

### *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 472: Standard for Competence of Responders for Hazardous Materials/Weapons of Mass Destruction Incidents*

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

#### *Minimum Requirements*

Applicants must complete one (1) of the following:

1. SFFMA Fire Inspector I, Fire Inspector II, AND Plans Examiner I Curriculum; or
1. NFPA 1031: Fire Inspector I, Fire Inspector II, AND Plans Examiner I; or
2. TCFP Fire Inspector curriculum

#### NFPA 1031: Fire Inspector I

### SECTION 1 GENERAL

FI1-1.01 The Trainee shall meet the job performance requirements defined in Section I-1.01 through I-3.16.

FI1-1.02 The Trainee shall meet the job performance requirements defined in of NFPA 472: Section 4.2 Competencies — Analyzing the Incident.

- A. Detecting the Presence of Hazardous Materials/WMD. Given examples of various situations, awareness level personnel shall identify those situations where hazardous materials/WMD are present by completing the following requirements:
  1. Identify the definitions of both hazardous material (or dangerous goods, in Canada) and WMD
  2. Identify the UN/DOT hazard classes and divisions of hazardous materials/WMD and identify common examples of materials in each hazard class or division
  3. Identify the primary hazards associated with each UN/DOT hazard class and division
  4. Identify the difference between hazardous materials/WMD incidents and other emergencies
  5. Identify typical occupancies and locations in the community where hazardous materials/WMD are manufactured, transported, stored, used, or disposed of
  6. Identify typical container shapes that can indicate the presence of hazardous materials/WMD
  7. 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
8. Given an NFPA 704 marking, describe the significance of the colors, numbers, and special symbols
  9. Identify U.S. and Canadian placards and labels that indicate hazardous materials/WMD
  10. 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
  11. 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
  12. Describe the limitations of using the senses in determining the presence or absence of hazardous materials/WMD
  13. Identify at least four types of locations that could be targets for criminal or terrorist activity using hazardous materials/WMD
  14. Describe the difference between a chemical and a biological incident
  15. Identify at least four indicators of possible criminal or terrorist activity involving chemical agents
  16. Identify at least four indicators of possible criminal or terrorist activity involving biological agents
  17. Identify at least four indicators of possible criminal or terrorist activity involving radiological agents
  18. Identify at least four indicators of possible criminal or terrorist activity involving illicit laboratories (clandestine laboratories, weapons lab, ricin lab)
  19. Identify at least four indicators of possible criminal or terrorist activity involving explosives
  20. Identify at least four indicators of secondary devices
- B. Surveying Hazardous Materials/WMD Incidents. Given examples of hazardous materials/WMD incidents, awareness level personnel shall, from a safe location, 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:
1. Identify difficulties encountered in determining the specific names of hazardous materials/WMD at facilities and in transportation

2. Identify sources for obtaining the names of, UN/NA identification numbers for, or types of placard associated with hazardous materials/WMD in transportation
  3. Identify sources for obtaining the names of hazardous materials/WMD at a facility
- C. Collecting Hazard Information. Given the identity of various hazardous materials/WMD (name, UN/NA identification number, or type placard), awareness level personnel shall identify the fire, explosion, and health hazard information for each material by using the current edition of the DOT Emergency Response Guidebook by completing the following requirements:
1. Identify the three methods for determining the guidebook page for a hazardous material/WMD
  2. Identify the two general types of hazards found on each guidebook page

## SECTION 2 ADMINISTRATION

This duty involves the preparation of correspondence and inspection reports, handling of complaints, and maintenance of records, as well as participation in legal proceedings and maintenance of an open dialogue with the plan examiner and emergency response personnel, according to the following job performance requirements.

- FI1-2.01 The 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.
- FI1-2.02 The 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.
- FI1-2.03 The 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.
- FI1-2.04 The 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.
- FI1-2.05 The 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.
- FI1-2.06 The 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 3 FIELD INSPECTION

This duty involves fire safety inspections of new and existing structures and properties for construction, occupancy, fire protection, and exposures, according to the following job performance requirements.

- FI1-3.01 The 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.
- FI1-3.02 The 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.

- FI1-3.03 The 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.
- FI1-3.04 The 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 type1s identified and recorded in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1-3.05 The 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.
- FI1-3.06 The 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.
- FI1-3.07 The 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.
- FI1-3.08 The 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.
- FI1-3.09 The 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.
- FI1-3.10 The 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.
- FI1-3.11 The 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.
- FI1-3.12 The 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.
- FI1-3.13 The 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.

FI1-3.14 The 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.

FI1-3.15 The 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.

FI1-3.16 The 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 4 PLAN REVIEW

No requirements at this level per NFPA

## SECTION 1 GENERAL

FI2-1.01 The Trainee shall meet the job performance requirements defined in Section FI2-1.01 through FI2-4.06.

## SECTION 2 ADMINISTRATION

This duty involves conducting research, interpreting codes, implementing policy, testifying at legal proceedings, and creating forms and job aids, according to the following job performance requirements.

- FI2-2.01 The 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.
- FI2-2.02 The 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.
- FI2-2.03 The 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.
- FI2-2.04 The 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.
- FI2-2.05 The 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 3 FIELD INSPECTION

This duty involves code enforcement inspections and analyses of new and existing structures and properties for construction, occupancy, fire protection, and exposures, according to the following job performance requirements.

- FI2-3.01 The 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.
- FI2-3.02 The 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.
- FI2-3.03 The 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.
- FI2-3.04 The 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.
- FI2-3.05 The 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.

- FI2-3.06 The 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.
- FI2-3.07 The 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.
- FI2-3.08 The 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.
- FI2-3.09 The 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.
- FI2-3.10 The 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.
- FI2-3.11 The 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.
- FI2-3.12 The 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 4 PLANS REVIEW

This duty involves field verification of shop drawings, plans, and construction documents to ensure that they meet the intent of applicable codes and standards for fire and life safety, according to the following job performance requirements.

- FI2-4.01 The 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.
- FI2-4.02 The 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.
- FI2-4.03 The 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.

- F12-4.04 The 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.
- F12-4.05 The 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.
- F12-4.06 The 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 GENERAL

PE1-1.01 The Trainee shall meet the job performance requirements defined in Sections PE1-2.01 through PE1-4.0.

## SECTION 2 ADMINISTRATION

This duty involves the review of plans, preparation of correspondence and plan review reports, communication with fire inspectors and emergency response personnel, handling of complaints, maintenance of records, participation in legal proceedings, identification of when additional expertise is required, and familiarity with procedures used by the jurisdiction to evaluate alternative methods, according to the following job performance requirements.

PE1-2.01 The 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.

PE1-2.02 The 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.

PE1-2.03 The 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.

PE1-2.04 The Trainee shall determine the applicable code or standard, given a fire protection issue, so that the proper document, edition, and section are referenced.

## SECTION 3 FIELD INSPECTIONS

No requirements at this level per NFPA

## SECTION 4 PLANS REVIEW

This duty involves the review and approval of plans for life and fire issues including interior finish, occupancy type, height and area limitations, construction type, and general fire safety and the identification of the requirements for fire protection systems and permits, to ensure that the plans meet the intent of applicable codes and standards for fire and life safety, according to the following job requirements.

PE1-4.01 The 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.

PE1-4.02 The 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.

PE1-4.03 The 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.

PE1-4.04 The 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.

PE1-4.05 The 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.

- PE1-4.06 The 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.
- PE1-4.07 The 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.
- PE1-4.08 The 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.
- PE1-4.09 The 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.
- PE1-4.10 The 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.