472 4.2.1 (6)
A. Non-bulk containers
B. Bulk containers
C. Fixed facility storage systems
D. Pipelines
E. Ships and marine vessels
- 18-I.08 Trainee shall identify facility and transportation markings and colors that indicate hazardous materials/WMD.
NFPA 472 4.2.1 (7)
- 18-I.09 Given an NFPA 704 marking, describe the significance of the colors, numbers, and special symbols.
NFPA 472 4.2.1 (8)
- 18-I.10 Trainee shall identify U.S. and Canadian placards and labels that indicate hazardous materials/WMD. (see ERG or DOT Chart)
NFPA 472 4.2.1 (9)

- 18-I.11 Trainee shall identify the following basic information on material safety data sheets (MSDS) and shipping papers for hazardous materials:
NFPA 472 4.2.1 (10)
- A. Identify where to find MSDS.
 - B. Identify major sections of an MSDS.
 - C. Identify the entries on shipping papers that indicate the presence of hazardous materials.
 - D. Match the name of the shipping papers found in transportation (air, highway, rail, and water) with the mode of transportation.
 - E. Identify the person responsible for having the shipping papers in each mode of transportation.
 - F. Identify where the shipping papers are found in each mode of transportation.
 - G. Identify where the papers can be found in an emergency in each mode of transportation.
- 18-I.12 Trainee shall identify examples of clues (other than occupancy/ location, container shape, markings/color, placards/ labels, MSDS, and shipping papers) the sight, sound, and odor of which indicate hazardous materials/WMD.
NFPA 472-4.2.1 (11)
- 18-I.13 Trainee shall describe the limitations of using the senses in determining the presence or absence of Hazard Materials/WMD
NFPA 472-4.2.1 (12)
- 18-I.14 Identify at least four types of locations that could be targets for criminal or terrorist activity using hazardous materials/WMD.
NFPA 472 4.2.1 (13)
- 18-I.15 Trainee shall describe the difference between a chemical and a biological incident.
NFPA 472 4.2.1 (14)
- A. Chemical – characterized by rapid onset of symptoms
 - B. Biological – symptoms require days or weeks to manifest
- 18-I.16 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving:
NFPA 472 4.2.1 (15-20)
- A. Chemical agents
 - B. Biological agents
 - C. Radiological agents
 - D. Illicit Laboratories
 - E. Explosives
 - F. Secondary devices
- 18-I.17 Trainee shall identify the hazardous material(s)/WMD involved in each situation by name, UN/NA identification number, or type placard applied by completing the following requirements:
NFPA 472 4.2.2
- A. Identify difficulties encountered in determining the specific names of hazardous materials/WMD at facilities and in transportation
 - B. Identify sources for obtaining the names of, UN/NA identification numbers for, or types of placard associated with hazardous materials/WMD in transportation
 - C. Identify sources for obtaining the names of hazardous materials/WMD at a facility
- 18-I.18 Trainee shall identify the fire, explosion, and health hazard information for each material by using the current edition of the DOT Emergency Response Guidebook (ERG).
NFPA 472 4.2.3

18-I.19 Trainee shall identify the actions to be taken to protect themselves and others and to control access to the scene by completing the following requirements:

NFPA 472 4.4.1 (1-12)

- A. Identify the location of both the emergency response plan and/or standard operating procedures
- B. Identify the role of the awareness level personnel during hazardous materials/WMD incidents
- C. Identify the following basic precautions to be taken to protect themselves and others in hazardous materials/ WMD incidents:
- D. Given examples of hazardous materials/WMD and the identity of each hazardous material/WMD (name, UN/NA identification number, or type placard), identify the following response information:
 - 1. Emergency action (fire, spill, or leak and first aid)
 - 2. Personal protective equipment necessary
 - 3. Initial isolation and protective action distances
- E. Given the name of a hazardous material, identify the recommended personal protective equipment from the following list:
 - 1. Street clothing and work uniforms
 - 2. Structural fire-fighting protective clothing
 - 3. Positive pressure self-contained breathing apparatus
 - 4. Chemical-protective clothing and equipment
- F. Identify the definitions for each of the following protective actions:
 - 1. Isolation of the hazard area and denial of entry
 - 2. Evacuation
 - 3. Shelter-in-place
- G. Identify the size and shape of recommended initial isolation and protective action zones
- H. Describe the difference between small and large spills as found in the Table of Initial Isolation and Protective Action Distances in the DOT Emergency Response Guidebook (ERG).
- I. Identify the circumstances under which the following distances are used at a hazardous materials/WMD incidents:
 - 1. Table of Initial Isolation and Protective Action Distances
 - 2. Isolation distances in the numbered guides
- J. Describe the difference between the isolation distances on the orange-bordered guidebook pages and the protective action distances on the green-bordered Emergency Response Guidebook (ERG) pages
- K. Identify the techniques used to isolate the hazard area and deny entry to unauthorized persons at hazardous materials/WMD incidents
- L. Identify at least four specific actions necessary when an incident is suspected to involve criminal or terrorist activity

18-I.20 Trainee shall identify the initial notifications to be made and how to make them, consistent with the AHJ.

NFPA 472 4.4.2

- 18-I.21 Trainee shall be able to perform the following tasks
NFPA 472 5.1.2.2
- A. Analyze the hazardous material/WMD incident and determine the scope of the problem and potential outcomes
 - B. Plan an initial response to a hazardous materials/WMD incident within the capabilities and competencies of available personnel and personal protective equipment
 - C. Implement the planned response for a hazardous materials/WMD incident to favorably change the outcomes consistent with the emergency response plan and/or standard operating procedures
 - D. Evaluate the progress of the actions taken at a hazardous materials/WMD incident to ensure that the response objectives are being met safely, effectively
- 18-I.22 Trainees shall analyze an incident to determine the scope and hazards of a hazardous materials/WMD incident and predict potential outcomes by completing the following tasks:
NFPA 472-5.2
- A. Use containers, markings, and environmental clues to collect information about the incident;
 - B. Identify types of assistance provided by government authorities with incidents involving criminal or terrorist activity; and
 - C. Identify possible outcomes based on material/agent type, chemical properties, types of breach or release, and the health risks and physical hazards.
- 18-I.23 Trainees shall analyze an incident and plan the response by completing the following tasks:
NFPA 472-5.3, 472-5.4, 472-6.2.3, 472-6.2.4
- A. Describing response objectives
 - B. Identifying action options
 - C. Determine suitability of personal protective equipment
 - D. Identifying decontamination issues
- 18-I.24 Trainees shall demonstrate an ability to implement a response to an incident involving hazardous materials/WMD by completing the following tasks as listed in the emergency response plan and/or standard operating procedures:
NFPA 472-5.4
- A. Establish/enforce scene control, safety, evacuation, sheltering-in-place, emergency decontamination, and communication between responders and to the public.
 - B. Describe the process to preserve evidence.
 - C. Initiate the Incident Command System to include describing the purpose, need, benefits, and elements of the incident command system, the various incident levels, the role of the operations level responder, the duties and roles of specified functions, considerations for determining the location of the incident command post, procedures for requesting additional resources, and the role and response objectives of other agencies.
 - D. Describe considerations for the use of personal protective equipment provided by the AHJ, to include safety precautions, importance of the buddy system and backup personnel, the signs, symptoms and control of heat and cold stress and procedures for their control, the capabilities and limitations of personnel working in PPE, and procedures for cleaning, disinfecting, inspecting, maintaining, testing, and storing PPE.

- 18-I.25 Trainees shall demonstrate an ability to evaluate the progress of a response to an incident involving hazardous materials/WMD by completing the following tasks:
NFPA 472-5.5
- A. Identify if actions taken were effective in accomplishing the objectives, and describe the circumstances under which it would be prudent to withdraw from a hazardous materials/WMD incident.
 - B. Identify the methods for communicating the status of the planned response through the normal chain of command, and for immediate notification of the incident commander and other response personnel about critical emergency conditions at the incident.
- 18-I.26 Trainees shall meet all competencies at the awareness and operations level, all mission-specific competencies for PPE, and all competencies in this section by completing the following tasks within the capabilities and competencies of available personnel, PPE, and control equipment in accordance with the emergency response plan or standard operating procedures.
NFPA 472-6.6.1
- 18-I.27 Trainees shall plan an initial response by completing the following tasks:
NFPA 472.6.6.3
- A. Identify the options to accomplish a given response objective.
 - B. Identify the purpose for and the procedures, equipment, and safety precautions associated with each of the following control techniques: absorption, adsorption, damming, diking, dilution, diversion, remote valve shutoff, retention, vapor dispersion, vapor suppression.
 - C. Select the PPE equipment required to support product control at hazardous materials/WMD incidents based on local procedures.
- 18-I.28 Trainees shall demonstrate control functions by completing the following tasks:
NFPA 472-6.6.4
- A. Demonstrate the application of foam(s) or agent(s) on a spill or fire involving hazardous materials/WMD.
 - B. Identify the characteristics and applicability of the following Class B foams: Aqueous film-forming foam (AFFF), Alcohol-resistant concentrates (ARC), Fluoroprotein, High-expansion foam
 - C. Demonstrate how to perform the following control activities: absorption, adsorption, damming, diking, dilution, diversion, remote valve shutoff, retention, vapor dispersion, vapor suppression.
 - D. Identify the location and describe the use of emergency remote shutoff devices on MC/DOT-306/406, MC/DOT-307/407, and MC-331 cargo tanks containing flammable liquids or gases.
 - E. Describe the use of emergency remote shutoff devices at fixed facilities.
 - F. Describe local procedures for going through the technical decontamination process.