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OFFICE OF THE STATE FIRE MARSHAL
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Attachment 14

Date: April 10, 2020

To: Statewide Training and Education Advisory Committee

From: Andrew Henning, Chief of State Fire Training

SUBJECT/AGENDA ACTION ITEM:

Fire Fighter 1 (2019) – Fire Fighter 1C: Wildland Update

Recommended Actions:

Approval of the updates to the Fire Fighter 1 (2019) training standards and certification requirements.

Background Information:

The National Fire Protection Association (NFPA) released the 2020 edition of NFPA 1051: Standard Wildland Firefighting Personnel Professional Qualifications in September 2019. SFT uses NFPA 1051 as a bases for our Fire Fighter 1, Company Officer, and Chief Fire Officer training standards and certification requirements. SFT's goal is to update training standards and certification requirements within two years of publication.

Analysis/Summary of Issue:

An administrative review has been conducted to see the changes between the 2016 edition and the 2020 edition of NFPA 1051 for the Wildland Fire Fighter 1 level. After the review was completed, there were no substantial changes to Fire Fighter 1 (2019) (hours or cost for course delivery) to the training standards. The staff review determined the following changes listed below.

NFPA:

- Replaced the word “agency” with “AHJ”
- Paragraph 4.1.1
 - Added “AHJ required” to “first aid” in requisite knowledge

- Removed “and NFES 2943, Wildland Fire Incident Management Field Guide” in requisite knowledge
- Paragraph 4.3.4
 - Added a new job performance requirement on maintaining a personal gear kit.
- Paragraph 4.5.4
 - Replaced “correctly” with “properly” in requisite skills
- Paragraph 4.5.8
 - Replaced the word “control” with “containment” in JPR
 - Replaced “Apply requisite knowledge” with “Observe, identify, and take action on potential threats” in requisite skills

Impact

- Made all editorial changes
- Added the new JPR to the CTS guide as standard 9-3: Maintaining a Personal Gear Kit
- Added the new JPR to the Fire Fighter 1C: Wildland Fire Fighter course plan as Topic 2-7: Maintaining Personal Gear Kit
 - Most of the Topic 2-7 material was already covered in Topic 3-1: Assembling and Preparing for Response.
 - Moved the Application activity from 3-1 to 2-7
 - Adjusted time between 3-1 and 2-7
 - No addition to the certification task book and no skill sheet
 - No changes to time or cost for course delivery and/or testing

Documents Updated

- Fire Fighter 1 Certification Training Standards Guide (2019)
- Fire Fighter 1C: Wildland Fire Fighter Course Plan
- All Wildland skill sheets (9-1 through 9-2 and 10-1 through 10-7) to reflect NFPA edition number and editorial changes

Fire Fighter Instructors and agencies delivering the Fire Fighter 1C: Wildland course shall use the revised curriculum beginning July 1, 2020.

Fire Fighter 1

(NFPA Fire Fighter I, HazMat/WMD FRA and FRO, and
Wildland Fire Fighter 1)

Certification Training Standards Guide (2019)



California Department of Forestry and Fire Protection
Office of the State Fire Marshal
State Fire Training

Fire Fighter 1

Certification Training Standards Guide (2019)

Published: January 2020

Revised: Month 2020

This CTS guide utilizes the following NFPA standards to provide the qualifications for State Fire Training's Fire Fighter 1 (2019) certification:

- NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)
- NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)
- NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

State Fire Training coordinated the development of this CTS guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this CTS guide for adoption by the Office of the State Fire Marshal (OSFM).

Cover photo courtesy of Craig Allyn Rose Photography.

Published by State Fire Training.

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- Rob Wheatley, Division Chief, Director of Fire Training, CAL FIRE Training Center

Month 2020 Revision

Revised to align Wildland Fire Fighter 1 content with release of NFPA 1051 (2020).

- Allison L. Shaw, Editor, California State University, Sacramento

How to Read a CTS Guide

Overview

A certification training standard (CTS) guide lists the requisite knowledge, skills, and job performance requirements an individual must complete in order to become certified in a specific job function.

It also documents and justifies the OSFM-approved revisions to the certification's NFPA standard, and identifies where each certification training standard is taught (course plan), tested (skill sheets), and validated (task book).

Individuals aspiring to meet State Fire Training's certification training standards must do so in accordance with the codes, standards, regulations, policies, and standard operating procedures applicable within their own agency or jurisdiction.

Format

Each certification training standard is comprised of eight sections.

Section Heading

Training standards are grouped by section headings that describe a general category. For example, the Fire Fighter 1 CTS guide includes the following section headings: NFPA Requirements, Fire Department Communications, Fireground Operations, and Preparedness and Maintenance.

Training Standard Title

The training standard title provides a general description of the performance requirement contained within the individual standard.

Authority

The CTS guide references each individual standard with one or more paragraphs of the corresponding National Fire Protection Association (NFPA) Professional Qualifications. This ensures that each fire service function within California's certification system meets or exceeds NFPA standards.

When California requirements exceed the NFPA standard, the CTS guide cites the Office of the State Fire Marshal as the authority and prints the corresponding information in *italics*.

Job Performance Requirements

This segment includes a written statement that describes a specific job-related task, the items an individual needs to complete the task, and measurable or observable outcomes.

Requisite Knowledge

This segment lists the knowledge that an individual must acquire in order to accomplish the job performance requirement.

Requisite Skills

This segment lists the skills that an individual must acquire in order to accomplish the job performance requirement.

Content Modification

This table documents and justifies any revisions to the NFPA standard that the development or validation cadres make during the development of a CTS guide.

Cross Reference

This table documents where each training standard is taught (course plan), tested (skill sheets), and validated (task book).

Fire Fighter 1 - Structure

Section 1: Structure Fire Fighter Duties

1-1: Role of the Fire Fighter 1

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.1.1, 4.1.2

Job Performance Requirement

There is no job performance requirement identified for this training standard.

Requisite Knowledge

1. *Describe* the organization of the fire department
2. *Describe* the role of the Fire Fighter 1 in the organization
3. *Describe* the mission of fire service
4. *Describe* the fire department's standard operating procedures (SOPs) and rules and regulations as they apply to the Fire Fighter 1
5. *Describe* the value of fire and life safety initiatives in support of the fire department mission and to reduce fire fighter line-of-duty injuries and fatalities
6. *Identify* the role of other agencies as they relate to the fire department
7. *Identify* the signs and symptoms of behavioral and emotional distress
8. *Identify* aspects of the fire departments' member assistance program
9. *Describe* the importance of physical fitness and a healthy lifestyle to the performance of the duties of a fire fighter
10. *Define* the critical aspects of NFPA 1500

Requisite Skills

1. Don personal protective clothing, doff personal protective clothing, perform field reduction of contaminants, and prepare for reuse
2. Hoist tools and equipment using ropes and the correct knot
3. Locate information in departmental documents and standards or code materials

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|-------------------------------------|-------------------------------------|
| Fire Fighter 1A, Topic 1-3: Fire Fighter 1 Roles and Responsibilities <ul style="list-style-type: none"> • RK 1, 2, 3, 4, 5, 6 and RS 3 Fire Fighter 1A, Topic 2-2: Health and Safety Awareness <ul style="list-style-type: none"> • RK 9, 10 Fire Fighter 1A, Topic 2-3: Behavioral Health and Cancer Awareness <ul style="list-style-type: none"> • RK 7, 8 Fire Fighter 1A, Topic 2-4: Personal Protective Ensemble <ul style="list-style-type: none"> • RS 1 Fire Fighter 1A, Topic 4-1: Utilizing Ropes and Knots <ul style="list-style-type: none"> • RS 2 | Cognitive only – no testable skills | Cognitive only – no testable skills |

1-2: Inspecting and Maintaining Personal Protective Equipment

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Inspect and maintain structural personal protective equipment (PPE), given PPE, so that PPE is inspected, maintained, and returned to a ready state.

Requisite Knowledge

1. Identify the components of structural PPE
2. Explain the importance of standards for structural PPE
3. Describe how improper usage or maintenance can compromise PPE effectiveness
4. Describe proper method for inspecting, cleaning, and maintaining structural PPE
5. Identify when to remove PPE from service
6. Describe how to remove PPE from service

Requisite Skills

1. Inspect structural PPE
2. Clean structural PPE
3. Maintain structural PPE

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | NFPA 1001 does not include a designated JPR for inspecting and maintaining PPE but it is a Cal/OSHA requirement: 8 CCR § 3401(b)(4). |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--|-----------|
| Fire Fighter 1A, Topic 2-4: Structural Personal Protective Ensemble | 1-7: Doff, Inspect, and Prepare Structural PPE for Reuse | (CTS 1-2) |

1-3: Inspecting and Maintaining Self-Contained Breathing Apparatus

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Inspect and maintain self-contained breathing apparatus (SCBA), given SCBA, so that SCBA is inspected, maintained, and returned to a ready state.

Requisite Knowledge

1. Identify the components of SCBA
2. Explain the importance of standards for SCBA
3. Describe how improper fit, usage, or maintenance can compromise SCBA effectiveness
4. Identify the proper method for inspecting, cleaning, and maintaining SCBA
5. Identify when to remove SCBA from service
6. Describe how to remove SCBA from service

Requisite Skills

1. Inspect SCBA
2. Clean SCBA
3. Maintain SCBA

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | NFPA 1001 does not include a designated JPR for inspecting and maintaining SCBA but it is a Cal/OSHA requirement: 8 CCR § 5144(k). |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|-------------------|-----------|
| Fire Fighter 1A, Topic 2-5: Self-Contained Breathing Apparatus | 1-3: Inspect SCBA | (CTS 1-3) |

1-4: Donning Structural Personal Protective Equipment

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Don structural personal protective equipment (PPE), given PPE, so the PPE is donned in 60 seconds or less and all elements of the PPE ensemble are worn in accordance with manufacturer guidelines.

Requisite Knowledge

1. Describe the protection provided by structural PPE
2. Describe the limitations of structural PPE
3. Identify manufacturer guidelines for correct PPE use

Requisite Skills

1. Don PPE

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| CTS | Added a certification training standard. | NFPA 1001 does not include a designated JPR for donning PPE. OSFM uses 60 seconds as the industry standard. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|-------------------------|-----------|
| Fire Fighter 1A, Topic 2-4: Structural Personal Protective Ensemble | 1-4: Don Structural PPE | (CTS 1-4) |

1-5: Donning Self-Contained Breathing Apparatus

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Don self-contained breathing apparatus (SCBA), given SCBA, so that the SCBA is donned in 60 seconds or less and all elements of the SCBA are worn and operated in accordance with manufacturer guidelines.

Requisite Knowledge

1. Identify conditions that require respiratory protection
2. Describe the protection provided by SCBA
3. Describe the uses and limitations of SCBA
4. Describe potential long-term consequences of exposure to products of combustion
5. Identify manufacturer guidelines for correct SCBA use
6. Describe operational inspection procedures for SCBA

Requisite Skills

1. Don SCBA
2. Perform operational inspection of SCBA

Content Modification

| Block | Modification | Justification |
|-------|---------------------------------|--|
| CTS | Added a certification standard. | NFPA 1001 does not include a designated JPR for donning SCBA. OSFM uses 60 seconds as the industry standard. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|----------------|-----------|
| Fire Fighter 1A, Topic 2-5: Self-Contained Breathing Apparatus | 1-5: Don SCBA | (CTS 1-5) |

1-6: Doffing Self-Contained Breathing Apparatus

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Doff self-contained breathing apparatus (SCBA), given SCBA, so that SCBA is removed in accordance with manufacturer guidelines and returned to a ready state.

Requisite Knowledge

1. Identify when it is safe to doff respiratory protection
2. Identify manufacturer guidelines for doffing SCBA
3. Identify AHJ policies and procedures for doffing SCBA

Requisite Skills

1. Doff SCBA
2. Return SCBA to a ready state

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| CTS | Added a certification training standard. | NFPA 1001 does not include a designated JPR for doffing SCBA but it is a California requirement: 8 CCR § 5144(k). |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|----------------|-----------|
| Fire Fighter 1A, Topic 2-5: Self-Contained Breathing Apparatus | 1-6: Doff SCBA | (CTS 1-6) |

1-7: Doffing Personal Protective Equipment

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Doff structural personal protective equipment (PPE), given PPE, so that PPE is removed in accordance with manufacturer guidelines and returned to a ready state.

Requisite Knowledge

1. Identify when it is safe to doff PPE
2. Identify manufacturer guidelines for doffing PPE
3. Identify AHJ policies and procedures for doffing PPE

Requisite Skills

1. Doff PPE
2. Return PPE to a ready state

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | NFPA 1001 does not include a designated JPR for doffing PPE. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--|-----------|
| Fire Fighter 1A, Topic 2-4: Structural Personal Protective Ensemble | 1-7: Doff, Inspect, and Prepare Structural PPE for Reuse | (CTS 1-7) |

1-8: Doffing Self-Contained Breathing Apparatus and Personal Protective Equipment for Gross Decontamination

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Doff self-contained breathing apparatus (SCBA) and structural personal protective equipment (PPE), given SCBA and PPE, so that SCBA and PPE are removed to reduce contaminant exposure; SCBA and PPE undergo gross decontamination and are tagged and transported; and fire fighter conducts physical decontamination as soon as possible, in order to reduce exposure to field contaminants.

Requisite Knowledge

1. Identify the purpose and benefits of gross decontamination
2. Identify parts of the body most susceptible to contaminate exposure
3. Identify common routes of exposure
4. Describe how to conduct onsite gross decontamination
5. Describe how to doff SCBA and PPE to reduce exposure to field contaminants
6. Describe how to tag and transport contaminated SCBA and PPE
7. Identify personal decontamination processes

Requisite Skills

1. Don and doff SCBA and PPE

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | NFPA 1001 does not include a designated JPR for PPE gross decontamination. Added to incorporate IAFF Cancer Awareness and Prevention Initiative to increase awareness and promote cultural change. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|-----------|
| Fire Fighter 1A, Topic 2-7: Doffing SCBA and PPE for Gross Decontamination | 1-8: Doff SCBA and PPE for Gross Decontamination | (CTS 1-8) |

1-9: Identifying Confined Spaces

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Identify a permit-required and non-permit-required confined space, given an incident and a confined space, so that hazards associated with confined spaces are identified, equipment is secured, and incident management operations and communications are followed, in accordance with state regulations and industry standards.

Requisite Knowledge

1. Identify regulations and standards applicable to confined space incidents
2. Describe the history and dangers of confined space incidents
3. Describe how to identify a confined space
4. Describe how to identify a permit-required confined space
5. Describe how to recognize hazards
6. Describe how to isolate hazards and minimize risks
7. Describe how to recognize the need for and manage support resources
8. Describe how to ensure that resource application fits the operational requirements
9. Describe how to recognize the need for technical rescue resources
10. Describe how to search areas immediately adjacent to the space
11. Describe how to establish victim communication
12. Describe how to determine a victim survivability profile
13. Describe how to evaluate a non-entry rescue
14. Describe how to perform a non-entry rescue
15. Describe the positions and components of a permit-required confined space entry
16. Describe Cal/OSHA confined space operational positions and responsibilities

Requisite Skills

1. None required

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| CTS | Added a certification training standard. | California state law (8 CCR § 5157-5158) not captured by NFPA 1001. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|------------------------------------|-----------|
| CSRA: Confined-Space Rescue Awareness (2018) | Covered in CSRA training materials | (CTS 1-9) |

Fire Fighter 1 - Structure

Section 1: Structure Fire Fighter Duties

The training for this standard can be met through the completion of State Fire Training's Confined Space Rescue Awareness course.

1-10: Operating within the Incident Command System

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Operate within the Incident Command System (ICS), given an incident and an incident action plan, so that organizational elements are recognized, positions and responsibilities are identified, facility needs are met, and the incident is managed, in accordance with state and federal regulations.

Requisite Knowledge

1. Explain the principles and basic structure of the Incident Command System (ICS)
2. Describe the NIMS management characteristics that are the foundation of the ICS
3. Describe the ICS functional areas and the roles of the Incident Commander and Command Staff
4. Describe the General Staff roles within ICS
5. Identify how NIMS management characteristics apply to ICS for a variety of roles and discipline areas

Requisite Skills

1. None required

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | This California state law is not captured by NFPA 1001: 19 CCR § 2403. See also: Homeland Security Presidential Directive, HSPD-5, Section 502, of the Homeland Security Act, 6 U.S.C. §§ 101 et. seq. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|-----------------------------------|-----------|
| Fire Fighter 1A, Topic 2-1: Operating within the Incident Command System | Covered in other training modules | (CTS 2-1) |

The training for this standard can be met through the completion of FEMA's IS-100: Introduction to the Incident Command System and IS-700: An Introduction to the National Incident Management System.

1-11: Fire Fighter Physical Health and Safety

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Identify common fire fighter health and safety issues, given an assignment, in order to avoid or mitigate common accidents and injuries, maintain a healthy and physically fit lifestyle, and conduct life safety initiatives in the line of duty.

Requisite Knowledge

1. List common types of accidents and injuries and identify their causes
2. Describe how physical fitness and a healthy lifestyle correspond to fire fighter performance
3. Define critical aspects of NFPA 1500: Standard on Fire Department Occupational Safety and Health Program (current edition)
4. Describe how fire and life safety initiatives support a fire department's mission to reduce fire fighter line-of-duty injuries and deaths

Requisite Skills

1. None required

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | Application of this behavior reduces fire fighter injury, illness, and fatalities. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|-------------------------------------|------------|
| Fire Fighter 1A, Topic 2-2: Health and Safety Awareness | Cognitive only – no testable skills | (CTS 1-11) |

1-12: Behavioral Health

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Describe common sources and impacts of stress and demonstrate practices that contribute to resilience, given an assignment in the fire service, in accordance with current research and best practices.

Requisite Knowledge

Define types of stress

Describe signs and symptoms of stress

Describe reactions to stress

Identify common stressors found in various situations and environments

Describe physiological and emotional impacts of stress

Describe behaviors associated with unmanaged stress

Describe the role of nutrition, sleep, exercise, relaxation techniques, and rest in mediating and mitigating stress

Describe healthy and unhealthy coping mechanisms

Identify potential consequences of unhealthy coping mechanisms

Describe the role of communication in coping with stress

Describe behavioral health resources available through an AHJ

Describe behavioral health resources available outside of the fire service

Requisite Skills

Demonstrate the self-assessment process

Demonstrate relaxation techniques

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| CTS | Added a certification training standard. | Added to address critical health and safety concerns facing the fire service not covered by NFPA standards. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|-------------------------------------|-------------------------------------|
| Fire Fighter 1A, Topic 2-3: Stress and Resilience | Cognitive only – no testable skills | Cognitive only – no testable skills |

1-13: Cancer Awareness

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Demonstrate best practices to minimize cancer exposure and risk, given an assignment in the fire service so that the types, prevalence of, and common causes of cancer in the fire service are described, exposure to carcinogenic chemicals is described, and cancer exposure and risk are mitigated in accordance with current research and best practices.

Requisite Knowledge

- Describe cancer prevalence in the fire service
- Define “carcinogenic agent”
- Identify risk factors specific to the fire service
- Identify risk or protective factors specific to lifestyle
- Identify exposure sources
- Identify common states of carcinogenic chemicals
- Identify common categories of carcinogenic chemicals
- Identify exposure routes
- Identify common activities, objects, and locations associated with exposure
- Identify modifiable and unmodifiable risk factors
- Define “exclusion (hot) zones,” “contamination reduction (warm) zones,” and “support (cold) zones”
- Identify best practices that minimize contaminant exposure and risk during fire suppression, overhaul, mop-up, and post-incident activities
- Identify best practices for PPE that minimize contaminant exposure and risk
- Identify best practices for equipment that minimize contaminant exposure and risk
- Identify best practices that minimize contaminant exposure and risk at the station
- Identify best practices that minimize contaminant exposure and risk at home

Requisite Skills

- Demonstrate best practices that minimize contaminant exposure and risk during fire suppression, overhaul, mop-up, and post-incident activities
- Demonstrate best practices for PPE that minimize contaminant exposure and risk
- Demonstrate best practices for equipment that minimize contaminant exposure and risk
- Demonstrate best practices that minimize contaminant exposure and risk at the station
- Demonstrate best practices that minimize contaminant exposure and risk at home
- Document all exposures, injuries, and illnesses within AHJ reporting system

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| CTS | Added a certification training standard. | Added to address critical health and safety concerns facing the fire service not covered by NFPA standards. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|-------------------------------------|-------------------------------------|
| Fire Fighter 1A, Topic 2-4: Cancer Awareness | Cognitive only – no testable skills | Cognitive only – no testable skills |

Section 2: Fire Department Communications

2-1: Initiating the Response to a Reported Emergency

Authority

1. NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)
 - Paragraph 4.2.1
2. Office of the State Fire Marshal

Job Performance Requirement

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.

Requisite Knowledge

1. *Explain* the procedures for reporting an emergency
2. *Identify* departmental SOPs for taking and receiving alarms, radio codes, or procedures
3. *List* information needs of dispatch center
4. Identify different types of fire department communications equipment

Requisite Skills

1. Operate fire department communications equipment
2. Relay information
3. Record information

Content Modification

| Block | Modification | Justification |
|-------|----------------------------|---|
| RK 4 | Added knowledge component. | The JPR requires the candidate to have equipment and use it correctly, but doesn't include any knowledge of it. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--|-----------|
| Fire Fighter 1A, Topic 3-2: Initiating a Response to a Reported Emergency | 2-1: Initiate a Response to an Emergency | (CTS 2-1) |

2-2: Receiving a Telephone Call

Authority

1. NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)
 - Paragraph 4.2.2

Job Performance Requirement

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.

Requisite Knowledge

1. *Describe* fire department procedures for answering non-emergency telephone calls

Requisite Skills

1. Operate fire station telephone and intercom equipment

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|-------------------------------|-----------|
| Fire Fighter 1A, Topic 3-1: Receiving a Non-emergency Telephone Call | 2-2: Receive a Telephone Call | (CTS 2-2) |

2-3: Transmitting and Receiving Messages via Radio

Authority

1. NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)
 - Paragraph 4.2.3
2. Office of the State Fire Marshal

Job Performance Requirement

Transmit and receive messages via the fire department radio, given a fire department radio and *standard* operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ.

Requisite Knowledge

1. *Describe* departmental radio procedures and etiquette for routine *radio* traffic, emergency *radio* traffic, and emergency *radio* evacuation signals
2. Identify types and operations of fire department radios

Requisite Skills

1. Operate radio equipment
2. *Identify the differences* between routine and emergency *radio* traffic

Content Modification

| Block | Modification | Justification |
|-------|---|--|
| JPR | Added "standard". | Added for consistency with other instances within NFPA 1001. |
| RK 1 | Added "radio" three times. | Added to clarify that this only covers the radio aspects of these items. |
| RK 2 | Added knowledge component. | The JPR requires the candidate to have a radio and use it correctly, but doesn't include any knowledge of types and use. |
| RS 2 | Changed "discriminate" to "identify the differences". Added "radio". | SFT uses neutral language whenever possible without changing content or context. Added "radio" to clarify that this only covers the radio aspect of emergency traffic. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--------------------------------------|-----------|
| Fire Fighter 1A, Topic 3-3: Transmitting and Receiving Messages Via Radio | 2-3: Operate a Fire Department Radio | (CTS 2-3) |

2-4: Activating an Emergency Call of Assistance

Authority

1. NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)
 - Paragraph 4.2.4

Job Performance Requirement

Activate an emergency call for assistance, given vision-obscured conditions, PPE, and department SOPs, so that the fire fighter can be located and rescued.

Requisite Knowledge

1. *Describe different* personnel accountability systems
2. *Describe* emergency communication procedures
3. *Describe* emergency evacuation methods

Requisite Skills

1. Initiate an emergency call for assistance in accordance with the AHJ's procedures
2. Use other methods of emergency calls for assistance

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|-----------|
| Fire Fighter 1A, Topic 6-1: Structural Fire Fighter Survival | 3-5: Activate an Emergency Call and Exit a Hazardous Area | (CTS 2-4) |

Section 3: Fire Ground Operations

3-1: Using Self-contained Breathing Apparatus During Emergency Operations

Authority

1. NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)
 - Paragraph 4.3.1
2. Office of the State Fire Marshal

Job Performance Requirement

Use self-contained breathing apparatus (SCBA) during emergency operations, given SCBA and other PPE, so that the SCBA is correctly donned, the SCBA is correctly worn, controlled breathing techniques are used, emergency procedures are enacted if the SCBA fails, all low-air warnings are recognized, respiratory protection is not intentionally compromised, and hazardous areas are exited prior to air depletion.

Requisite Knowledge

Identify conditions that require respiratory protection

Describe the uses and limitations of SCBA

Identify the components of SCBA

Describe different donning procedures

Describe different breathing techniques

Describe how to monitor and manage air consumption

Describe indications for and emergency procedures used with SCBA

Identify physical requirements of the SCBA wearer

Requisite Skills

1. Demonstrate different controlled breathing techniques
2. Replace SCBA air cylinders
3. Use SCBA to exit through restricted passages
4. Monitor and manage air consumption
5. Initiate and complete emergency procedures in the event of SCBA failure or air depletion
6. Complete donning procedures

Content Modification

| Block | Modification | Justification |
|-------|----------------------------|---------------------------------|
| RK 6 | Added knowledge component. | Added to comply with NFPA 1404. |
| RS 4 | Added skills component. | Added to comply with NFPA 1404. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--|------------------|
| Fire Fighter 1A, Topic 2-5: Self-Contained Breathing Apparatus <ul style="list-style-type: none">• RK 1, 2, 3, 4 and RS 6 Fire Fighter 1A, Topic 2-6: Using SCBA During Emergency Operations <ul style="list-style-type: none">• RK 5, 6, 7, 8 and RS 1, 2, 3, 4, 5 | 3-1a: Replace an SCBA Air Cylinder 3-1b: Use SCBA During Emergency Operations | (CTS 3-1) |

3-2: Responding on an Apparatus to an Emergency Scene

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.2

Job Performance Requirement

Respond on apparatus to an emergency scene, given *an apparatus*, personal protective clothing and other necessary PPE, so that the apparatus is correctly mounted and dismounted, seat belts are used while the vehicle is in motion, and other personal protective equipment is correctly used.

Requisite Knowledge

Describe mounting and dismounting procedures for riding fire apparatus

Identify hazards and ways to avoid hazards associated with riding apparatus

Describe prohibited practices

Identify different types of department PPE and *their* means for usage

Requisite Skills

Use each piece of provided safety equipment

Content Modification

| Block | Modification | Justification |
|-------|-----------------------|--|
| JPR | Added "an apparatus". | Not included in the given but required to complete the task. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|-----------|
| Fire Fighter 1A, Topic 2-8: Responding on an Apparatus to an Emergency Scene | 3-2: Respond to an Emergency Scene on an Apparatus | (CTS 3-2) |

3-3: Establishing and Operating in Work Areas at Emergency Scenes

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.3

Job Performance Requirement

Establish and operate in work areas at emergency scenes, given *an apparatus, personal* protective equipment, traffic and scene control devices, structure fire and roadway emergency scenes, traffic hazards and downed electrical wires, photovoltaic power systems, battery storage systems, an assignment, and SOPs, so that procedures are followed, protective equipment is worn, protected work areas are established as directed using traffic and scene control devices, and the fire fighter performs assigned tasks only in established, protected work areas.

Requisite Knowledge

Identify potential hazards involved in operating on emergency scenes including vehicle traffic, utilities, and environmental conditions

Describe proper procedures for *mounting and* dismounting apparatus in traffic

Describe procedures for safe operation at emergency scenes

Identify the protective equipment available for members' safety on emergency scenes and work zone designations

Requisite Skills

Use personal protective clothing

Deploy traffic and scene control devices

Dismount apparatus

Operate in the protected work areas as directed

Content Modification

| Block | Modification | Justification |
|-------|-----------------------|--|
| JPR | Added "an apparatus". | Not included in the given but required to complete the task. |
| JPR | Added "personal". | Added for consistency with other references to PPE. |
| RK 2 | Added "mounting and". | Added for consistency with other standards. Mounting is equally as important as dismounting. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|------------------------------------|-----------|
| Fire Fighter 1A, Topic 2-9: Establishing and Operating in Work Areas at Emergency Scenes | 3-3: Operate at an Emergency Scene | (CTS 3-3) |

3-4: Forcing Entry into a Structure

Authority

1. NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)
 - Paragraph 4.3.4

Job Performance Requirement

Force entry into a structure, given PPE, tools, *a prop or structure with doors, walls, and windows*, and an assignment, so that the tools are used as designed, the barrier is removed, and the opening is in a safe condition and ready for entry.

Requisite Knowledge

Describe basic construction of typical doors, windows, and walls within the department's community or service area

Describe types and uses of hand and power tools used for forcible entry

Describe the operation of doors, windows, and locks

Identify the dangers associated with forcing entry through doors, windows, and walls

Requisite Skills

Transport and operate hand and power tools

Force entry through doors, windows, and walls using assorted methods and tools

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| JPR | Added "a prop or structure with doors, walls, and windows" | Required to complete the JPR but not included in the given. |
| RK 2 | Added knowledge component. | Not included in NFPA 1001 but required to complete RS 1. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|-----------------------------------|-----------|
| Fire Fighter 1A, Topic 5-1: Building Construction <ul style="list-style-type: none">• RK 1 Fire Fighter 1A, Topic 5-10: Forcing Entry into a Structure <ul style="list-style-type: none">• RK 1, 2, 3, 4 and RS 1, 2 | 3-4: Force Entry into a Structure | (CTS 3-4) |

3-5: Exiting a Hazardous Area

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.5

Job Performance Requirement

Exit a hazardous area as a team, given vision-obscured conditions *and PPE*, so that a safe haven is found before exhausting the air supply, others are not endangered, and the team integrity is maintained.

Requisite Knowledge

Describe personnel accountability systems

Describe communication procedures

Describe emergency evacuation methods

Define what constitutes a safe haven

Identify elements that create or indicate a hazard

Identify emergency procedures for loss of air supply

Requisite Skills

Operate as a team member in vision-obscured conditions

Locate and follow a guide line

Conserve air supply

Evaluate areas for hazards

Identify a safe haven

Content Modification

| Block | Modification | Justification |
|-------|--------------------------------------|---|
| JPR | Added "and PPE". | Not included in NFPA 1001 but required for fire fighter survival. |
| RS 2 | Changed "guideline" to "guide line". | Changed to clarify meaning. NFPA 1001 used the wrong word. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|-----------|
| Fire Fighter 1A, Topic 6-1: Structural Fire Fighter Survival | 3-5: Activate an Emergency Call and Exit a Hazardous Area | (CTS 3-5) |

3-6: Setting Up, Mounting, Ascending, Dismounting, and Descending Ground Ladders

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.6

Office of the State Fire Marshal

Job Performance Requirement

Set up, mount, ascend, dismount, and descend ground ladders, given single and extension ladders, an assignment, *PPE*, and team members if needed, so that hazards are assessed, the ladder is stable, the angle is correct for climbing, extension ladders are extended to the necessary height with the fly locked, the top is placed against a reliable structural component, and the assignment is accomplished.

Requisite Knowledge

Identify the uses of ground ladders

Identify the types, parts, and construction features of a ground ladder

Identify types of lifts, carries, and raises

Describe how to secure ground ladders

Describe how to operate from ground ladders

Describe hazards associated with setting up ladders

Define what constitutes a stable foundation for ladder placement

Identify different angles for various tasks

Describe climbing techniques

Describe safety limits to the degree of angulation

Describe what constitutes a reliable structural component for top placement

Requisite Skills

Lift and carry ladders

Raise *and move* ladders

Extend ladders

Lock flies

Secure ground ladders

Determine that a wall and roof will support the ladder

Judge extension ladder height requirements

Place the ladder to avoid obvious hazards

Mount, ascend, dismount, and descend the ladder

Demonstrate proper climbing techniques

Operate from ground ladders

Content Modification

| Block | Modification | Justification |
|-------|--------------------------------|---|
| JPR | Added "PPE". | Not included in NFPA 1001 but required for fire fighter survival. |
| RK 1 | Added knowledge component. | Not included in NFPA 1001 but needed for proper ladder use. |
| RK 2 | Added to a knowledge component | Not included in NFPA 1001 but needed for proper ladder use. |
| RK 3 | Added knowledge component. | Not included in NFPA 1001 but needed for proper ladder use. |
| RK 4 | Added knowledge component. | Not included in NFPA 1001 but needed for proper ladder use. |
| RK 5 | Added knowledge component. | Not included in NFPA 1001 but needed for proper ladder use. |
| RS 1 | Added "Lift and". | Changed to match RK 3. |
| RS 2 | Added "and move". | Not included in NFPA 1001 but needed for proper ladder use. |
| RS 5 | Added skills component. | Added to correspond with RK 4. |
| RS 10 | Added skills component. | This is a CalOSHA requirement. |
| RS 11 | Added skills component. | Added to correspond with RK 6. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|-----------|
| Fire Fighter 1A, Topic 5-8: Cleaning, Inspecting, and Maintaining Fire Service Ladders <ul style="list-style-type: none"> • RK 1, 2 Fire Fighter 1A, Topic 5-9: Ground Ladder Operations <ul style="list-style-type: none"> • RK 3, 4, 5, 6, 7, 8, 9, 10, 11 • RS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 | 3-6: Lift, Carry, and Raise a Ground Ladder | (CTS 3-6) |

3-7: Attacking a Passenger Vehicle Fire

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.7

Office of the State Fire Marshal

Job Performance Requirement

Attack a passenger vehicle fire operating as a member of a team, given personal protective equipment (PPE), *self-contained breathing apparatus (SCBA)*, an attack line (*1½ inch or larger*), hand tools, and *a passenger vehicle or prop*, so that hazards are avoided, leaking flammable liquids are identified and controlled, protection from flash fires is maintained, all vehicle compartments are overhauled, and the fire is extinguished.

Requisite Knowledge

Describe principles of fire streams as they relate to fighting automobile fires

Identify precautions to be followed when advancing hose lines toward an automobile

List observable results that a fire stream has been properly applied

Identify alternative fuels and the hazards associated with them

Describe dangerous conditions created during an automobile fire

Describe common types of accidents or injuries related to fighting automobile fires and how to avoid them

Describe how to access locked passenger, trunk, and engine compartments

Identify methods for overhauling an automobile

Requisite Skills

Identify automobile fuel types

Assess and control fuel leaks

Open, close, and adjust the flow and pattern on nozzles

Apply water for maximum effectiveness while maintaining flash fire protection

Advance 1½ in. (38 mm) or larger diameter attack lines

Expose hidden fires by opening all automobile compartments

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| JPR | Added "self-contained breathing apparatus (SCBA)". | CalOSHA requirement for IDLH environments. |
| JPR | Added "(1½ inch or larger)". | Specified by RS 5. |
| JPR | Added "a passenger vehicle or prop". | Not included in the given but required to complete the JPR. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--------------------------------------|------------------|
| Fire Fighter 1A, Topic 7-2: Attacking a Passenger Vehicle Fire | 3-7: Attack a Passenger Vehicle Fire | (CTS 3-7) |

3-8: Extinguishing Fires in Exterior Class A Materials

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.8

Office of the State Fire Marshal

Job Performance Requirement

Extinguish fires in exterior Class A materials, given fires in stacked or piled *materials*, small unattached structures, or storage containers that can be fought from the exterior, attack lines, hand tools and master stream devices, *PPE*, and an assignment, so that exposures are protected, the spread of fire is stopped, collapse hazards are avoided, water application is effective, the fire is extinguished, and signs of the origin area(s) and arson are preserved.

Requisite Knowledge

Describe types of attack lines and water streams appropriate for attacking stacked, piled materials, and outdoor fires

Identify dangers — such as collapse — associated with stacked and piled materials

Describe various extinguishing agents and their effect on different material configurations

Identify tools and methods to use in breaking up various types of materials

Describe difficulties related to complete extinguishment of stacked and piled materials

Identify water application methods for exposure protection and fire extinguishment

Describe dangers such as exposure to toxic or hazardous materials associated with storage building and container fires

Identify obvious signs of origin and cause

List techniques for the preservation of fire cause evidence

Requisite Skills

Recognize inherent hazards related to the material's configuration

Operate handlines or master streams

Break up material using hand tools and water streams

Operate hoselines and other water application devices

Evaluate and modify water application for maximum penetration

Search for and expose hidden fires

Assess patterns for origin determination

Evaluate for complete extinguishment

Content Modification

| Block | Modification | Justification |
|-------|-------------------------------|--|
| JPR | Added "PPE". | Not included in NFPA 1001 but required for fire fighter survival. |
| JPR | Added "materials" and commas. | As originally written "stacked or piled" modified "unattached structure or storage container". Revised to clarify meaning. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|---|------------------|
| Fire Fighter 1A, Topic 7-1: Extinguishing Fires in Exterior Class A Materials | 3-8a: Operate a Portable Master Stream 3-8b: Extinguish an Exterior Fire | (CTS 3-8) |

3-9: Conducting a Search and Rescue in a Structure

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.9

Office of the State Fire Marshal

Job Performance Requirement

Conduct a search and rescue in a structure operating as a member of a team, given an assignment, obscured vision conditions, personal protective equipment (PPE), *self-contained breathing apparatus (SCBA)*, a flashlight, forcible entry tools, hose lines or *guide lines*, a *thermal imaging device*, and ladders when necessary, so that ladders are correctly placed when used, all assigned areas are searched, all victims are located and removed, team integrity is maintained, and team members' safety — including respiratory protection — is not compromised.

Requisite Knowledge

Describe how to use forcible entry tools during rescue operations

Describe how to use thermal imaging devices and other search tools

Describe how to use ladder operations for rescue

Identify the psychological effects of operating in obscured conditions and ways to manage them

Describe methods to determine if an area is tenable

Describe primary and secondary search techniques

Identify team members' roles and goals

Describe methods and indicators used to locate victims

Describe victim removal methods (including various carries)

Identify considerations related to respiratory protection

Requisite Skills

Use SCBA to exit through restricted passages

Set up and use different types of ladders for various types of rescue operations

Rescue a fire fighter with functioning respiratory protection

Rescue a fire fighter whose respiratory protection is not functioning

Rescue a person who has no respiratory protection

Assess areas to determine tenability

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| JPR | Added "self-contained breathing apparatus (SCBA)". | Required for RK 1 but not included in the given. |
| JPR | Added "or guide lines". | This is an additional option for orientation. |
| JPR | Added "a thermal imaging device". | This is a recognized industry standard not included in NFPA 1001. |
| RK 2 | Added knowledge component. | This is a recognized industry standard not included in NFPA 1001. |
| RK 8 | Revised without changing intent. | Revised for clarification. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|-----------|
| Fire Fighter 1A, Topic 5-11: Conducting a Search and Rescue Operation in a Structure | 3-9a: Search for and Rescue a Victim with no Respiratory Protection 3-9b: Rescue a Fire Fighter 3-9c: Use a Ladder for Rescue | (CTS 3-9) |

3-10: Attacking an Interior Structure Fire

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.10

Office of the State Fire Marshal

Job Performance Requirement

Attack an interior structure fire operating as a member of a team, given an attack line (*1½ inch or larger*), *pumping apparatus, established water supply*, ladders when needed, personal protective equipment, *self-contained breathing apparatus (SCBA)*, tools, and an assignment, so that team integrity is maintained, the attack line is deployed for advancement, ladders are correctly placed when used, access is gained into the fire area, effective water application practices are used, the fire is approached correctly, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, the correct body posture is maintained, hazards are recognized and managed, and the fire is brought under control.

Requisite Knowledge

Identify types, designs, and uses of fire hoses

Identify fittings, tools, and appliances

Describe common building materials and construction types

Identify the principles of fire streams

Describe types, design, operation, nozzle pressure effects, and flow capabilities of nozzles

Identify precautions to be followed when advancing hoselines to a fire

Describe observable results that a fire stream has been properly applied

Identify dangerous building conditions created by fire

Identify principles of exposure protection

Describe potential long-term consequences of exposure to products of combustion

List physical states of matter in which fuels are found

List common types of accidents or injuries and their causes

Describe how to apply each size and type of attack line

Define the role of the backup team in fire attack situations

Describe attack and control techniques for grade level and above and below grade level fires

Identify methods for locating and exposing hidden fires

Requisite Skills

Prevent water hammers when shutting down nozzles

Open, close, and adjust nozzle flow and patterns

Apply water using direct, indirect, and combination attacks

Advance charged and uncharged 1½ in. (38 mm) diameter or larger hose lines up ladders and up and down interior and exterior stairways

Extend hose lines

Replace burst hose sections

Operate charged hose lines of 1½ in. (38 mm) diameter or larger while secured to a ground ladder
Couple and uncouple various *hose line* connections
Carry hose
Attack fires at grade level and above and below grade levels
Locate and suppress interior wall and subfloor fires

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| JPR | Added "(1½ inch or larger)". | Specified by RS 4, and RS 7. |
| JPR | Added "pumping apparatus, established water supply". | You cannot do live fire training evolutions without a water supply. |
| JPR | Added "self-contained breathing apparatus (SCBA)". | Required for IDLH environments. |
| RK 1 | Added knowledge component. | Not included in NFPA 1001 but needed for proper hose use. |
| RK 2 | Added knowledge component. | Not included in NFPA 1001 but needed for proper hose use. |
| RK 3 | Added knowledge component. | Not included in NFPA 1001 but needed for proper hose selection and attack. |
| RK 16 | Added "methods for locating". | Not included in NFPA 1001 but this is a two-step process. |
| RS 8 | Changed "handline" to "hose line". | Not all hose lines are handlines. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|------------|
| Fire Fighter 1A, Topic 2-5: Self-Contained Breathing Apparatus <ul style="list-style-type: none"> • RK 10 Fire Fighter 1A, Topic 5-1: Building Construction <ul style="list-style-type: none"> • RK 3, 8 Fire Fighter 1A, Topic 5-2: Fire Behavior <ul style="list-style-type: none"> • RK 11 Fire Fighter 1A, Topic 5-5: Cleaning, Inspecting, and Returning Fire Hose to Service <ul style="list-style-type: none"> • RK 1, 2, 5, 13 Fire Fighter 1A, Topic 5-6: Deploy and Connect Fire Hose <ul style="list-style-type: none"> • RK 4, 6, 7 and RS 1, 2, 5, 6, 8, 9 Fire Fighter 1A, Topic 5-12: Attacking an Interior Structure Fire | 3-10a: Operate a Charged Attack Hoseline from a Ground Ladder 3-10b: Attack a Live Interior Structure Fire 3-10c: Attack a Simulated Interior Structure Fire 3-10d: Extend a Hoseline 3-10e: Load, Deploy, and Advance an Attack Line 3-10f: Load Supply Hose | (CTS 3-10) |

Fire Fighter 1 - Structure
Section 3: Fire Ground Operations

| | | |
|---|--|--|
| <ul style="list-style-type: none">• RK 6, 7, 9, 12, 14, 15, 16 and RS 3, 4, 7, 10, 11 | | |
|---|--|--|

The training for this standard can be met through the completion of State Fire Training's Fire Control 3: Structural Fire Fighting (2018) course.

3-11: Performing Horizontal Ventilation on a Structure

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.11

Job Performance Requirement

Perform horizontal ventilation on a structure operating as part of a team, given an assignment, PPE, ventilation tools, equipment, and ladders, so that the ventilation openings are free of obstructions, tools are used as designed, ladders are correctly placed, ventilation devices are correctly placed, and the structure is cleared of smoke.

Requisite Knowledge

Describe the principles, advantages, limitations, and effects of horizontal, mechanical, and hydraulic ventilation

Describe safety considerations when venting a structure

Describe fire behavior in a structure

List the products of combustion found in a structure fire

Identify the signs, causes, effects, and prevention of backdrafts

Describe the relationship of oxygen concentration to life safety and fire growth

Requisite Skills

Transport and operate ventilation tools and equipment and ladders

Use safe procedures for breaking window and door glass and removing obstructions

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--------------------------------------|------------|
| Fire Fighter 1A, Topic 5-13: Horizontal Ventilation Operations <ul style="list-style-type: none">• RK 1, 2 and RS 1, 2, 3 Fire Fighter 1A, Topic 5-2: Fire Behavior <ul style="list-style-type: none">• RK 3, 4, 5, 6 | 3-11: Perform Horizontal Ventilation | (CTS 3-11) |

3-12: Performing Vertical Ventilation on a Structure

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.12

Office of the State Fire Marshal

Job Performance Requirement

Perform vertical ventilation on a structure as part of a team, given an assignment, PPE, ground and roof ladders, and tools, so that ladders are positioned for ventilation, a specified opening is created, all ventilation barriers are removed, structural integrity is not compromised, products of combustion are released from the structure, and the team retreats from the area when ventilation is accomplished.

Requisite Knowledge

Describe vertical (top-side) ventilation

Describe methods of heat transfer

Describe the principles of thermal layering within a structure on fire

List the techniques and safety precautions for venting flat roofs, pitched roofs, and basements

Describe basic indicators of potential collapse or roof failure

Identify the effects of construction type and elapsed time under fire conditions on structural integrity

Describe the advantages and disadvantages of vertical and trench/strip ventilation

Requisite Skills

Transport and operate ventilation tools and equipment

Hoist ventilation tools to a roof

Cut roofing and flooring materials to vent flat roofs, pitched roofs, and basements

Sound a roof for integrity

Clear an opening with hand tools

Select, carry, deploy, and secure ground ladders for ventilation activities

Deploy roof ladders on pitched roofs while secured to a ground ladder

Carry ventilation-related tools and equipment while ascending and descending ladders

Content Modification

| Block | Modification | Justification |
|-------|----------------------------|---|
| RK 1 | Added knowledge component. | Needed a basic level introduction to the topic. Mirrors foundational information in the Horizontal Ventilation JPR. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|------------------------------------|------------------|
| Fire Fighter 1A, Topic 5-1: Building Construction <ul style="list-style-type: none">• RK 6 Fire Fighter 1A: Topic 5-2: Fire Behavior <ul style="list-style-type: none">• RK 2-3 Fire Fighter 1A, Topic 5-14: Vertical Ventilation Operations <ul style="list-style-type: none">• RK 1, 4-7 and RS 1-8 | 3-12: Perform Vertical Ventilation | (CTS 3-12) |

3-13: Overhauling a Fire Scene

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.13

Office of the State Fire Marshal

Job Performance Requirement

Overhaul a fire scene, given PPE, an attack line, hand tools, a flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

Requisite Knowledge

Describe the purpose of and methods for overhaul

Describe types of fire attack lines and water application devices most effective for overhaul

Describe water application methods for extinguishment that limit water damage

Identify types of tools and methods used to expose hidden fire

Describe dangers associated with overhaul

Describe obvious signs of area of origin or signs of arson

Identify reasons for protection of fire scene

Requisite Skills

Deploy and operate an attack line *for overhaul*

Remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity

Apply water for maximum effectiveness

Expose and extinguish hidden fires in walls, ceilings, and subfloor spaces

Recognize and preserve obvious signs of area of origin and arson

Separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination

Evaluate for complete extinguishment

Content Modification

| Block | Modification | Justification |
|-------|------------------------------|--|
| RK 1 | Added a knowledge component. | Foundational knowledge not included in NFPA. |
| RS 1 | Added "for overhaul". | Adding "for overhaul" dictates hose line selection. |
| RS 6 | Added skills component. | This is a skill from NFPA 1001 paragraph 4.3.14. It aligns more closely with the JPR for paragraph 4.3.13. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|---|------------------|
| Fire Fighter 1A, Topic 5-16: Overhauling a Fire Scene | 3-13a: Overhaul a Fire Scene 3-13b: Remove Charred Materials | (CTS 3-13) |

3-14: Conserving Property

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.14

Office of the State Fire Marshal

Job Performance Requirement

Conserve property as a member of a team, given salvage tools and equipment, *PPE*, and an assignment, so that the building and its contents are protected from further damage.

Requisite Knowledge

Describe the purpose of property conservation and its value to the public

Describe methods used to protect property

List types of and uses for salvage covers

Describe operations at properties protected with automatic sprinklers

Describe how to stop the flow of water from an automatic sprinkler head

Identify the main control valve on an automatic sprinkler system

Describe forcible entry issues related to salvage

Describe procedures for protecting possible areas of origin and potential evidence

Requisite Skills

Cluster furniture

Deploy covering materials

Roll and fold salvage covers for reuse

Construct water chutes and catch-alls

Remove water

Cover building openings, including doors, windows, floor openings, and roof openings

Stop the flow of water from a sprinkler with sprinkler wedges or stoppers

Operate a main control valve on an automatic sprinkler system

Content Modification

| Block | Modification | Justification |
|-------|---|--|
| JPR | Added "PPE". | Not included in NFPA 1001 but required for fire fighter safety. |
| RS | Removed "Separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination". | This skill aligns more closely with the JPR for NFPA 1001 paragraph 43.13. It was relocated to 3-13: Overhauling a Fire Scene. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|------------------|
| Fire Fighter 1A, Topic 5-15: Conserving Property | 3-14a: Control Water Flow from a Sprinkler System 3-14b: Remove Water from the Interior of a Structure 3-14c: Salvage a Room and its Contents 3-15d: Cover Building Openings | (CTS 3-14) |

3-15: Connecting a Fire Department Pumper to a Water Supply

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.15

Office of the State Fire Marshal

Job Performance Requirement

Connect a fire department pumper to a water supply as a member of a team, given supply or intake hose, hose tools, a fire hydrant or static water source, *an apparatus*, and *PPE*, so that connections are tight and water flow is unobstructed.

Requisite Knowledge

Describe types and components of municipal and rural water systems

Describe loading and off-loading procedures for mobile water supply apparatus

Describe fire hydrant operation

Identify suitable static water supply sources

Describe procedures and protocol for connecting to various water sources

Requisite Skills

Hand lay a supply hose

Connect and place hard suction hose for drafting operations

Deploy portable water tanks as well as the equipment necessary to transfer water between and draft from them

Make hydrant-to-pumper hose connections for forward and reverse lays

Connect supply hose to a hydrant

Fully open and close the hydrant

Content Modification

| Block | Modification | Justification |
|-------|------------------------------|--|
| JPR | Added "and PPE". | Not included in NFPA 1001 but required for fire fighter safety. |
| JPR | Added "an apparatus" | Required to complete the JPR but not listed as a given. |
| RK 1 | Added a knowledge component. | NFPA 1001 assumes that the candidate is using a pressurized hydrant but there are other types of water supply. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|------------------|
| Fire Fighter 1A, Topic 5-4: Water Supply Systems <ul style="list-style-type: none">• RK 1, 2, 3, 4, 5 Fire Fighter 1A, Topic 5-6: Deploy and Connect Fire Hose <ul style="list-style-type: none">• RS 1, 2, 3, 4, 5, 6 | 3-15a: Deploy Portable Tank and Prepare for Drafting Operations 3-15b: Forward Hose Lay | (CTS 3-15) |

3-16: Extinguishing Incipient Class A, Class B, and Class C Fires

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.16

Office of the State Fire Marshal

Job Performance Requirement

Extinguish incipient Class A, Class B, and Class C fires, given a selection of portable fire extinguishers *and PPE*, so that the correct extinguisher is chosen, the fire is completely extinguished, and correct extinguisher-handling techniques are followed.

Requisite Knowledge

Describe the classifications of fire

Identify the types of, rating systems for, and risks associated with each class of fire

Describe operating methods and limitations of portable extinguishers

Requisite Skills

Operate portable fire extinguishers

Approach fire with portable fire extinguishers

Select an appropriate extinguisher based on the size and type of fire

Safely carry portable fire extinguishers

Content Modification

| Block | Modification | Justification |
|-------|---------------------------|---|
| JPR | Added " <i>and PPE</i> ". | Not included in NFPA 1001 but required for fire fighter safety. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|---|------------|
| Fire Fighter 1A, Topic 5-2: Fire Behavior <ul style="list-style-type: none">• RK 1 Fire Fighter 1A, Topic 5-3: Extinguishing Fire with Fire Extinguishers <ul style="list-style-type: none">• RK 2, 3 and RS 1, 2, 3, 4 | 3-16: Select, Carry, and Operate a Portable Fire Extinguisher | (CTS 3-16) |

3-17: Operating Emergency Scene Lighting

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.17

Office of the State Fire Marshal

Job Performance Requirement

Operate emergency scene lighting, given fire service lighting equipment, a power supply, and an assignment, so that emergency scene lighting equipment is operated within the manufacturer's listed safety precautions.

Requisite Knowledge

Describe safety principles and practices for portable electrical equipment

Identify power supply capacity and limitations

Describe light deployment methods

Requisite Skills

Operate department power supply and lighting equipment

Deploy cords and connectors

Reset ground-fault interrupter (GFI) devices

Locate lights for best effect

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| RK 1 | Added "for portable electrical equipment". | This was added to narrow the scope of discussion. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---------------------|------------|
| Fire Fighter 1A, Topic 4-3: Operating Emergency Scene Lighting | 3-17: Light a Scene | (CTS 3-17) |

3-18: Turning Off Building Utilities

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.18

Office of the State Fire Marshal

Job Performance Requirement

Turn off building utilities, given tools, *PPE*, and an assignment, so that the assignment is safely completed.

Requisite Knowledge

Describe properties, principles, and safety concerns for *electrical*, gas, and water systems

Identify utility disconnect methods and associated dangers

Describe how to use required safety equipment

Requisite Skills

Identify utility control devices

Operate control valves or switches

Assess for related hazards

Content Modification

| Block | Modification | Justification |
|-------|---|--|
| JPR | Added "PPE". | Not included in NFPA 1001 but required for fire fighter safety. |
| RK 1 | Replaced "electricity" with "electrical". | "Electrical" is the proper use of "electricity" as an adjective. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|-----------------------------------|------------|
| Fire Fighter 1A, Topic 5-7: Utility Control at Emergencies | 3-18: Turn Off Building Utilities | (CTS 3-18) |

3-19: Combatting a Ground Cover Fire

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.19

Office of the State Fire Marshal

Job Performance Requirement

Combat a ground cover fire operating as a member of a team, given *personal protective equipment (PPE)*, SCBA (if needed), hose lines, extinguishers or hand tools, and an assignment, so that threats to property are reported, threats to personal safety are recognized, retreat is quickly accomplished when warranted, and the assignment is completed.

Requisite Knowledge

Describe types of ground cover fires

Describe parts of ground cover fires

Describe methods to contain or suppress

Describe safety principles and practices

Requisite Skills

Determine exposure threats based on fire spread potential

Protect exposures

Construct a fire line or extinguish with hand tools,

Maintain integrity of established fire lines

Suppress ground cover fires using water

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| JPR | Replaced “protective clothing” with “personal protective equipment (PPE)”. | Protective clothing isn’t comprehensive enough to meet JPR requirements. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|----------------------------------|------------|
| Fire Fighter 1A, Topic 7-3: Combatting a Ground Cover Fire | 3-19: Combat a Ground Cover Fire | (CTS 3-19) |

3-20: Tying Knots Appropriate for Hoisting Tools

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.20

Office of the State Fire Marshal

Job Performance Requirement

Tie a knot appropriate for hoisting tools, given PPE, tools, ropes, *webbing*, and an assignment, so that the knots used are appropriate for hoisting tools securely and as directed.

Requisite Knowledge

Identify rope types and usage

Identify knot types and usage

Describe the difference between life safety and utility rope

Identify reasons for placing rope out of service

Identify types of knots to use for given tools, ropes, or situations

Describe hoisting methods for tools and equipment

Describe how to use rope to support response activities

Requisite Skills

Tie knots specific to hoisting different types of tools

Hoist tools using specific knots based on the type of tool

Content Modification

| Block | Modification | Justification |
|-------|----------------------------|--|
| JPR | Added "webbing". | Not included in NFPA 1001 but is commonly used for this task. |
| RK 1 | Added knowledge component. | Not included in NFPA 1001 but it's a basic knowledge component required to complete the JPR. |
| RS 1 | Added skill component. | Not included in NFPA 1001 but required to complete the JPR. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--|------------|
| Fire Fighter 1A, Topic 4-1: Utilizing Ropes and Knots | 3-20a: Tie Knots 3-20b: Hoist Tools Aloft | (CTS 3-20) |

3-21: Operating Hand and Power Tools

Authority

Office of the State Fire Marshal

Job Performance Requirement

Operate hand and power tools, given hand and power tools and an assignment, so that tools are properly operated, maintained, and transported in accordance with manufacturer specifications and AHJ policies and procedures.

Requisite Knowledge

Describe types of hand and power tools
Describe uses of hand and power tools

Requisite Skills

Transport hand and power tools
Operate hand and power tools
Maintain hand and power tools

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| CTS | Added a certification training standard. | Many NFPA paragraphs require knowledge and skills regarding hand tools. Created one standard to cover foundational knowledge. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|------------------------------------|------------|
| Fire Fighter 1A, Topic 4-2: Utilizing Hand and Power Tools | 3-21: Operate Hand and Power Tools | (CTS 3-21) |

3-22: Operating an Air-Monitoring Instrument

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.3.21

Job Performance Requirement

Operate an air-monitoring instrument, given an air monitor and an assignment or task, so that the device is operated and the fire fighter recognizes the high- or low-level alarms of the air monitor and takes action to mitigate the hazard.

Requisite Knowledge

Identify the various uses for an air monitor

Describe basic operation of an air monitor

Describe air monitoring procedures

Identify how to recognize high- or low-level alarms of the air monitor

Describe emergency actions to be taken upon the activation of the high- or low-level alarms of the air monitor

Requisite Skills

Operate the air monitor

Recognize the alarms

React to the alarms of the air monitor

Content Modification

| Block | Modification | Justification |
|-------|---|---|
| RK 1 | Removed "knowledge of" | This content is already in the knowledge section; we don't need knowledge of knowledge. |
| RK 3 | Split one knowledge component into two. | Clarifying a poorly written knowledge component. |
| RK 4 | Split one knowledge component into two. | Clarifying a poorly written knowledge component. |
| RS 3 | Added a knowledge component. | NFPA does not cover the step-by-step process. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|------------|
| Fire Fighter 1A, Topic 4-4: Operating an Air-Monitoring Instrument | 3-22: Operate an Air-Monitoring Instrument | (CTS 3-22) |

Section 4: Preparedness and Maintenance

4-1: Cleaning and Checking Ladders, Ventilation Equipment, SCBA, Ropes, Salvage Equipment, and Hand Tools

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 4.5.1

Office of the State Fire Marshal

Job Performance Requirement

Clean and check ladders, ventilation equipment, SCBA, ropes, salvage equipment, and hand tools, given cleaning tools, cleaning supplies, and an assignment, so that equipment is clean and maintained according to manufacturer's or departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.

Requisite Knowledge

Describe types of cleaning methods for various tools and equipment

Describe the correct use of cleaning solvents

Identify manufacturer or departmental guidelines for cleaning equipment and tools

Identify manufacturer or departmental guidelines for removing tools and equipment from service

Requisite Skills

Select correct tools *to maintain* various parts and pieces of equipment

Follow guidelines

Complete recording and reporting procedures

Content Modification

| Block | Modification | Justification |
|-------|----------------------------|--|
| RK 4 | Added knowledge component. | Added to support the JPR. |
| RS 1 | Added "to maintain". | Added to clarify the purpose for tool selection. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|---------------------------------------|------------------|
| <p>Fire Fighter 1A, Topic 2-5: Self-Contained Breathing Apparatus</p> <ul style="list-style-type: none"> • RK 1, 2, 3, 4 and RS 1, 2, 3 (as it pertains to SCBA) <p>Fire Fighter 1A, Topic 4-1: Utilizing Ropes and Knots</p> <ul style="list-style-type: none"> • RK 1, 2, 3, 4 and RS 1, 2, 3 (as it pertains to rope) <p>Fire Fighter 1A, Topic 4-2: Utilizing Hand and Power Tools</p> <ul style="list-style-type: none"> • RK 1, 2, 3, 4 and RS 1, 2, 3 (as it pertains to tools) <p>Fire Fighter 1A, Topic 5-9: Cleaning, Inspecting, and Maintaining Fire Service Ladders</p> <ul style="list-style-type: none"> • RK 1, 2, 3, 4 and RS 1, 2, 3 (as it pertains to ladders) <p>Fire Fighter 1A, Topic 5-15: Horizontal Ventilation Operations</p> <ul style="list-style-type: none"> • RK 1, 2, 3, 4 and RS 1, 2, 3 (as it pertains to horizontal ventilation equipment) <p>Fire Fighter 1A, Topic 5-16: Vertical Ventilation Operations</p> <ul style="list-style-type: none"> • RK 1, 2, 3, 4 and RS 1, 2, 3 (as it pertains to vertical ventilation equipment) <p>Fire Fighter 1A, Topic 5-17: Conserving Property</p> <ul style="list-style-type: none"> • RK 1, 2, 3, 4 and RS 1, 2, 3 (as it pertains to salvage equipment) | <p>4-1: Clean and Check Equipment</p> | <p>(CTS 4-1)</p> |

4-2: Cleaning, Inspecting, and Returning Fire Hose to Service

Authority

NFPA 1001: Standard for Fire Fighter Professional Qualifications (2019)

- Paragraph 5.4.2

Office of the State Fire Marshal

Job Performance Requirement

Clean, inspect, and return fire hose to service, given washing equipment, water, detergent, tools, and replacement gaskets, so that damage is noted and corrected, the hose is clean, and the equipment is placed in a ready state for service.

Requisite Knowledge

Describe departmental procedures for *inspecting a hose according to manufacturer guidelines*, noting a defective hose, and removing it from service

Describe cleaning and maintenance methods

Describe types of hose rolls and loads

Requisite Skills

Clean different types of hose

Operate hose washing and drying equipment

Mark defective hose

Replace coupling gaskets

Roll hose

Reload hose

Content Modification

| Block | Modification | Justification |
|-------|---|--|
| RK 1 | Added “inspecting a hose according to manufacturer guidelines”. | This strengthens the knowledge component with a standard. |
| RK 2 | Added “and maintenance”. | There are steps beyond cleaning required before returning hose to a ready state. |
| RK 3 | Added “types of”. | Added for clarification. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|-----------|
| Fire Fighter 1A, Topic 5-5: Cleaning, Inspecting, and Returning Fire Hose to Service <ul style="list-style-type: none"> • RK 1, 2, 3 and RS 1, 2, 3, 4 Fire Fighter 1A, Topic 5-6: Deploy and Connect Fire Hose <ul style="list-style-type: none"> • RS 5, 6 | 4-2a: Replace a Burst Section of Hose 4-2b: Build Hose Rolls 4-2c: Clean and Maintain Hose and Mark Defective Hose | (CTS 4-2) |

Hazardous Materials/WMD

Section 5: Awareness

5-1: Description of Duties (Awareness)

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 4.1.3

Job Performance Requirement

There is no job performance requirement identified for this training standard.

Requisite Knowledge

Identify the role of awareness personnel at a hazardous materials/WMD incident

Identify the location and contents of the AHJ emergency response plan

Describe standard operating procedures for awareness personnel

Requisite Skills

None specified

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|-------------------------------------|-------------------------------------|
| Fire Fighter 1B, Topic 2-1: Description of Duties (Awareness) | Cognitive only – no testable skills | Cognitive only – no testable skills |

5-2: Recognizing and Identifying Hazardous Materials/WMD and Associated Hazards

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 4.2.1

Job Performance Requirement

Recognize and identify the hazardous materials/WMD and hazards involved in a hazardous materials/WMD incident, given a hazardous materials/WMD incident and approved reference sources, so that the presence of hazardous materials/WMD is recognized and the materials and their hazards are identified.

Requisite Knowledge

Describe how to recognize hazardous materials and WMD

List basic hazards associated with classes and divisions

Identify indicators to the presence of hazardous materials including container shapes, NFPA 704 markings, globally harmonized system (GHS) markings, placards, labels, pipeline markings, other transportation markings, shipping papers with emergency response information, and other indicators

Describe how to access information from the Emergency Response Guidebook (ERG) (current edition) using name of the material, UN/NA identification number, placard applied, or container identification charts

List types of hazard information available from the ERG, safety data sheets (SDS), shipping papers with emergency response information, and other approved reference sources

Requisite Skills

Recognize indicators to the presence of hazardous materials/WMD

Identify hazardous materials/WMD by name, UN/NA identification number, placard applied, or container identification charts

Use the ERG, SDS, shipping papers with emergency response information, and other approved reference sources to identify hazardous materials/WMD and their potential fire, explosion, and health hazards

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|------------------|
| Fire Fighter 1B, Topic 2-2: Recognizing and Identifying Hazardous Materials/WMD and Associated Hazards | 5-2a: Recognize, Identify, and Isolate Hazardous Materials/WMD 5-2b: Identify Markings | (CTS 5-2) |

5-3: Isolating the Hazard Area and Denying Entry

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 4.3.1

Office of the State Fire Marshal

Job Performance Requirement

Isolate the hazard area and deny entry at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, policies and procedures, and approved reference sources, so that the hazard area is isolated and secured, personal safety procedures are followed, hazards are avoided or minimized, and additional people are not exposed to further harm.

Requisite Knowledge

Describe how to use the ERG, SDS, shipping papers with emergency response information, and other approved reference sources to identify precautions to be taken to protect responders and the public

Describe policies and procedures for isolating the hazard area and denying entry

Identify the purpose of and methods for isolating the hazard area and denying entry

Requisite Skills

Recognize precautions for protecting responders and the public

Identifying isolation areas

Denying entry

Avoiding or minimizing hazards

Content Modification

| Block | Modification | Justification |
|-------|--------------|---|
| RS 4 | Added "or". | Accidental NFPA omission. Without it, RS 4 contradicts the JPR requirement. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--|-----------|
| Fire Fighter 1B, Topic 2-3: Isolating the Hazard Area and Denying Entry | 5-2a: Recognize, Identify, and Isolate Hazardous Materials/WMD | (CTS 5-3) |

5-4: Initiating Required Notifications

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 4.4.1

Job Performance Requirement

Initiate required notifications at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, policies and procedures, and approved communications equipment, so that the notification process is initiated and the necessary information is communicated.

Requisite Knowledge

Identify policies and procedures for notification, reporting, and communications

List types of approved communications equipment

Describe how to operate equipment

Requisite Skills

Operate approved communications equipment

Communicate in accordance with policies and procedures

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--------------------------------------|-----------|
| Fire Fighter 1B, Topic 2-4: Initiating Required Notifications | 5-4: Initiate Required Notifications | (CTS 5-4) |

Section 6: Operations

6-1: Description of Duties (Operations)

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 5.1.5

Job Performance Requirement

There is no job performance requirement identified for this training standard.

Requisite Knowledge

Identify the role of operations level responders at a hazardous materials/WMD incident

Identify the location and contents of AHJ emergency response plan and standard operating procedures for operations level responders, including those response operations for hazardous materials/WMD incidents

Requisite Skills

None specified

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|-------------------------------------|-------------------------------------|
| Fire Fighter 1B, Topic 3-1: Description of Duties (Operations) | Cognitive only – no testable skills | Cognitive only – no testable skills |

6-2: Identifying the Scope of a Hazardous Materials/WMD Incident

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 5.2.1

Job Performance Requirement

Identify the scope of the problem at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, and approved reference sources, so that container types, materials, location of any release, and surrounding conditions are identified, hazard information is collected, the potential behavior of a material and its container is identified, and the potential hazards, harm, and outcomes associated with that behavior are identified.

Requisite Knowledge

Define hazard classes and divisions

Identify types of containers

Identify container identification markings, including piping and pipeline markings and contacting information

Identify types of information to be collected during the hazardous materials/WMD incident survey

Identify the availability and location of shipping papers in transportation and of safety data sheets (SDS) at facilities

Describe types of hazard information available from and how to contact CHEMTREC, CANUTEC, and SETIQ, governmental authorities, and manufacturers, shippers, and carriers

Describe how to communicate with carrier representatives to reduce impact of a release

Identify basic physical and chemical properties, including boiling point, chemical reactivity, corrosivity (pH), flammable (explosive) range [LFL (LEL) and UFL (UEL)], flash point, ignition (autoignition) temperature, particle size, persistence, physical state (solid, liquid, gas), radiation (ionizing and nonionizing), specific gravity, toxic products of combustion, vapor density, vapor pressure, and water solubility

Identify the behavior of a material and its container based on the material's physical and chemical properties and the hazards associated with the identified behavior

List examples of potential criminal and terrorist targets

Identify indicators of possible criminal or terrorist activity for each of the following: chemical agents, biological agents, radiological agents, illicit laboratories (i.e., clandestine laboratories, weapons labs, ricin labs), and explosives

Describe additional hazards associated with terrorist or criminal activities, such as secondary devices

Determine the likely harm and outcomes associated with the identified behavior and the surrounding conditions

Requisite Skills

Identify container types, materials, location of release, and surrounding conditions at a hazardous materials/WMD incident

Collect hazard information

Communicate with pipeline operators or carrier representatives

Describe the likely behavior of the hazardous materials or WMD and its container

Describe the potential hazards, harm, and outcomes associated with that behavior and the surrounding conditions

Content Modification

| Block | Modification | Justification |
|-------|-----------------------|--|
| RK 5 | Added “and location”. | The documents should always be available; the real knowledge is in knowing where they are located. |
| RS 2 | Removed “ing”. | Removed to for consistency with verb tenses of other NFPA standards. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|---|-----------|
| Fire Fighter 1B, Topic 3-2: Identifying the Scope of a Hazardous Materials/WMD Incident | 6-2: Identify the Scope of a Hazardous Materials/WMD Incident | (CTS 6-2) |

6-3: Identifying Action Options for a Hazardous Materials/WMD Incident

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 5.3.1

Job Performance Requirement

Identify the action options for a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, approved reference sources, and the scope of the problem, so that response objectives, action options, safety precautions, suitability of approved personal protective equipment (PPE) available, and emergency decontamination needs are identified.

Requisite Knowledge

Identify policies and procedures for hazardous materials/WMD incident operations

List the basic components of an incident action plan (IAP)

Describe modes of operation (offensive, defensive, and nonintervention)

Describe types of response objectives

Describe types of action options

Identify types of response information available from the Emergency Response Guidebook (ERG), safety data sheets (SDS), shipping papers with emergency response information, and other resources

Identify types of information available from and how to contact CHEMTREC, CANUTEC, and SETIQ, governmental authorities, and manufacturers, shippers, and carriers (highway, rail, water, air, pipeline)

Describe safety procedures

Describe risk analysis concepts

Identify the purpose, advantages, limitations, and uses of approved PPE to determine if PPE is suitable for the incident conditions

Explain the difference between exposure and contamination

Identify contamination types, including sources and hazards of carcinogens at incident scenes

List routes of exposure

Describe types of decontamination (emergency, mass, and technical)

Describe the purpose, advantages, and limitations of emergency decontamination

Describe procedures, tools, and equipment for performing emergency decontamination

Requisite Skills

Identify response objectives and action options based on the scope of the problem and available resources

Identify whether approved PPE is suitable for the incident conditions

Identify emergency decontamination needs based on the scope of the problem

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|-----------|
| Fire Fighter 1B, Topic 3-2: Identifying the Scope of a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 7 Fire Fighter 1B, Topic 3-4: Performing Emergency Decontamination at a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 14, 15, 16 Fire Fighter 1B, Topic 3-5: Identifying Action Options for a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12 and RS 1, 2, 3 | 6-3: Identify Action Options for a Hazardous Materials/WMD Incident | (CTS 6-3) |

6-4: Performing Assigned Tasks at a Hazardous Materials/WMD Incident

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 5.4.1

Office of the State Fire Marshal

Job Performance Requirement

Perform assigned tasks at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment with limited potential of contact with hazardous materials/WMD, policies and procedures, the scope of the problem, approved tools, equipment, and PPE, so that protective actions and scene control are established and maintained, on-scene incident command is described, evidence is preserved, approved PPE is selected and used in the proper manner; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; assignments are completed; and gross decontamination of personnel, tools, equipment, and PPE is conducted in the field.

Requisite Knowledge

Describe scene control procedures

Describe procedures for protective actions, including evacuation and sheltering-in-place

Describe procedures for ensuring coordinated communications between responders and to the public

List evidence recognition and preservation procedures

Identify hazardous materials/WMD incident command roles and responsibilities within the incident command system (ICS)

Identify the purpose, importance, benefits, and organization of incident command at hazardous materials/WMD incidents

Describe policies and procedures for implementing incident command at hazardous materials/WMD incidents

Describe the capabilities, limitations, inspection, donning, working in, going through decontamination while wearing, doffing approved PPE

Describe how to recognize signs and symptoms of thermal stress

Identify safety precautions when working at hazardous materials/WMD incidents

Describe purpose, advantages, and limitations of gross decontamination

Identify the need for gross decontamination in the field based on the task(s) performed and contamination received, including sources and hazards of carcinogens at incident scenes

Describe gross decontamination procedures for personnel, tools, equipment, and PPE

Describe how to clean, disinfect, and inspect tools, equipment, and PPE

Requisite Skills

Establish and maintain scene control

Recognize and preserve evidence

Inspect, don, work in, go through decontamination while wearing, and doff approved PPE

Isolate contaminated tools, equipment, and PPE

Conduct gross decontamination of contaminated personnel, tools, equipment, and PPE in the field

Clean, disinfect, and inspect approved tools, equipment, and PPE

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| RK 5 | Changed “Describe incident command organization” to “Identify hazardous materials/WMD incident command roles and responsibilities within the incident command system (ICS)”. | Expanded to identify that there are roles and responsibilities specific to HazMat/WMD within the ICS. |
| RK 14 | Removed “ing” from “cleaning, disinfecting, and inspecting”. | Removed for consistency with other RK language. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|-----------|
| Fire Fighter 1B, Topic 3-3: Selecting, Donning, Working In, and Doffing Approved PPE at a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 8, 14 Fire Fighter 1B, Topic 3-4: Performing Decontamination at a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 11, 13 Fire Fighter 1B, Topic 3-6: Performing Assigned Tasks at a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 1, 2, 3, 4, 5, 6, 7, 9, 10, 12 and RS 1, 2, 3, 4, 5, 6 | 6-4: Perform Assigned Tasks at a Hazardous Materials/WMD Incident | (CTS 6-4) |

6-5: Performing Emergency Decontamination at a Hazardous Materials/ WMD Incident

Authority

1. NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)
 - Paragraph 5.5.1

Job Performance Requirement

Perform emergency decontamination at a hazardous materials/WMD incident, given a hazardous materials/WMD incident that requires emergency decontamination; an assignment; scope of the problem; policies and procedures; and approved tools, equipment, and PPE for emergency decontamination, so that emergency decontamination needs are identified, approved PPE is selected and used, exposures and personnel are protected, safety procedures are followed, hazards are avoided or minimized, emergency decontamination is set up and implemented, and victims and responders are decontaminated.

Requisite Knowledge

Define contamination, cross contamination, and exposure

Describe contamination types

List routes of exposure

Identify types of decontamination (emergency, mass, and technical)

Describe the purpose, advantages, and limitations of emergency decontamination

Describe policies and procedures for performing emergency decontamination

Identify approved tools and equipment for emergency decontamination

Describe hazard avoidance for emergency decontamination

Requisite Skills

Select an emergency decontamination method

Set up emergency decontamination in a safe area

Use PPE in the proper manner

Implement emergency decontamination

Prevent spread of contamination

Avoid hazards during emergency decontamination

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|------------------|
| Fire Fighter 1B, Topic 3-4: Performing Emergency Decontamination at a Hazardous Materials/WMD Incident | 6-5: Perform Emergency Decontamination | (CTS 6-5) |

6-6: Evaluating and Reporting Progress for a Hazardous Materials/WMD Incident

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 5.6.1

Job Performance Requirement

Evaluate and report the progress of the assigned tasks for a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, status of assigned tasks, and approved communication tools and equipment, so that the effectiveness of the assigned tasks is evaluated and communicated to the supervisor, who can adjust the IAP as needed.

Requisite Knowledge

List components of progress reports

Describe policies and procedures for evaluating and reporting progress

Describe how to use approved communication tools and equipment

Identify signs indicating improving, static, or deteriorating conditions based on the objectives of the action plan

Describe how to recognize circumstances under which it would be prudent to withdraw from a hazardous materials/ WMD incident

Requisite Skills

Determine incident status

Determining whether the response objectives are being accomplished

Use approved communications tools and equipment

Communicate the status of assigned tasks

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|-----------|
| Fire Fighter 1B, Topic 3-8: Evaluating and Reporting Progress for a Hazardous Materials/WMD Incident | 6-8: Evaluate and Report Progress for a Hazardous Materials/WMD Incident | (CTS 6-6) |

Section 7: Operations – Mission Specific

7-1: Selecting, Donning, Working In, and Doffing Approved PPE at a Hazardous Materials/WMD Incident

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 6.2.1

Job Performance Requirement

Select, don, work in, and doff approved PPE at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; a mission-specific assignment in an IAP that requires use of PPE; the scope of the problem; response objectives and options for the incident; access to a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures; approved PPE; and policies and procedures, so that under the guidance of a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures, approved PPE is selected, inspected, donned, worked in, decontaminated, and doffed; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; and all reports and documentation pertaining to PPE use are completed.

Requisite Knowledge

Describe policies and procedures for PPE selection and use

Describe the importance of working under the guidance of a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures when selecting and using PPE

Identify the capabilities and limitations of and specialized donning, doffing, and usage procedures for approved PPE

List components of an incident action plan (IAP)

Describe procedures for decontamination, inspection, maintenance, and storage of approved PPE

Describe the process for being decontaminated while wearing PPE

Describe procedures for reporting and documenting the use of PPE

Requisite Skills

Select PPE for the assignment

Inspect, maintain, store, don, work in, and doff PPE

Go through decontamination (emergency and technical) while wearing the PPE

Report and document the use of PPE

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|-----------|
| Fire Fighter 1B, Topic 3-3: Selecting, Donning, Working In and Doffing Approved PPE at a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 1, 2, 3, 5, 6, 7 and RS 1, 2, 3, 4 Fire Fighter 1B, Topic 3-5: Identifying Action Options for a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 4 | 7-1: Don, Work In, and Doff Chemical Protective Clothing | (CTS 7-1) |

7-2: Performing Product Control Techniques at a Hazardous Materials/WMD Incident

Authority

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)

- Paragraph 6.6.1

Office of the State Fire Marshal

Job Performance Requirement

Perform product control techniques with a limited risk of personal exposure at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with release of product; an assignment in an IAP; scope of the problem; policies and procedures; approved tools, equipment, control agents, and PPE; and access to a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures, so that under the guidance of a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures, approved PPE is selected and used; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; a product control technique is selected and implemented; the product is controlled; victims, personnel, tools, and equipment are decontaminated; and product control operations are reported and documented.

Requisite Knowledge

Describe types of PPE and the hazards for which they are used

Describe the importance of working under the guidance of a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures

Define control, confinement, containment, and extinguishment

Describe policies and procedures for product control

Identify product control methods for controlling a release with limited risk of personal exposure

Describe safety precautions associated with each product control method

Identify the location and describe how to operation of remote/emergency shutoff devices in cargo tanks and intermodal tanks in transportation and containers at facilities, that contain flammable liquids and flammable gases

List characteristics and applicability of approved product control agents

Describe how to use approved tools and equipment

Identify requirements for reporting and documenting product control operations

Requisite Skills

Select and use PPE

Select and perform product control techniques to confine/contain the release with limited risk of personal exposure

Use approved control agents and equipment on a release involving hazardous materials/WMD

Use remote control valves and emergency shutoff devices on cargo tanks and intermodal tanks in transportation and containers at fixed facilities
 Perform product control techniques

Content Modification

| Block | Modification | Justification |
|-------|------------------------------|---|
| RK 4 | Added “for product control”. | Added to narrow the scope of discussion of policies and procedures. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|------------------------------|-----------|
| Fire Fighter 1B, Topic 3-7: Performing Product Control Techniques at a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 2, 3, 4, 5, 6, 7, 8, 9, 10 and RS 1, 2, 3, 4, 5 Fire Fighter 1B, Topic 3-3: Selecting, Donning, Working In, and Doffing Approved PPE at a Hazardous Materials/WMD Incident <ul style="list-style-type: none"> ○ RK 1 | 7-2: Perform Product Control | (CTS 7-2) |

Wildland Fire Fighter 1

Section 8: Wildland Fire Fighter Duties

8-1: Role of the Wildland Fire Fighter

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.1.1, 4.1.2

Office of the State Fire Marshal

Job Performance Requirement

There is no job performance requirement identified for this training standard.

Requisite Knowledge

Describe fireline safety and use and limitations of personal protective equipment

Describe the use, limitations, inspection, and care of a fire shelter

Describe AHJ on fire shelter use

Describe basic wildland fire behavior

Identify fire suppression techniques

Identify basic wildland fire tactics

Describe the fire fighter's role within the AHJ incident management system

Describe AHJ required first aid

Describe how to use NFES 1077, Incident Response Pocket Guide (IRPG)

Requisite Skills

Use basic verbal communication

Use required personal protective equipment

Deploy a fire shelter

Content Modification

| Block | Modification | Justification |
|-------|----------------------------|--|
| RK 2 | Added knowledge component. | Added to call attention to a unique element of PPE that isn't physically worn. |
| RS 3 | Added skills component. | Not covered by NFPA 1051 but critical for wildland fire fighter survival. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|-------------------------------------|-------------------------------------|
| Fire Fighter 1C, Topic 1-3: Wildland Fire Fighter Roles and Responsibilities <ul style="list-style-type: none"> • RK 4, 5, 6, 7, 8, 9 Fire Fighter 1C, Topic 2-1: Wildland Fire Behavior <ul style="list-style-type: none"> • RK 4 Fire Fighter 1C, Topic 2-3: Human Factors on the Fireline <ul style="list-style-type: none"> • RS 1 Fire Fighter 1C, Topic 2-4: Donning, Doffing, and Maintaining Wildland Personal Protective Equipment <ul style="list-style-type: none"> • RK 1 and RS 2 Fire Fighter 1C, Topic 2-5: Deploying a Fire Shelter <ul style="list-style-type: none"> • RK 2, 3 and RS 3 Fire Fighter 1C, Topic 3-2: Constructing a Fireline <ul style="list-style-type: none"> • RK 5, 6 Fire Fighter 1C, Topic 3-4: Reducing the Threat of Fire Exposure to Improved Properties (WUI) <ul style="list-style-type: none"> • RK 4 | Cognitive only – no testable skills | Cognitive only – no testable skills |

8-2: Donning Wildland Personal Protective Equipment

Authority

Office of the State Fire Marshal

Job Performance Requirement

Don wildland personal protective equipment (PPE), given PPE, so the PPE is donned in 60 seconds or less and all elements of the PPE ensemble are worn in accordance with manufacturer guidelines.

Requisite Knowledge

Identify the components of wildland PPE
Explain the importance of standards for wildland PPE
Describe the protection provided by wildland PPE
Describe the limitations of wildland PPE
Identify manufacturer guidelines for correct PPE use

Requisite Skills

Don PPE

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | NFPA 1051 does not include a designated JPR for donning wildland PPE. OSFM uses 60 seconds as the industry standard. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|-----------|
| Fire Fighter 1C, Topic 2-4: Donning, Doffing, and Maintaining Wildland Personal Protective Equipment | 8-2: Don Wildland Personal Protective Equipment | (CTS 8-2) |

8-3: Deploying a Fire Shelter

Authority

Office of the State Fire Marshal

Job Performance Requirement

Deploy a fire shelter, given PPE, a hand tool, a live or simulated incident, and a fire shelter, so that the fire shelter is deployed within 30 seconds and used in accordance with manufacturer and AHJ procedures.

Requisite Knowledge

- Describe the protection provided by and limitations of fire shelters
- Describe how to inspect and evaluate a fire shelter
- Describe how to select and prepare a shelter deployment site
- Identify items to take into and leave outside a fire shelter
- Describe methods for deploying a fire shelter
- Identify when to deploy and exit a fire shelter during an incident

Requisite Skills

Deploy a fire shelter within 30 seconds

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | NFPA 1051 does not include a designated JPR for deploying a fire shelter. OSFM uses 30 seconds as the industry standard. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|----------------------------|-----------|
| Fire Fighter 1C, Topic 2-5: Deploying a Fire Shelter | 8-3: Deploy a Fire Shelter | (CTS 8-3) |

8-4: Doffing Wildland Personal Protective Equipment

Authority

Office of the State Fire Marshal

Job Performance Requirement

Doff wildland personal protective equipment (PPE), given PPE, so that PPE is removed in accordance with manufacturer guidelines and returned to a ready state.

Requisite Knowledge

Identify when it is safe to doff PPE

Identify AHJ policies and procedures for doffing PPE

Requisite Skills

Doff PPE

Return PPE to a ready state

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| CTS | Added a certification training standard. | NFPA 1051 does not include a designed JPR for doffing PPE. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|-----------|
| Fire Fighter 1C, Topic 2-4: Donning, Doffing, and Maintaining Wildland Personal Protective Equipment | 8-4: Doff Wildland Personal Protective Equipment | (CTS 8-4) |

Section 9: Preparedness

9-1: Maintaining Assigned Personal Protective Equipment

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.3.2

Job Performance Requirement

Maintain assigned personal protective equipment, given the standard equipment issue, so that the equipment is serviceable and available for use on the fireline and defects are recognized and reported to the supervisor.

Requisite Knowledge

Describe how to maintain personal protective equipment, including inspection, the recognition of unserviceable items, and proper cleaning procedures

Requisite Skills

None specified

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|--|-----------|
| Fire Fighter 1C, Topic 2-4: Donning, Doffing, and Maintaining Wildland Personal Protective Equipment | 9-1: Maintain Assigned Personal Protective Equipment | (CTS 9-1) |

9-2: Maintaining Assigned Suppression Hand Tools and Equipment

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.3.3

Job Performance Requirement

Maintain assigned suppression hand tools and equipment, given tools and equipment and AHJ maintenance specifications, so that assigned equipment is maintained and serviceable and defects are recognized and reported to the supervisor.

Requisite Knowledge

Describe how to inspect tools and assigned suppression equipment

Describe how to recognize unserviceable items

Describe required maintenance techniques

Requisite Skills

Sharpen assigned suppression equipment

Maintenance techniques for assigned suppression equipment

Use required maintenance equipment

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--|-----------|
| Fire Fighter 1C, Topic 2-6: Maintaining Assigned Suppression Hand Tools and Equipment | 9-2: Maintain Hand Tools and Equipment | (CTS 9-2) |

9-3: Maintaining Personal Gear Kit

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.3.4

Job Performance Requirement

Maintain personal gear kit, given a deployment and AHJ policies, so that mobilization response readiness meets AHJ requirements.

Requisite Knowledge

Describe contents of a personal gear kit

Identify type and duration of the incident

Describe AHJ requirements

Requisite Skills

None specified

Content Modification

| Block | Modification | Justification |
|-------|--------------|---------------|
| | | |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|-------------------------------------|-------------------------------------|
| Fire Fighter 1C, Topic 2-7: Maintaining Personal Gear Kit | Cognitive only – no testable skills | Cognitive only – no testable skills |

Section 10: Suppression

10-1: Assembling and Preparing for Response

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.5.2

Office of the State Fire Marshal

Job Performance Requirement

Assemble and prepare for response, given an assembly location, an assignment, incident location, mode of transportation, and time requirements, so that arrival at the incident with the required personnel and equipment meets AHJ guidelines.

Requisite Knowledge

Identify equipment required for response

Describe AHJ time standards and special transportation considerations

Describe AHJ safety response guidelines

Describe operational procedures for various response modes

Requisite Skills

None specified

Content Modification

| Block | Modification | Justification |
|-------|--|--|
| RK 1 | Changed “requirements” to “required for response”. | Clarification. The student isn’t identifying the requirements of the equipment, they are identifying what equipment is required based on what the incident requires. |
| RK 2 | Removed “(weight considerations)”. | Weight is not the only special transportation consideration. |
| RK 3 | Added “response guidelines”. | Narrowing the scope of “agency safety” to pertain to the JPR. |
| RK 4 | Changed “transportation” to “response”. | Transportation implies the type of vehicle in which the responders are traveling to the incident, not the response level. Revised for clarification. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|---|------------|
| Fire Fighter 1C, Topic 3-1: Assembling and Preparing for Response | 10-1: Assemble and Prepare for Response | (CTS 10-1) |

10-2: Recognizing Hazards and Unsafe Situations

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.5.3

Office of the State Fire Marshal

Job Performance Requirement

Recognize hazards and unsafe situations, given a wildland or wildland/urban interface fire *or simulated scenario* and the standard safety policies and procedures of the AHJ, so that the hazard(s) and unsafe condition(s) are communicated to the supervisor and appropriate action is taken.

Requisite Knowledge

Describe basic wildland fire safety

Describe basic wildland fire behavior

Identify basic wildland suppression methods

Describe the Standard Fire Fighting Orders

Describe the Situations that Shout “Watch Out”

Describe the principles of LCES (Lookouts, Communications, Escape Routes, Safety Zones)

Describe downhill checklist guideline

Describe Common Denominators of Fire Behavior on Tragedy Fires

Describe human factors that impact wildland fire suppression

Requisite Skills

Demonstrate knowledge of the Standard Fire Orders, the Situations that Shout “Watch Out”, and LCES

Content Modification

| Block | Modification | Justification |
|-------|--------------------------------|--|
| JPR | Added “or simulated scenario”. | Allows option to complete testing outside of a live wildland fire. |
| RK 2 | Added “basic wildland”. | Added to narrow the scope of “fire behavior”. |
| RK 3 | Added “basic wildland”. | Added to narrow the scope of “suppression methods”. |
| RK 4 | Added knowledge component. | Added to align with NWCG S-130 fire fighter training. |
| RK 5 | Added knowledge component. | Added to align with NWCG S-130 fire fighter training. |
| RK 6 | Added knowledge component. | Added to align with NWCG S-130 fire fighter training. |
| RK 7 | Added knowledge component. | Not covered by NFPA 1051 but it is an IRPG industry standard. |

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| | | |
|------|----------------------------|---|
| RK 8 | Added knowledge component. | Not covered by NFPA 1051 but it is an IRPG industry standard. |
| RK 9 | Added knowledge component. | NFPA does include human factors. |
| RS 1 | Added skills component. | Added to align with NWCG S-130 fire fighter training |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|---|------------|
| Fire Fighter 1C, Topic 2-1: Wildland Fire Behavior <ul style="list-style-type: none"> • RK 2 Fire Fighter 1C, Topic 2-2: Recognizing Hazards and Unsafe Situations <ul style="list-style-type: none"> • RK 1, 4, 5, 6, 7, 8 and RS 1 Fire Fighter 1C, Topic 2-3: Human Factors on the Fireline <ul style="list-style-type: none"> • RK 9 Fire Fighter 1C, Topic 3-2: Constructing a Fireline <ul style="list-style-type: none"> ○ RK 3 | 10-2a: Use Incident Response Pocket Guide 10-3b: Assume Safety Position for Retardant Drop | (CTS 10-2) |

10-3: Constructing a Fireline

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.5.4

Office of the State Fire Marshal

Job Performance Requirement

Construct a fireline, given a wildland fire *or simulated scenario*, AHJ line construction standards, suppression tools, water or other suppression agents, and equipment, so that the fireline conforms to the construction standard.

Requisite Knowledge

Describe basic wildland suppression strategy

Identify basic wildland suppression tactics

Describe fireline construction principles, techniques, and standards

Describe safety considerations related to fireline construction

Describe how to construct a handline

Describe how to perform mobile attack

Describe how to perform a simple hose lay

Describe how to perform a progressive hose lay

Describe how to retrieve hose

Requisite Skills

Use hand tools properly

Apply fire streams

Apply extinguishing agents

Content Modification

| Block | Modification | Justification |
|-------|--------------------------------|---|
| JPR | Added “or simulated scenario”. | Allows option to complete testing outside of a live wildland fire. |
| RK 1 | Added knowledge component. | Statewide operational activities require more detail than provided by NFPA. |
| RK 2 | Added knowledge component. | Statewide operational activities require more detail than provided by NFPA. |
| RK 3 | Changed the word order. | Revised to simplify and clarify language. |
| RK 4 | Added knowledge component. | Not covered by NFPA 1051 but it is an IRPG industry standard. |
| RK 5 | Added knowledge component. | Statewide operational activities require more detail than provided by NFPA. |
| RK 6 | Added knowledge | Statewide operational activities require more detail than |

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| | | |
|--------|----------------------------|---|
| | component. | provided by NFPA. |
| RK 7 | Added knowledge component. | Statewide operational activities require more detail than provided by NFPA. |
| RK 8 | Added knowledge component. | Statewide operational activities require more detail than provided by NFPA. |
| RK 9 | Added knowledge component. | Statewide operational activities require more detail than provided by NFPA. |
| RS 1-3 | Revised to put verb first. | Consistency with all other RS text. |
| RS 3 | Added “extinguishing”. | Added to clarify agent type. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|---|------------------|
| Fire Fighter 1C, Topic 3-2: Constructing a Fireline | 10-3a: Assemble, Use, and Maintain a Back Pump 10-3b: Perform a Progressive Hose Lay (Hose) 10-3b: Perform a Progressive Hose Lay (Nozzle) 10-3c: Construct a Fireline Using Hand Tools 10-3d: Perform Mobile Pumping | (CTS 10-3) |

10-4: Securing the Fireline

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.5.5

Office of the State Fire Marshal

Job Performance Requirement

Secure the fireline, given a wildland fire *or simulated scenario*, suppression tools, water or other suppression agents, and equipment, so that *fireline* burning materials and unburned fuels *are physically separated*.

Requisite Knowledge

Describe line improvement techniques

Identify safety considerations

Describe how to use basic ignition devices

Requisite Skills

Use of basic ignition devices only under direct supervision

Content Modification

| Block | Modification | Justification |
|-------|--------------------------------|--|
| JPR | Added “or simulated scenario”. | Allows option to complete testing outside of a live wildland fire. |
| JPR | Adjusted language. | NFPA standard for JPR was unclear and abatement is not always possible. |
| RK 3 | Added a knowledge component. | Not included in NFPA 1051 but required by Cal OES. All type III engines must carry a drip torch. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|--|------------|
| Fire Fighter 1C, Topic 3-3: Securing a Fireline | 10-4a: Ignite and Extinguish Road Flares and Fusees 10-4b: Assemble, Ignite, Extinguish, and Disassemble a Drip Torch | (CTS 10-4) |

10-5: Reducing the Threat of Fire Exposure to Improved Properties

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.5.6

Office of the State Fire Marshal

Job Performance Requirement

Describe the methods to reduce the threat of fire exposure to improved properties, given a wildland/urban interface fire *or simulated scenario*, suppression tools, and equipment, so that improvements are protected.

Requisite Knowledge

Describe wildland fire behavior within the wildland/urban interface

Describe wildland fuel removal for structure defense preparation

Describe structure defense methods

Identify equipment and personnel capabilities within the wildland/urban interface

Identify the difference between a safety zone and a temporary refuge area (TRA)

Requisite Skills

Use methods to protect improvements

Content Modification

| Block | Modification | Justification |
|-------|--|---|
| JPR | Added “or simulated scenario”. | Allows option to complete testing outside of a live wildland fire. |
| RK 1 | Added “within the wildland/urban interface”. | Expanding wildland fire behavior (covered in CTS 10-2) to include wildland/urban interface. |
| RK 2 | Added “for structure defense preparation”. | Added to clarify the purpose and location of removal. |
| RK 3 | Replaced “protection” with “defense”. | “Defend” is California terminology. |
| RK 4 | Added “within the wildland/urban interface”. | Expanding wildland fire behavior (covered in CTS 10-2) to include wildland/urban interface. |
| RK 5 | Added knowledge component. | NFPA does not adequately address safety. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|-----------------------------------|------------|
| Fire Fighter 1C, Topic 3-4: Reducing the Threat of Fire Exposure to Improved Properties (WUI) | 10-5: Prep and Defend a Structure | (CTS 10-5) |

10-6: Mopping Up a Fire Area

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.5.7

Office of the State Fire Marshal

Job Performance Requirement

Mop up fire area, given a wildland fire *or simulated scenario*, suppression tools, and water or other suppression agents and equipment, so that burning fuels that threaten escape are located and extinguished.

Requisite Knowledge

Describe mop up principles, techniques, and standards

Requisite Skills

Use basic tools and techniques to perform mop-up operations

Content Modification

| Block | Modification | Justification |
|-------|--------------------------------|--|
| JPR | Added “or simulated scenario”. | Allows option to complete testing outside of a live wildland fire. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|---|---------------------------------|------------|
| Fire Fighter 1C, Topic 3-5: Mopping Up in a Fire Area | 10-6: Perform Mop Up Operations | (CTS 10-6) |

10-7: Patrolling the Fire Area

Authority

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2020)

- Paragraph 4.5.8

Office of the State Fire Marshal

Job Performance Requirement

Patrol the fire area, given a wildland fire *or simulated scenario*, suppression tools, and equipment, so that containment of the fire area is maintained.

Requisite Knowledge

Describe patrol principles, techniques, and standards

Requisite Skills

Observe, identify, and take action on potential threats *when patrolling fire areas*

Content Modification

| Block | Modification | Justification |
|-------|-----------------------------------|--|
| JPR | Added “or simulated scenario”. | Allows option to complete testing outside of a live wildland fire. |
| RS 1 | Added “to patrolling fire areas”. | Revised to narrow scope of requisite knowledge application. |

Cross Reference

| Course Plan | Skill Sheet(s) | Task Book |
|--|----------------------------|------------|
| Fire Fighter 1C, Topic 3-6: Patrolling the Fire Area | 10-7: Patrol the Fire Area | (CTS 10-7) |

Revisions

This page documents changes made to the CTS guide since its initiation publication.

Month 2020

The Month 2020 changes reflect updates based on the 2020 edition of NFPA 1051 Standard for Wildland Firefighting Personnel Professional Qualifications. The staff review determined the following minor changes.

NFPA:

- All instances
 - Replaced the word “agency” with “AHJ”
- Paragraph 4.1.1
 - Added “AHJ required” to “first aid” in requisite knowledge
 - Removed “and NFES 2943, Wildland Fire Incident Management Field Guide” in requisite knowledge
- Paragraph 4.3.4
 - Added a new job performance requirement
- Paragraph 4.5.4
 - Replaced “correctly” with “properly” in requisite skills
- Paragraph 4.5.8
 - Replaced the word “control” with “containment” in JPR
 - Replaced “Apply requisite knowledge” with “Observe, identify, and take action on potential threats” in requisite skills

Impact

- Made all editorial changes
- Added the new JPR to the CTS guide as standard 9-3: Maintaining a Personal Gear Kit
- Added the new JPR to the Fire Fighter 1C: Wildland Fire Fighter course plan as Topic 2-7: Maintaining Personal Gear Kit
 - Most of the Topic 2-7 material was already covered in Topic 3-1: Assembling and Preparing for Response.
 - Moved the Application activity from 3-1 to 2-7
 - Adjusted time between 3-1 and 2-7
 - No addition to the certification task book and no skill sheet
 - No changes to time or cost for course delivery and/or testing

Documents Changed

- Fire Fighter 1 Certification Training Standards Guide (2019)
- Fire Fighter 1C: Wildland Fire Fighter Course Plan

Revisions

- All Wildland skill sheets (9-1 through 9-2 and 10-1 through 10-7) to reflect NFPA edition number and editorial changes



Wildland (2020)

Course Plan

Course Details

| | |
|----------------------------------|--|
| Certification: | Fire Fighter 1 |
| CTS Guide: | Fire Fighter Certification Training Standards Guide (January 2020) |
| Description: | This course provides the skills and knowledge needed for the entry-level fire fighter to recognize hazards and unsafe situations; don, doff, and maintain wildland personal protective equipment; deploy a fire shelter; maintain suppression hand tools and equipment; assemble and prepare for response; construct and secure a fireline; reduce the threat of fire exposure to improved properties; and mop up and patrol a fire area when working with wildland fires. |
| Designed For: | Entry level fire fighters |
| Prerequisites: | Fire Fighter 1A – Structure (2019) (SFT course or equivalent) <ul style="list-style-type: none">• If a student takes Fire Fighter 1C – Wildland (2016) as a stand-alone course |
| Corequisites: | Fire Fighter 1A – Structure (2019) (SFT course or equivalent) <ul style="list-style-type: none">• If a student takes Fire Fighter 1C – Wildland within an academy program |
| Standard: | Complete all activities, skills, and formative tests. Complete all summative tests with a minimum score of 80%. |
| Hours (Total): | 56 hours (30 lecture / 26 application / AHJ determines practice and assessment times) |
| Maximum Class Size: | 50 |
| Instructor Level: | Fire Fighter Instructor (See <i>SFT Procedures Manual</i> (January 2019) section 6.6 for requirements.)* |
| Instructor/Student Ratio: | 1:50 (Lecture) / 1:10 (Application)* |
| Restrictions: | None |
| SFT Designation: | CFSTES |

* If any portion of this course curriculum is taught using another course plan, the instructor level and ratio of that course plan supersedes this requirement.

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Required Resources

Instructor Resources

To teach this course, instructors need:

- *Fundamentals of Fire Fighter Skills and Hazardous Materials Response* (Jones and Bartlett Learning, 4th edition, ISBN: 978-1-284-15133-6)
- **or**
- *Essentials of Fire Fighting* (IFSTA, 7th edition, ISBN: 978-087939657-2)
- *Firefighter's Handbook On Wildland Firefighting: Strategy, Tactics and Safety* (Fire Protection Publications, Oklahoma State University, 4th edition, ISBN: 978-087939676-3)
- [The New Generation Fire Shelter](#) (NWCG, March 2003 edition)
- [Incident Response Pocket Guide](#) (NWCG, current edition)
- NFPA 1051: Wildland Firefighting Personnel Professional Qualifications (current edition)
- Full wildland PPE that meets AHJ requirements

Online Instructor Resources

The following instructor resources are available online at

<https://osfm.fire.ca.gov/divisions/state-fire-training/cfstes-professional-certification/fire-fighter-1-2019/>

- Wildland Skill Sheets
 - 8-2: Don Wildland Personal Protective Equipment
 - 8-3: Deploy a Fire Shelter
 - 8-4: Doff Wildland Personal Protective Equipment
 - 9-1: Maintain Assigned Personal Protective Equipment
 - 9-2: Maintain Hand Tools and Equipment
 - 10-1: Assemble and Prepare for Response
 - 10-2a: Use Incident Response Pocket Guide
 - 10-2b: Assume Safety Position for Retardant Drop
 - 10-3a: Assemble, Use, and Maintain a Back Pump
 - 10-3b: Perform a Progressive Hose Lay (Hose)
 - 10-3b: Perform a Progressive Hose Lay (Nozzle)
 - 10-3c: Construct a Fireline Using Hand Tools
 - 10-3d: Perform Mobile Pumping
 - 10-4a: Ignite and Extinguish Road Flares and Fusees
 - 10-4b: Assemble, Ignite, Extinguish, and Disassemble a Drip Torch
 - 10-5: Prep and Defend a Structure
 - 10-6: Perform Mop Up Operations
 - 10-7: Patrol the Fire Area

Student Resources

To participate in this course, students need:

- *Fundamentals of Fire Fighter Skills and Hazardous Materials Response* (Jones and Bartlett Learning, 4th edition, ISBN: 978-1-284-151336)
or
- *Essentials of Fire Fighting* (IFSTA, 7th edition, ISBN: 978-087939657-2)
- *Firefighter's Handbook On Wildland Firefighting: Strategy, Tactics and Safety* (Fire Protection Publications, Oklahoma State University, 4th edition, ISBN: 978-087939676-3)
- *Incident Response Pocket Guide* (NWCG, current edition)
- Full wildland PPE that meets AHJ requirements

Facilities, Equipment, and Personnel

The following facilities, equipment, or personnel are required to deliver this course:

- **Appliances and tools:** 1½-inch fog nozzles, 1-inch fog nozzles, 1½-inch bales, 1-inch bales, 1½-inch smooth bore tips, 1-inch smooth bore tips, forestry tees, double female fittings, double male fittings, hose clamps, hose roller, nozzle selection determined by AHJ, reducer or increaser (fittings), spanner wrenches, gated wye, rubber mallet
- **Hose:** 1-inch fire hose and 1 ½-inch fire hose (1,000-foot minimum), 2½-inch or 3-inch fire hose (500-foot minimum), handline with fog nozzle, hard suction (intake) hose and strainer, soft suction hose
- **Hand tools:** hydrant wrench, drip torches, back pumps, shovel (short handle, round point), Pulaski, McLeod, brush hook, single bit axe, double bit axe, wire broom, rhino tools, combi tool, flagging
- **Power tools:** Chain saw, pole saw, portable pump
- **Protective equipment/clothing:** Gloves, helmet, wildland shroud, goggles, hearing protection, wildland PPE, practice fire shelter, fire shelter, wildland web gear with water system(s)
- **Other supplies/equipment needed:** Fire hydrant, portable radio, minimum of two apparatuses equipped with pump and two separate water supplies, fuel and supplies for power equipment, cleaning supplies and equipment, two portable tanks with water transfer equipment and appliances, traffic and scene control devices

Time Table

| Segment | Lecture | Application | Unit Total |
|---|--------------|--------------|--------------|
| Unit 1: Introduction | | | |
| Topic 1-1: Orientation and Administration | 0.5 | 0.0 | |
| Topic 1-2: Fire Fighter 1 Certification Process | 0.5 | 0.0 | |
| Topic 1-3: Wildland Fire Fighter Roles and Responsibilities | 0.5 | 0.0 | |
| Unit 1 Totals | 1.5 | 0.0 | 1.5 |
| Unit 2: Preparation | | | |
| Topic 2-1: Wildland Fire Behavior | 7.5 | 0.5 | |
| Topic 2-2: Recognizing Hazards and Unsafe Situations | 4.0 | 2.0 | |
| Topic 2-3: Human Factors on the Fireline | 4.0 | 0.0 | |
| Topic 2-4: Donning, Doffing, and Maintaining Wildland Personal Protective Equipment | 0.5 | 1.5 | |
| Topic 2-5: Deploying a Fire Shelter | 0.5 | 1.5 | |
| Topic 2-6: Maintaining Assigned Suppression Hand Tools and Equipment | 1.5 | 1.75 | |
| Topic 2-7: Maintaining Personal Gear Kit | 0.25 | 0.25 | |
| Unit 2 Totals | 18.25 | 7.50 | 25.75 |
| Unit 3: Suppression | | | |
| Topic 3-1: Assembling and Preparing for Response | 0.25 | 0.0 | |
| Topic 3-2: Constructing a Fireline | 4.0 | 16.0 | |
| Topic 3-3: Securing a Fireline | 2.0 | 1.0 | |
| Topic 3-4: Reducing the Threat of Fire Exposure to Improved Properties (WUI) | 3.0 | 1.0 | |
| Topic 3-5: Mopping Up in a Fire Area | 0.5 | 0.5 | |
| Topic 3-6: Patrolling the Fire Area | 0.5 | 0.0 | |
| Unit 3 Totals | 10.25 | 18.50 | 28.75 |
| Summative Assessment | | | |
| Determined by AHJ or educational institution | TBD | TBD | TBD |
| Skills Practice (Lab / Sets and Reps) | | | |
| Determined by AHJ or educational institution | TBD | TBD | TBD |
| | | | |
| Course Totals | 30.0 | 26.0 | 56.0 |

Time Table Key

1. The Time Table documents the amount of time required to deliver the content included in the course plan.
2. Time is documented using the quarter system: 15 min. = .25 / 30 min. = .50 / 45 min. = .75 / 60 min. = 1.0.
3. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.
4. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled. The Application time documented is based on the maximum class size identified in the Course Details section.
5. Summative Assessments are determined and scheduled by the authority having jurisdiction. These are not the written or psychomotor State Fire Training certification exams. These are in-class assessments to evaluate student progress and calculate course grades.

Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective

At the end of this topic a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, skills exercises, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives

1. Identify facility requirements
 - Restroom locations
 - Food locations
 - Smoking locations
 - Emergency procedures
2. Identify classroom requirements
 - Start and end times
 - Breaks
 - Electronic device policies
 - Special needs and accommodations
 - Other requirements as applicable
3. Review course syllabus
 - Course objectives
 - Calendar of events
 - Course requirements
 - Student evaluation process
 - Assignments
 - Activities and skills exercises
 - Required student resources
 - Class participation requirements

Discussion Questions

1. Determined by instructor

Application

1. Determined by instructor

Instructor Notes

1. When teaching Fire Fighter 1A, 1B, and 1C in a consecutive format, it is not necessary to repeat this topic for each course. At a minimum, cover it once on the first day of the first course.

Topic 1-2: Fire Fighter 1 and 2 Certification Process

Terminal Learning Objective

At the end of this topic a student will be able to identify the requirements for Fire Fighter 1 and 2 certification and be able to describe the certification task book and examination process.

Enabling Learning Objectives

1. Identify the different levels of certification in the Fire Fighter certification track
 - Fire Fighter 1
 - Fire Fighter 2
2. Identify the prerequisites for certification
 - Fire Fighter 1
 - Fire Fighter 2
3. Identify the course work required for certification
 - Fire Fighter 1
 - Fire Fighter 2
4. Identify the exams required for certification
 - Fire Fighter 1
 - Fire Fighter 2
5. Identify the task book requirements for certification
 - Fire Fighter 1
 - Fire Fighter 2
6. Identify the experience requirements for certification
 - Fire Fighter 1
 - Fire Fighter 2
7. Identify the position requirements for certification
 - Fire Fighter 1
 - Fire Fighter 2
8. Describe the certification task book process
9. Describe the certification examination process

Discussion Questions

1. Determined by instructor

Application

1. Determined by instructor

Instructor Notes

1. When teaching Fire Fighter 1A, 1B, and 1C in a consecutive format, it is not necessary to repeat this topic for each course. At a minimum, cover it once on the first day of the first course.
2. Use the *SFT Procedures Manual (2019)* 7.12.1 Fire Fighter 1 (2019) and 7.12.3 Fire Fighter 2 (2019) content for ELOs 2 through 7.
3. Use a copy of the Fire Fighter 2 Certification Task Book to walk students through the task book process and expectations for ELO 8.

4. Use the *SFT Procedures Manual (2019)* (Chapter 11: Fire Fighter Certification Exams) content for ELO 9.

Topic 1-3: Wildland Fire Fighter Roles and Responsibilities

Terminal Learning Objective

At the end of this topic a student will be able to describe the role of the wildland fire fighter as identified by NFPA 1051: Wildland Firefighting Personnel Professional Qualifications (current edition) and the Office of the State Fire Marshal.

Enabling Learning Objectives

1. Describe types of wildland fires
 - Wildland Urban Interface (intermix)
 - Forest
 - Desert
 - Grass
 - Brush
 - Timber
2. Describe the fire fighter's role within the AHJ incident management system
3. Describe basic safety roles and responsibilities of the wildland fire fighter
 - Fireline safety, use, and limitations of personal protective equipment (PPE)
 - Use, limitations, inspection, and care of a fire shelter
 - AHJ required first aid as referenced in NFES 1077 (Incident Response Pocket Guide (IRPG))
4. Describe basic wildland fire behavior
5. Identify wildland fire suppression techniques and tactics

Discussion Questions

1. How do wildland fires differ from structure fires?

Application

1. Determined by instructor

Instructor Notes:

1. This topic is an introduction to everything covered in units 2 and 3. Cover this material at a very high level.

CTS Guide Reference: 8-1

Skill Sheet: None

Unit 2: Preparation

Topic 2-1: Wildland Fire Behavior

Terminal Learning Objective

At the end of this topic a student, given a wildland or wildland/urban interface fire and the standard safety policies and procedures of the AHJ, will be able to describe basic wildland fire behavior.

Enabling Learning Objectives

1. Describe basic wildland fire behavior
2. Identify the three sides of the fire triangle
3. Identify environmental factors that affect the start and spread of wildland fire
 - Weather
 - Fuel
 - Topography
4. Describe contributing factors that indicate potential for increased fire behavior that may compromise safety

Discussion Questions

1. What sources can you use to gather weather data?
2. How does weather influence fire behavior?
3. How does fuel influence fire behavior?
4. How does topography influence fire behavior?

Application

1. Given a scenario that includes weather, fuel, and topography, have students work in small groups to predict potential fire behavior and present their findings to the class.

Instructor Notes:

1. Recommend using NWCG S-190 course curriculum for additional content.

CTS Guide Reference: 10-2

Skill Sheet:

- 10-2a: Use Incident Response Pocket Guide
- 10-2b: Assume Safety Position for Retardant Drop

Topic 2-2: Recognizing Hazards and Unsafe Situations

Terminal Learning Objective

At the end of this topic a student, given a wildland or wildland/urban interface fire and the standard safety policies and procedures of the AHJ, will be able to recognize hazards and unsafe situations, communicate hazard(s) and unsafe condition(s) to a supervisor, and take appropriate action.

Enabling Learning Objectives

1. Describe basic wildland fire safety
 - 10 Standard Fire Orders
 - 18 Watch-out Situations
 - LCES
 - Common Denominators of Fire Behavior on Tragedy Fires
 - Downhill line construction
 - Avoiding fire entrapment
 - Using a vehicle or a structure as refuge
2. Describe hazards associated with working around aircraft
3. Describe hazards associated with working around heavy equipment
4. Assume safe position for an air tanker drop
5. Use fireline flagging
6. Use the *Incident Response Pocket Guide* (IRPG)

Discussion Questions

1. How do LCES, the 10 Standard Fire Orders, and the 18 Watch-out Situations relate to one another?
 - How are they connected?
 - How are they different?
2. What are some of the Common Denominators of Fire Behavior on Tragedy?
 - How are these common denominators related to fire behavior?

Application

1. Given several fatal fire incidents, have students work in small groups to identify violations of the 10 Standard Fire Orders and 18 Watch-out Situations and report their findings to the class.

Instructor Notes:

1. Recommend using portions of NWCG S-131 course curriculum for additional content.

CTS Guide Reference: 10-2

Skill Sheet:

- 10-2a: Use Incident Response Pocket Guide
- 10-2b: Assume Safety Position for Retardant Drop

Topic 2-3: Human Factors on the Fireline

Terminal Learning Objective

At the end of this topic a student, given a wildland or wildland/urban interface fire and the standard safety policies and procedures of the AHJ, will be able to identify and communicate human performance factors to the appropriate personnel.

Enabling Learning Objectives

1. Identify human performance factors in high-risk work environments
 - Attitude
 - Physical conditioning
 - Training levels
 - Experience
 - Fatigue
 - Local knowledge
 - Crew dynamics
 - Chain of command
 - Span of control
 - Effective communication
2. Describe basic verbal communications
3. Identify common barriers to good listening
 - Perceived opinions
 - Distractions
 - Filtering information
 - Not listening
 - Attitude
4. Identify basic communication responsibilities
 - Briefings
 - Debriefing
 - Warnings
 - Acknowledge messages
 - Ask questions

Discussion Questions

1. How do human factors impact fireline safety?
2. How do human factors impact crew cohesion?

Application

1. Determined by instructor

Instructor Notes:

1. Recommend using portions of NWCG L-180 course curriculum for additional content.

CTS Guide Reference: 10-2

Skill Sheet:

- 10-2a: Use Incident Response Pocket Guide
- 10-2b: Assume Safety Position for Retardant Drop

Topic 2-4: Donning, Doffing, and Maintaining Wildland Personal Protective Equipment

Terminal Learning Objective

At the end of this topic a student, given wildland personal protective equipment including web gear with shelter, will be able to don, doff, and maintain PPE so that PPE is donned in 60 seconds or less, all elements of the PPE ensemble are worn and doffed in accordance with manufacturer guidelines and returned to a ready state, PPE ensemble is serviceable and available for use on the fireline, and defects are recognized and reported to the supervisor.

Enabling Learning Objectives

1. Identify the components of wildland PPE
2. Explain the importance of standards for wildland PPE
3. Describe the protection provided by and limitations of wildland PPE
4. Describe fireline safety and use of PPE
5. Identify manufacturer guidelines for correct PPE use
6. Identify when it is safe to doff wildland PPE
7. Identify AHJ policies and procedures for doffing wildland PPE
8. Describe how to inspect wildland PPE
9. Describe how to recognize when PPE should be removed from service
10. Describe proper cleaning procedures for wildland PPE
11. Describe how to maintain wildland PPE
12. Describe AHJ policy on fire shelter use
13. Don wildland PPE
14. Doff wildland PPE
15. Return PPE to a ready state

Discussion Questions

1. How is wildland PPE different from structural PPE?
2. Why is it important to always wear PPE, including the fire shelter?

Application

1. Given a recent wildland incident scenario, have students identify how improper PPE use contributed to injury or fatality.
2. Given wildland PPE have students practice donning and doffing PPE. Working in pairs, have students determine if each person's PPE is correctly worn per manufacturer standards.

Instructor Note:

3. Green sheets and scenarios are available at www.wildfirelessons.net.

CTS Guide Reference: 8-2, 8-4, 9-1

Skill Sheet:

- 8-2: Don Wildland Personal Protective Equipment
- 8-4: Doff Wildland Personal Protective Equipment
- 9-1: Maintain Assigned Wildland Personal Protective Equipment

Topic 2-5: Deploying a Fire Shelter

Terminal Learning Objective

At the end of this topic a student, given PPE, a hand tool, a live or simulated incident, and a fire shelter, will be able to deploy a fire shelter so that the fire shelter is deployed within 30 seconds and used in accordance with manufacturer and AHJ procedures.

Enabling Learning Objectives

1. Describe the protection provided by and limitations of fire shelters
2. Describe how to inspect and evaluate a fire shelter
3. Describe how to select and prepare a shelter deployment site
4. Describe AHJ policy on fire shelter use
5. Identify items to take into and leave outside a fire shelter
 - Take in
 - Water
 - Radio
 - Leave out
 - Combustibles (fuel, fusees, etc.)
 - Hand tool
6. Describe methods for deploying a fire shelter
 - Standing-to-sitting method
 - Standing drop-down method
 - Lying down method
7. Identify when to deploy and exit a fire shelter during an incident
8. Deploy a fire shelter within 30 seconds

Discussion Questions

1. Why is it important to know and select the correct size fire shelter?
2. What factors should be considered when selecting a deployment site?
3. Why is it important to regularly inspect a fire shelter?
4. When should you exit a fire shelter?

Application

1. Given a recent fire entrapment or shelter deployment, have students identify how the fire shelter worked to prevent more serious injuries or fatalities.
2. Given wildland PPE, a hand tool, and a practice fire shelter, have students practice deploying the fire shelter using different deployment methods.

Instructor Notes

1. Recommend showing online NWCG video: New Generation Fire Shelter.

CTS Guide Reference: 8-3

Skill Sheet: 8-3: Deploy a Fire Shelter

Topic 2-6: Maintaining Assigned Suppression Hand Tools and Equipment

Terminal Learning Objective

At the end of this topic a student, given tools, equipment, and AHJ maintenance specifications, will be able to recognize defects and report them to a supervisor and maintain assigned suppression hand tools and equipment so that assigned equipment is serviceable.

Enabling Learning Objectives

1. Identify wildland fire fighting tools and equipment
 - Fusees
 - Drip torches
 - Back pumps
 - Round point shovel
 - Pulaski
 - Mcleod
 - Brush hook
 - Single and double bit axe
 - Wire broom
 - Rhino tool
 - Combi tool
 - Power equipment
 - Chain saw
 - Pump
 - Pole saw
 - Fireline flagging
2. Describe how to use wildland fire fighting tools and equipment
3. Describe how to inspect tools and equipment
4. Describe how to maintain and care for tools and equipment
5. Describe how to recognize when tools and equipment should be removed from service
6. Perform required maintenance techniques
7. Sharpen assigned suppression equipment
8. Perform other maintenance techniques for assigned suppression equipment
9. Use required maintenance equipment

Discussion Questions

1. Why is it important to properly maintain wildland tools and equipment?
2. What are some common tools used to cut line?
3. What are some common tools used to scrape fire line?

Application

1. Given wildland tools/equipment that have been removed from service, have students inspect the tools/equipment to identify the deficiencies and safety concerns, and share their findings with the class.

CTS Guide Reference: 9-2

Skill Sheet: 9-2: Maintain Hand Tools and Equipment

Topic 2-7: Maintaining Personal Gear Kit

Terminal Learning Objective

At the end of this topic a student, given a deployment and AHJ policies, will be able to maintain a personal gear kit so that mobilization response readiness meets AHJ requirements.

Enabling Learning Objectives

1. Describe contents of a personal gear kit
2. Identify type and duration of incident
3. Describe AHJ requirements

Discussion Questions

1. What items should be packed in an out-of-county bag? Does your AHJ require any specific items?
2. How long should you be prepared to be deployed?
3. What is your AHJ response time expectation?

Application

1. Given different incidents types and durations, have students create a list of what they would pack in a personal gear kit and share their findings with the class.

CTS Guide Reference: 9-3

Skill Sheet: None

Unit 3: Suppression

Topic 3-1: Assembling and Preparing for Response

Terminal Learning Objective

At the end of this topic a student, given an assembly location, an assignment, an incident location, a mode of transportation, and time requirements, will be able to assemble and prepare for response so that arrival at the incident with the required personnel and equipment meets AHJ guidelines.

Enabling Learning Objectives

1. Identify personnel and equipment requirements for response
 - Based on ICS type and capability
2. Identify AHJ time standards
3. Identify special transportation considerations
4. Describe operational procedures for various response modes
5. Describe AHJ safety response guidelines

Discussion Questions

1. What personnel and equipment are required for wildland incident response?
2. What steps should a fire fighter complete at the fire station before responding to a wildland incident?

Application

1. Determined by instructor

CTS Guide Reference: 10-1

Skill Sheet: 10-1: Assemble and Prepare for Response

Topic 3-2: Constructing a Fireline

Terminal Learning Objective

At the end of this topic a student, given a wildland or wildland/urban interface fire, AHJ line construction standards, suppression tools, water or other suppression agents, and equipment, will be able to construct a fireline that conforms to the AHJ's construction standard.

Enabling Learning Objectives

1. Describe basic wildland suppression strategy
 - Direct
 - Indirect
 - Combination
2. Identify basic wildland suppression tactics
 - Hose lays
 - Mobile attack
 - Hand line
 - Dozer line
 - Retardant line
3. Describe the principles, techniques, and standards of fireline construction
 - Hose lays
 - Mobile attack
 - Hand line
 - Dozer line
4. Describe how to construct a handline
 - Build a control line using the bump up or one lick method
 - Build a cup or trench while constructing handline
 - Procedures for passing hand tools
 - Tool line up and spacing
5. Describe how to perform mobile attack
6. Describe how to perform a simple hose lay
 - No appliances
7. Describe how to perform a progressive hose lay
 - With appliances
 - Two-person method
8. Describe how to retrieve hose
 - Single-section drain and carry
 - Figure 8 drain and carry
 - Other AHJ-specific methods
9. Use wildland tools properly
 - Fusees
 - Drip torches
 - Back pumps

- Round point shovel
 - Pulaski
 - Mcleod
 - Brush hook
 - Single and double bit axe
 - Wire broom
 - Rhino tool
 - Combi tool
 - Power equipment
 - Chain saw
 - Pump
 - Pole saw
10. Construct a handline
 11. Perform mobile attack
 12. Perform a simple hose lay
 13. Perform progressive hose lay
 14. Retrieve hose
 15. Apply fire streams
 16. Apply extinguishing agents

Discussion Questions

1. How does a simple hose lay differ from a progressive hose lay?
2. How wide should a fireline be?
3. What safety concerns should be considered:
 - When building a fireline?
 - For downhill line construction?
 - When working near heavy equipment?
 - When working with aircraft?

Application

1. Given an assignment, PPE, an apparatus or pressurized water supply with ability to do mobile pumping, hand tools, wildland hose and packs, nozzles, and appliances, have students practice constructing a handline, performing mobile attack, performing a simple and progressive hose lays, and retrieving hose.

CTS Guide Reference: 10-2, 10-3

Skill Sheet:

- 10-2a: Use Incident Response Pocket Guide
- 10-2b: Assume Safety Position for Retardant Drop
- 10-3a: Assemble, Use, and Maintain a Back Pump
- 10-3b: Perform a Progressive Hose Lay (Hose)
- 10-3b: Perform a Progressive Hose Lay (Nozzle)
- 10-3c: Construct a Fireline Using Hand Tools
- 10-3d: Perform Mobile Pumping

Topic 3-3: Securing a Fireline

Terminal Learning Objective

At the end of this topic a student, given a wildland fire or simulated event, suppression tools, water or other suppression agents, and equipment, will be able to secure the fireline so that fireline burning materials and unburned fuels are physically separated.

Enabling Learning Objectives

1. Describe fireline improvement techniques
 - Wet lines
 - Handline
 - Dozer lines
 - Retardant lines
 - Natural fuel breaks
 - Manmade fuel breaks
2. Describe safety considerations
3. Describe how to use basic ignition devices
 - Only under direct supervision
 - Ignite and extinguish fusees
 - Assemble and use a drip torch
4. Use basic ignition devices

Discussion Questions

1. How does a finished fireline differ from an initial fireline?
2. What is anchor point? What is it used for?
3. What ignition devices can be used to burn out a fireline?
4. What factors must be considered before initiating burn out?

Application

1. Given PPE and ignition devices, have students practice using ignition devices.

CTS Guide Reference: 10-4

Skill Sheet:

- 10-4a: Ignite and Extinguish Road Flares and Fusees
- 10-4b: Assemble, Ignite, Extinguish, and Disassemble a Drip Torch

Topic 3-4: Reducing the Threat of Fire Exposure to Improved Properties (WUI)

Terminal Learning Objective

At the end of this topic a student, given a wildland or wildland/urban interface fire, suppression tools, and equipment, will be able to describe methods to reduce the threat of fire exposure to improved properties in order to protect them.

Enabling Learning Objectives

1. Describe wildland fire behavior within the wildland/urban interface
2. Describe how to reduce fuel for structure defense
3. Identify structure defense tactical actions
 - Check and go
 - Prep and go
 - Prep and defend
 - Fire front following
 - Bump and run
 - Anchor and hold
 - Tactical patrol
4. Identify structure triage categories
 - Non-threatened
 - Threatened defensible
 - Threatened non-defensible
5. Identify the difference between a safety zone and a temporary refuge area (TRA)
6. Identify equipment and personnel capabilities within the wildland/urban interface
7. Prepare a structure for structure defense
8. Conduct structure defense within the wildland/urban interface

Discussion Questions

1. How does a fire fighter determine which tactical action to pursue?
2. When is it acceptable to leave a structure threatened by a wildland fire?
3. How is a temporary refuge area (TRA) different from a safety zone?

Application

1. Given a wildland/urban interface incident or simulated scenario and fire behavior factors, have students assess the structures, determine a triage category for each structure, and identify appropriate tactics to protect them.
2. Given a simulated scenario and an ICS 231 wildland placard, have students to fill out an ICS 231 wildland placard.

Instructor Notes:

1. Recommend using the FIRESCOPE Wildland Urban Interface (WUI) Structure Defense document for additional content.
2. Recommend using the CAL FIRE Wildland Urban Interface Operations Handbook for additional content.

CTS Guide Reference: 10-5

Skill Sheet: 10-5: Prep and Defend a Structure

Topic 3-5: Mopping Up in a Fire Area

Terminal Learning Objective

At the end of this topic a student, given a wildland fire or simulated scenario, suppression tools, water or other suppression agents, and equipment, will be able to mop up a fire area so that burning fuels that threaten escape are located and extinguished.

Enabling Learning Objectives

1. Describe principles, techniques, and standards for mop up
 - Dry mop up
 - Wet mop up
2. Use basic tools to perform mop-up operations
3. Use basic techniques to perform mop-up operations
4. Identify hazards associated with mop-up operations
 - Human hazards
 - Environmental hazards
5. Assemble and operate a back pump

Discussion Questions

1. What are some critical elements of mop-up operations?
2. How will different fuels influence mop-up operations?
3. What are some human factors hazards associated with mop-up operations?

Application

1. Given a wildland fire or simulated scenario, suppression tools, water or other suppression agents, and equipment, have students practice mopping up a fire area.

Instructor Notes:

1. None

CTS Guide Reference: 10-6

Skill Sheet: 10-5: Perform Mop Up Operations

Topic 3-6: Patrolling the Fire Area

Terminal Learning Objective

At the end of this topic a student, given a wildland fire or simulated scenario, suppression tools, and equipment, will be able to patrol and maintain containment of the fire area.

Enabling Learning Objectives

1. Describe the principles, techniques, and standards of patrol
2. Observe, identify, and take action on potential threats when patrolling fire areas

Discussion Questions

1. What should a fire fighter look for during patrol operations?
2. What is the importance of conducting patrol operations?

Application

1. Determined by instructor

Instructor Notes:

1. None

CTS Guide Reference: 10-7

Skill Sheet: 10-7: Patrol the Fire Area

How to Read a Course Plan

A course plan identifies the details, logistics, resources, and training and education content for an individual course. Whenever possible, course content is directly tied to a national or state standard. SFT uses the course plan as the training and education standard for an individual course. Individuals at fire agencies, academies, and community colleges use course plans to obtain their institution's consent to offer course and provide credit for their completion. Instructors use course plans to develop syllabi and lesson plans for course delivery.

Course Details

The Course Details segment identifies the logistical information required for planning, scheduling, and delivering a course.

Required Resources

The Required Resources segment identifies the resources, equipment, facilities, and personnel required to delivery the course.

Unit

Each Unit represents a collection of aligned topics. Unit 1 is the same for all SFT courses. An instructor is not required to repeat Unit 1 when teaching multiple courses within a single instructional period or academy.

Topics

Each Topic documents a single Terminal Learning Objective and the instructional activities that support it.

Terminal Learning Objective

A Terminal Learning Objective (TLO) states the instructor's expectations of student performance at the end of a specific lesson or unit. Each TLO includes a task (what the student must be able to do), a condition (the setting and supplies needed), and a standard (how well or to whose specifications the task must be performed). TLOs target the performance required when students are evaluated, not what they will do as part of the course.

Enabling Learning Objectives

The Enabling Learning Objectives (ELO) specify a detailed sequence of student activities that make up the instructional content of a lesson plan. ELOs cover the cognitive, affective, and psychomotor skills students must master in order to complete the TLO.

Discussion Questions

The Discussion Questions are designed to guide students into a topic or to enhance their understanding of a topic. Instructors may add to or adjust the questions to suit their students.

Application

The Application segment documents experiences that enable students to apply lecture content through cognitive and psychomotor activities, skills exercises, and formative testing. Application experiences included in the course plan are required. Instructors may add additional application experiences to suit their student population if time permits.

Instructor Notes

The Instructor Notes segment documents suggestions and resources to enhance an instructor's ability to teach a specific topic.

CTS Guide Reference

The CTS Guide Reference segment documents the standard(s) from the corresponding Certification Training Standard Guide upon which each topic within the course is based. This segment is eliminated if the course is not based on a standard.

Skill Sheet

The Skill Sheet segment documents the skill sheet that tests the content contained within the topic. This segment is eliminated if the course does not have skill sheets.

Update 19-1

Justification

In the 2020 edition of NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications, NFPA made the following changes:

- Replaced the word “agency” with the acronym “AHJ” in all instances
 - Editorial only, no change made to task book
- Replaced the word “control” with “containment” in paragraph 4.5.8
 - Editorial only, no change made to task book
- Added a new job performance requirement (paragraph 4.3.4)
 - Content already adequately covered in the task book through task #6 based on NPFA 1051: 4.5.2 / CTS 10-1
 - No new task book JPR needed



9.1 Maintain Assigned Personal Protective Equipment

| Candidate Information |
|--|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 2 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.3.2 / CTS Guide: 9-1 / Course Plan: Fire Fighter 1C, Topic 2-6 |
| Performance Outcome: Clean, inspect, replace (if applicable), and place personal protective equipment (PPE) in a ready state or report otherwise. |
| Candidate Directions: You will inspect, clean or replace, and place PPE in a ready state, reporting any defects to a supervisor. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Variables (circle one) |
|--|
| Personal Protective Equipment: Nomex pants / Nomex jacket / wildland gloves / helmet and eye protection / fire shelter / shroud / web gear and water source |

| Performance Measures (check appropriate box) | Pass | Fail |
|--|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Inspects and describes at least five items to ensure PPE is in safe working condition | | |
| 2. Describes appropriate cleaning procedures per manufacturer's recommendations for at least two items | | |
| 3. Inspects PPE and verbalizes findings of any holes, tears, gas and oil stains, etc. | | |
| 4. Describes importance of "Second Layer" of protective clothing | | |
| 5. Reports PPE considered unserviceable to supervisor | | |

| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



9-2: Maintain Hand Tools and Equipment

| Candidate Information |
|--|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.3.3 / CTS Guide: 9-2 / Course Plan: Fire Fighter 1C, Topic 2-6 |
| Performance Outcome: Clean, check, sharpen (if applicable), and place equipment in a ready state or report otherwise. |
| Candidate Directions: You will inspect, clean, and sharpen a tool and place in a ready state, reporting any defects to a supervisor. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Variables (circle one) |
|---|
| Tools and Equipment: brush hook / shovel / single or double bit ax / Pulaski / McLeod rhino tool / combi tool / wire broom |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Inspects and describes selected item to ensure tool is in safe working condition | | |
| 3. Reports any tools considered unserviceable to supervisor | | |
| 4. Uses file handle and guard | | |
| 5. Secures tools for sharpening | | |
| 6. Maintains clearance around work area | | |
| 7. Uses flat palm against file | | |
| 8. Sharpens tool per AHJ or manufacturer guidelines | | |

| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-1: Assemble and Prepare for Response

| Candidate Information |
|---|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.2 / CTS Guide: 10-1 / Course Plan: Fire Fighter 1C, Topic 3-1 |
| Performance Outcome: Assemble and prepare for response so that arrival at the incident with the required personnel and equipment meets AHJ guidelines. |
| Candidate Directions: You will identify the required equipment needed and the weight limitations for said equipment when you are dispatched to an out-of-county assignment. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|--|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Verbally identifies what essential items should be carried in an out-of-county bag to operate on the ground for up to 14 days | | |
| 2. Inspects PPE for serviceability | | |
| 3. Ensures equipment meets AHJ guidelines and weight limitations | | |

Basic Needs: Essential

- Undergarments (underwear and socks)
- 100% cotton t-shirts (as designated by AHJ)
- Work uniform pants and shirts
- Personal hygiene kit (soap, shampoo, toothbrush, toothpaste, lip balm, foot powder, shaving kit, aspirin, medications, etc.)
- Towel and washcloth
- Watch
- Small notebook, pen/pencil
- Tent, sleeping bag, and pillow (if AHJ does not provide a room for days off)

Basic Needs: Suggested

- Snacks or energy bars
- Inclement weather gear
- Bandanas
- Spare eyeglasses or repair kit
- Inspect repellent
- Small flashlight
- Hand sanitizer
- Shower shoes
- Off duty clothes
- Sewing kit



| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-2a: Use Incident Response Pocket Guide

| Candidate Information |
|--|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.3 / CTS Guide: 10-2 / Course Plan: Fire Fighter 1C, Topic 2-2 |
| Performance Outcome: Describe and demonstrate how to use the Incident Response Pocket Guide (IRPG). |
| Candidate Directions: You will use the IRPG to locate and describe the standard safety policies and procedures for wildland fires. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|-------------|-------------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Locates and describes LCES | | |
| 3. Locates and describes briefing checklist | | |
| 4. Locates and describes standard firefighting orders | | |
| 5. Locates and describes watch out situations | | |
| 6. Locates and describes common denominators on tragedy fires | | |
| 7. Locates and describes downhill checklist | | |
| 8. Locates and describes wildland challenges and hazards | | |

| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-2b: Assume Safety Position for Retardant Drop

| Candidate Information | |
|---|--|
| Candidate Name and SFT ID Number: | |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt | |
| General Information | |
| NFPA Standard: 1051 (2020), JPR 4.5.3 / CTS Guide: 10-2 / Course Plan: Fire Fighter 1C, Topic 2-2 | |
| Performance Outcome: Demonstrate the safety position for an air tanker retardant drop, while wearing wildland protective gear, within 30 seconds. | |
| Candidate Directions: You will properly assume the position for an air tanker drop within 30 seconds, while wearing full wildland PPE. The test will begin when I say, "air tanker approaching." The test will end when you say, "done." Do you understand the directions? | |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. States, "I would attempt to leave the target area if possible." | | |
| 3. Shouts, "Airdrop." | | |
| 4. Selects an area free of hazards | | |
| 5. Checks all wildland safety equipment to assure it is worn properly | | |
| 6. Lays flat on the ground, face down with head toward direction of the approaching air tanker | | |
| 7. Holds helmet on tightly | | |
| 8. Holds hand tool firmly to one side with the sharp edge away from body | | |
| 9. Remains in safety position with feet spread and toes extended outward until instructed to get up | | |
| 10. Time: | | |

| Evaluation Results | |
|---|--|
| Overall Evaluation: Pass / Fail (circle one) | |
| Student Signature / Date: | |
| Evaluator Signature / Date: | |
| Comments: | |



10-3a: Assemble, Use, and Maintain a Back Pump

| Candidate Information |
|--|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.4 / CTS Guide: 10-3 / Course Plan: Fire Fighter 1C, Topic 3-2 |
| Performance Outcome: Create a 100-foot simulated fireline using a back pump. Demonstrate donning and priming back pump, creating fireline, clearing and replacing a clogged nozzle, and refilling back pump. |
| Candidate Directions: You will use a back pump to make a fireline, clear and replace a clogged nozzle, and refill the back pump. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|--|-------------|-------------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Dons back pump using coat method | | |
| 3. Places arms through shoulder straps | | |
| 4. Positions back pump onto back without losing control | | |
| 5. Accesses and removes trombone keeping nozzle elevated | | |
| 6. Tests back pump to ensure it is primed and operable prior to reaching fireline | | |
| 7. Approaches burn side of simulated fireline with nozzle elevated and begins to apply a continuous wet line from an anchor point | | |
| 8. Makes a continuous 100-foot wet line on simulated fireline by overlapping succeeding sprays of water (Finger should be placed over tip to create a 12" wide spray pattern.) | | |
| 9. Removes finger from tip on evaluator's command and uses straight stream to cool a simulated hot spot | | |
| 10. Simulates and verbalizes steps to clear a clogged nozzle | | |
| 11. Simulates and verbalizes steps to replace a clogged nozzle | | |
| 12. Returns back pump to engine and refills unit at back pump refill station | | |

| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-3b: Perform a Progressive Hose Lay (Hose)

| Candidate Information |
|---|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.4 / CTS Guide: 10-3 / Course Plan: Fire Fighter 1C, Topic 3-2 |
| Performance Outcome: Make a 500-foot progressive two-person hose lay. Each candidate will complete the hose portion within four minutes and the nozzle position within four minutes for a total drill time of eight minutes. |
| Candidate Directions: Working with a partner you will start from inside the cab while wearing full wildland PPE with web gear and shelter and make a two-person 500-foot progressive hose lay from a clearly marked anchor point while applying a continuous wet line. At the midpoint of the examination you will switch positions with your partner. You will have four minutes to complete the hose portion and four minutes to complete the nozzle portion for a total testing time of eight minutes. When you are finished with the timed portion of the test, you will return the hose, brass, and clamp to the starting point. Running is never permitted. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|--|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Retrieves hose clamp and two hose tees from engine's brass compartment (or they may be mounted on hose rolls) | | |
| 3. Dons hose packs on back | | |
| Time Starts for Remaining Performance Measures | | |
| 4. Removes hose from hose pack (takes hose from nozzle candidate's hose pack) | | |
| 5. Deploys hose completely (shouts "hose," does not drop coupling, does not deploy hose into burn) | | |
| 6. Clamps charged hose lay with hose clamp (at least 18 inches from nozzle, without pinching hose or fingers, verbalizes "clamp" loudly) | | |
| 7. Hands male coupling of uncharged hose to nozzle candidate and receives male coupling from charged hose | | |
| 8. Attaches female coupling of clamped/charged hose to complete hose connection | | |
| 9. Releases hose clamp slowly | | |
| 10. States pre-designated command ("Water coming") | | |
| 11. Removes hose from hose pack (takes hose from nozzle candidate's hose pack) | | |
| 12. Deploys hose completely (shouts "hose," does not drop coupling, does not deploy hose into burn) | | |
| 13. Clamps charged hose lay with hose clamp (at least 18 inches from nozzle, without | | |



| | | |
|--|--|--|
| pinching hose or fingers, verbalizes "clamp" loudly) | | |
| 14. Hands male coupling of uncharged hose to nozzle candidate and receives male coupling from charged hose | | |
| 15. Attaches in-line hose tee to male end of clamped/charged hose (does not drop on ground, ensures in-line tee is closed) or may already be in-line if pre-attached in hose roll | | |
| 16. Attaches female coupling to male coupling of tee to complete hose connection | | |
| 17. Releases hose clamp slowly | | |
| 18. States pre-designated command ("Water coming") | | |
| Time Stops: | | |
| Candidate switches roles (see 10-3b: Perform a Progressive Hose Lay (Nozzle) skill sheet) | | |
| Hose Candidate and Nozzle Candidate | | |
| 19. Breaks down hose (disconnects all couplings) <ul style="list-style-type: none">• Engine operator shall disconnect from discharge | | |
| 20. Returns all used hose to spot "X" designated at beginning of exam <ul style="list-style-type: none">• Carries used hose using shoulder carry or butterfly (figure 8) method• Does not drag coupling | | |
| 21. Returns nozzles with bale shut off, hose clamps, hose tees, and hose packs to spot "X" designated at beginning of exam (without dropping equipment) | | |

Evaluation Results

Overall Evaluation: Pass / Fail (circle one)

Student Signature / Date:

Evaluator Signature / Date:

Comments:



10-3b: Perform a Progressive Hose Lay (Nozzle)

| Candidate Information |
|---|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.4 / CTS Guide: 10-3 / Course Plan: Fire Fighter 1C, Topic 3-2 |
| Performance Outcome: Make a 500-foot progressive two-person hose lay. Each candidate will complete the hose portion within four minutes and the nozzle position within four minutes for a total drill time of eight minutes. |
| Candidate Directions: Working with a partner you will start from inside the cab while wearing full wildland PPE with web gear and shelter and make a two-person 500-foot progressive hose lay from a clearly marked anchor point while applying a continuous wet line. At the midpoint of the examination you will switch positions with your partner. You will have four minutes to complete the hose portion and four minutes to complete the nozzle portion for a total testing time of eight minutes. When you are finished with the timed portion of the test, you will return the hose, brass, and clamp to the starting point. Running is never permitted. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Deploys starter hose roll completely (shouts "hose", does not drop coupling, does not deploy hose into burn) | | |
| 3. Hands female coupling of starter roll to engine operator to connect to discharge | | |
| 4. Retrieves 1½-foot nozzle with shut off bale and hose clamp from engine's brass compartment | | |
| 5. Attaches nozzle with bale shut off to hose (starter roll) male coupling assuring bale is fully closed | | |
| 6. Sets down nozzle | | |
| 7. Dons hose packs on back | | |
| 8. Picks up nozzle and instructs engine operator to charge line <ul style="list-style-type: none"> • Does not advance line | | |
| 9. Opens nozzle/bale fully and slowly bleeds air from line | | |
| 10. Adjusts nozzle pattern (straight stream to fog, leaves on medium fog) | | |
| 11. Establishes an anchor point and advances hose line <ul style="list-style-type: none"> • Makes continuous wet line • Uses alternating straight stream to medium fog knocking down simulated fire in advance of hose lay • Holds hose on either hip or over shoulder • Stops advancing hose lay when 10 feet of slack is left, verbalized by hose | | |



| | | |
|---|--|--|
| candidate | | |
| <ul style="list-style-type: none"> Knocks down simulated fire ahead of hose lay end with straight stream | | |
| 12. Closes nozzle/bale fully and slowly | | |
| Time Starts for Remaining Performance Measures | | |
| 13. Opens nozzle/bale slowly to relieve water pressure | | |
| 14. Removes nozzle/bale | | |
| 15. Hands male coupling to hose candidate and receives male coupling from uncharged hose | | |
| 16. Attaches nozzle/bale shut off to hose male coupling | | |
| 17. Confirms bale shut off is fully closed | | |
| 18. States pre-designated command (example "Ready for water") | | |
| 19. Opens nozzle/bale slowly to bleed air and to test nozzle pattern (straight stream to fog, leave on medium fog, does not advanced hose until fully charged) | | |
| 20. Resumes advancing hose line <ul style="list-style-type: none"> Makes continuous wet line Uses alternating straight stream to medium fog knocking down simulated fire in advance of hose lay Holds hose on either hip or over shoulder Stops advancing hose lay when 10 feet of slack is left, verbalized by hose candidate Knocks down simulated fire ahead of hose lay end with straight stream | | |
| 21. Closes nozzle/bale fully and slowly | | |
| 22. Opens nozzle/bale slowly to relieve water pressure | | |
| 23. Removes nozzle/bale | | |
| 24. Hands male coupling to hose candidate and receives male coupling from uncharged hose | | |
| 25. Attaches nozzle/bale shut off to hose male coupling | | |
| 26. Confirms bale shut off is fully closed | | |
| 27. States pre-designated command (example "Ready for water") | | |
| 28. Opens nozzle/bale slowly to bleed air and to test nozzle pattern (straight stream to fog, leave on medium fog, does not advanced hose until fully charged) | | |
| 29. Resumes advancing hose line <ul style="list-style-type: none"> Makes continuous wet line Uses alternating straight stream to medium fog knocking down simulated fire in advance of hose lay Holds hose on either hip or over shoulder Stops advancing hose lay when 10 feet of slack is left, verbalized by hose candidate Knocks down simulated fire ahead of hose lay end with straight stream | | |
| 30. Closes nozzle/bale fully and slowly | | |
| Time Stops: | | |



Candidate switches roles (see 10-3b: Perform a Progressive Hose Lay (Hose) skill sheet)

Hose Candidate and Nozzle Candidate 1

31. Breaks down hose (disconnects all couplings)

- Engine operator shall disconnect from discharge

32. Returns all used hose to spot "X" designated at beginning of exam

- Carries used hose using shoulder carry or butterfly (figure 8) method
- Does not drag coupling

33. Returns nozzles with bale shut off, hose clamps, hose tees, and hose packs to spot "X" designated at beginning of exam (without dropping equipment)

Evaluation Results

Overall Evaluation: Pass / Fail (circle one)

Student Signature / Date:

Evaluator Signature / Date:

Comments:



10-3c: Construct a Fireline Using Hand Tools

| Candidate Information |
|--|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.4 / CTS Guide: 10-3 / Course Plan: Fire Fighter 1C, Topic 3-2 |
| Performance Outcome: Construct a handline so that the fireline conforms to the construction standards. |
| Candidate Directions: You will perform as a team member in a group of no more than 10 to construct a handline using hand tools to AHJ standards. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|-------------|-------------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Discusses the following aspects based on fire simulation <ul style="list-style-type: none"> • Fireline location • Fireline construction methods • Fireline standards • Safety concerns | | |
| 3. Selects proper tools for given fuel types | | |
| 4. Demonstrates proper hook line order | | |
| 5. Demonstrates proper space when walking and working, (10-15 feet apart) | | |
| 6. Constructs line extending to mineral soil | | |
| 7. Demonstrates proper intra-crew communications (bump, take more, take less, hazards) | | |
| 8. Demonstrates the one lick, bump up, and leap frog techniques | | |
| 9. Demonstrates hot spotting, scratch line, and finished line | | |
| 10. Demonstrates trenching or construction of a downhill berm | | |
| 11. Demonstrates safe use of hand tools | | |

| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-3d: Perform Mobile Pumping

| Candidate Information |
|---|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.4 / CTS Guide: 10-3 / Course Plan: Fire Fighter 1C, Topic 3-2 |
| Performance Outcome: Mobile attack for a distance of 100 feet and cool down a hot spot under simulated fire conditions using an over the hip hose drag and over the shoulder method. |
| Candidate Directions: You will mobile pump for 100 feet. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Selects and extends proper attack line | | |
| 3. Attaches attack line to proper discharge (if not pre-connected) | | |
| 4. Selects proper nozzle with shut-off and attaches hand tight to attack line | | |
| 5. Opens engine discharge valve to charge hoseline | | |
| 6. Opens nozzle to check water pattern, water pressure, and complete elimination of air prior to reaching fire | | |
| 7. Utilizes an over-the-hip or over-the-shoulder hose drag method | | |
| 8. Begins mobile attack from selected anchor point | | |
| 9. Works parallel to fire's edge in simulated burn making a continuous wet line | | |
| 10. Adjusts nozzle to straight stream to cool flare-up/hotspot on fire's edge (upon command) | | |
| 11. Adjusts nozzle pattern back to narrow fog and completes a continuous wet line along 100 feet of fire's edge | | |
| 12. Avoids injury/damage to engine, crew, and equipment along 100 foot wet line | | |
| 13. Returns all equipment to proper storage on engine | | |

| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-4a: Ignite and Extinguish Road Flares and Fusees

| Candidate Information |
|---|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.5 / CTS Guide: 10-4 / Course Plan: Fire Fighter 1C, Topic 3-3 |
| Performance Outcome: Ignite and extinguish a flare or fusee ensuring the device is safely ignited carried and used and then extinguished. |
| Candidate Directions: You will ignite and extinguish a road flare or fusee. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| Igniting | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Grasps flare or fusee near base with back to wind | | |
| 3. Removes flare/fusee cap to expose igniter by twisting off in either direction | | |
| 4. Removes striker cap to expose striker | | |
| 5. Positions igniter and striker together with arms fully extended and looks away from flare/fusee | | |
| 6. Moves flare/fusee away from body while rubbing striker forcefully across igniter surface (repeats steps 5 and 6 until flare/fusee ignites) | | |
| Extinguishing | | |
| 7. Points lit end toward ground while holding flare/fusee at arm's length from body | | |
| 8. Taps flare/fusee's lit end onto bare ground (repeats step 8 until flare/fusee is extinguished) | | |
| 9. Disposes of used flare/fusee properly | | |

| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-4b: Assemble, Ignite, Extinguish, and Disassemble a Drip Torch

| Candidate Information |
|--|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 2 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.5 / CTS Guide: 10-4 / Course Plan: Fire Fighter 1C, Topic 3-3 |
| Performance Outcome: Assemble a drip torch ensuring the gasket is in place and intact, fuel spout is facing in the correct position and the air vent is open; ignite the torch using ignition source; extinguish the drip torch ensuring the wick has cooled down; and disassemble and place back into service ensuring the tank is full. |
| Candidate Directions: You will assemble, ignite, extinguish, and disassemble a drip torch. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|-------------|-------------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| Assemble and Ignite | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Shakes torch to mix fuel | | |
| 3. Places torch in a clear area and loosens and removes lock ring | | |
| 4. Loosens and removes fuel flow plug, inspects "O" ring, and places it hand tight on blind threaded retainer | | |
| 5. Removes fuel spout, checks fuel level in the tank, and checks gasket on spout | | |
| 6. Turns spout assembly over and sets it atop drip torch with wick pointed away from tank handle | | |
| 7. Slips lock ring over spout, threaded side down, and tightens lock ring in place | | |
| 8. Opens air vent $\frac{3}{4}$ of the way | | |
| 9. Pours small amount of fuel on ground and lights it with match or fusee | | |
| 10. Lights drip torch wick by inverting torch above flaming fuel | | |
| Extinguish and Disassemble | | |
| 11. Blows out wick and allows it to cool | | |
| 12. Removes lock ring and places it on clean surface | | |
| 13. Refills tank to $\frac{3}{4}$ full | | |
| 14. Inserts spout assembly wick into tank | | |
| 15. Replaces lock ring and hand tightens it | | |
| 16. Removes fuel flow plug from retainer and places it to block fuel flow to spout | | |
| 17. Closes air vent | | |



| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-5: Prep and Defend a Structure

| Candidate Information |
|---|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.6 / CTS Guide: 10-5 / Course Plan: Fire Fighter 1C, Topic 3-4 |
| Performance Outcome: Describe methods to reduce the threat of fire exposure to improved properties given a wildland or urban interface fire so that improvements are protected. |
| Candidate Directions: You will demonstrate your ability to accurately assess, categorize, and defend a structure in the wildland. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Performance Measures (check appropriate box) | Pass | Fail |
|--|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Explains importance of LCES and Situational Awareness | | |
| 3. Identifies structural triage category for affected structure | | |
| 4. Applies S-FACTS to affected structure | | |
| 5. Identifies and explains fuel removal options | | |
| 6. Describes essential tasks to undertake when protecting structures <ul style="list-style-type: none"> • Ladder to roof • Clean roof of combustibles • Clear around structure, woodpiles, furniture, etc. • Cover vents • Shut off fuel tanks • Close all windows and doors | | |
| 7. Describes hoseline placement, line construction, and use of fire to protect structure | | |
| 8. Describes effective use of tools and equipment to protect structure | | |
| 9. Describes characteristics of and differences between a safety zone and a temporary refuge area | | |



| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-6: Perform Mop Up Operations

| Candidate Information |
|---|
| Candidate Name and SFT ID Number: |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt |
| General Information |
| NFPA Standard: 1051 (2020), JPR 4.5.7 / CTS Guide: 10-6 / Course Plan: Fire Fighter 1C, Topic 3-5 |
| Performance Outcome: Correctly mop up a wildland fire. |
| Candidate Directions: You will mop up a simulated wildland fire using wet or dry mop up techniques. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? |

| Variables (circle one) |
|--------------------------|
| Mop Up: wet / dry |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| Dry Mop Up | | |
| 2. Locates and identifies burning material | | |
| 3. Utilizes hand tools for chopping, scraping, and separating burning material | | |
| 4. Mixes burning material with soil | | |
| 5. Rearranges fuels adjacent to control line to facilitate holding the fire | | |
| 6. Rearranges fuels so threat of escape is mitigated or extinguished | | |
| Wet Mop Up | | |
| 7. Locates and identifies burning material | | |
| 8. Applies water appropriately | | |
| 9. Uses straight steam to penetrate ground fuels | | |
| 10. Rearranges fuels so threat of escape is mitigated or extinguished | | |

| Evaluation Results |
|---|
| Overall Evaluation: Pass / Fail (circle one) |
| Student Signature / Date: |
| Evaluator Signature / Date: |
| Comments: |



10-7: Patrol the Fire Area

| Candidate Information | |
|--|--|
| Candidate Name and SFT ID Number: | |
| Circle One: Day 1 First Attempt / Day 1 Second Attempt / Day 2 First Attempt / Day 2 Second Attempt | |
| General Information | |
| NFPA Standard: 1051 (2020), JPR 4.5.8 / CTS Guide: 10-7 / Course Plan: Fire Fighter 1C, Topic 3-6 | |
| Performance Outcome: Correctly patrol a wildland fire. | |
| Candidate Directions: You will patrol the area of simulated wildland fire so that burning fuels that threaten escape are located and extinguished. The test will begin when I say, "start." The test will end when you say, "done." Do you understand the directions? | |

| Performance Measures (check appropriate box) | Pass | Fail |
|---|------|------|
| The candidate must complete all steps (100%) to receive a passing score. | | |
| 1. Wears and uses appropriate PPE/SCBA/equipment at all times during evaluation | | |
| 2. Determines number of resources needed | | |
| 3. Determines area to cover | | |
| 4. Determines depth of line to cover | | |
| 5. Grids to maintain containment of fire area | | |

| Evaluation Results | |
|---|--|
| Overall Evaluation: Pass / Fail (circle one) | |
| Student Signature / Date: | |
| Evaluator Signature / Date: | |
| Comments: | |