



Standardized Curriculum Form Ontario, Canada

Office of the Fire Marshal and Emergency Management
Curriculum based on
NFPA 1521, Chapter 5, 2015 Edition

Incident Safety Officer

National Fire Protection Association Standard for Incident Safety Officer Professional Qualifications

Notice

NFPA-referenced material set within this document is reprinted with permission from NFPA 1521-2015, *Standard for Fire Department Safety Officer Professional Qualifications*, copyright © 2014, National Fire Protection Association, Quincy, MA 02169. This reprinted material is not the complete and official position of the NFPA on the referenced subject, which is represented only by the standard in its entirety.

Enquiries regarding testing and certification should be directed to:

Manager

Academic Standards and Evaluation
Ministry of Community Safety and Correctional Services
Office of the Fire Marshal and Emergency Management
25 Morton Shulman Avenue, 2nd Floor
Toronto, Ontario
M3M 0B1

OFMTestingandCertification@ontario.ca

November 2017

Components of the OFMEM Academic Standards and Evaluation Standardized Curriculum Form

The OFMEM Academic Standards and Evaluation Standardized Curriculum Forms in Ontario, Canada, are based on internationally-recognized, competency-based, Professional Qualification Standards through the National Fire Protection Association (NFPA). Columns within this form from pages 5 and onward are composed of:

NFPA Objective

National Fire Protection Association Objectives are major competencies and Job Performance Requirements (JPR) within a professional qualifications standard that learners must acquire before successful completion of testing and certification.

Requisite Knowledge

As defined in published NFPA Professional Qualifications Standards, Requisite Knowledge is "Fundamental knowledge one must have in order to perform a specific task". This can be acquired by referring to the various suggested readings described below. Information used to construct multiple choice test questions in the Provincial Certification Exam for INCIDENT SAFETY OFFICER is derived from these materials.

Requisite Skills

As defined in published NFPA Professional Qualifications Standards, Requisite Skills are "The essential skills one must have in order to perform a specific task". This can be acquired by referring to the various suggested readings described below along with the latest version of OFMEM Academic Standards and Evaluation's Skills Sheets Booklet for INCIDENT SAFETY OFFICER. This booklet is used by Fire Chiefs or designates to evaluate Requisite Skill requirements for those seeking certification to NFPA 1521, Chapter 5, 2015 Edition.

Suggested Readings

A total of 100 multiple choice questions in the Provincial Certification Exam for INCIDENT SAFETY OFFICER (NFPA 1521-2015) will appear on the test, and are derived from the following suggested readings:

Publisher/Title/Edition **Keyword Reference** 1. NFPA 1521, Standard for Fire Department Safety NFPA 1521, 2015 Ed. Officer Professional Qualifications, 2015 Edition Refer to Chapter 5 regarding Incident Safety Officer (pages 16 - 20) and Annex A (*) J&B FDISO, 3rd Ed. 2. Jones and Bartlett, Fire Department Incident Safety Officer, 3rd Edition Refer to Incident Safety Officer material from Chapters 1 to 17 (pages 1 - 263) OR IFSTA FESSO, 2nd Ed. 3. IFSTA, Fire and Emergency Services Safety Officer, 2nd Edition Refer to Incident Safety Officer material from Chapters 13 to 16 (pages 406 - 642) **AND OHSA Section 21** 4. Government of Ontario, Guidance for Improving Health & Safety in the Fire Service - Under Section 21 of the Occupational Health and Safety Act, RSO 1990, Ministry of Labour Refer to all areas within the Section 21 Manual 5. ORNGE, Helicopter Safety - Approaching or ORNGE Heli Safety Leaving a Helicopter Refer to Fact Sheet and online Video: "Onscene Safety Procedures for Ornge Helicopters" 6. Government of Ontario, *Incident Management* Ontario IMS Forms System Forms, Ministry of Community Safety and

Knowledge Test Weighting (Out of 100%)

Refer to IMS Form 208, along with Forms 201,

Correctional Services

202, and 215-A

This column references percentage of multiple choice questions that will appear on the Provincial Certification Exam for knowledge-based testing for INCIDENT SAFETY OFFICER.

Questions are validated by a Provincial Advisory Committee (PAC), and used for knowledge-based testing for those seeking certification to NFPA 1521, Chapter 5, 2015 Edition through OFMEM Academic Standards and Evaluation. A mark of 70% or better is required to receive a "Pass" on the knowledge test.

Skill Sheet

This column references skill objectives that will be evaluated by OFMEM Academic Standards and Evaluation, to test Requisite Skill requirements of INCIDENT SAFETY OFFICER for those seeking certification to NFPA 1521, Chapter 5, 2015 Edition.

OFMEM Academic Standards and Evaluation Provincial Advisory Committee for INCIDENT SAFETY OFFICER

NFPA 1521, Chapter 5, 2015 Edition

Jason VanSlack, H.B.E.S., B.Ed., M.Ed.
Educational Consultant
OFMEM, Academic Standards and Evaluation, ON (Canada)

Bill Baker

Captain

Toronto Fire Services,

ON (Canada)

Ken Benoit

OFC Instructor

Ontario Fire College,

ON (Canada)

Alan Brody

Training Officer

Greater Toronto Airport Authority - FESTI,

ON (Canada)

Ted Bryan

Fire Chief

Township of Otonabee-South Monaghan,

ON (Canada)

Craig Dart

Division Chief

Toronto Fire Services,

ON (Canada)

Adam Eckhart

Deputy Fire Chief

Welland Fire and Emergency Services,

ON (Canada)

Richard Hayes

Fire Chief

Muskoka Lakes Fire Department,

ON (Canada)

Bill Johnson

Division Chief

Thunder Bay Fire Rescue Service,

ON (Canada)

Bob Lymburner

Fire Chief

Pelham Fire Services,

ON (Canada)

Jason Visser

Training Officer

St. Catharines Fire and Emergency Services,

ON (Canada)

This document has been reviewed and approved by the Manager of Academic Standards and Evaluation of the Office of the Fire Marshal and Emergency Management (OFMEM) in Ontario, Canada:

Name: Kalpana Rajgopalan Date: November 3, 2017

2017© Queen's Printer for Ontario, 2017.

The "OFMEM Standardized Curriculum Form (SCF)" for NFPA 1521, 2015 Edition - Incident Safety Officer is protected by Crown copyright, which is held by the Queen's Printer for Ontario. If credit is given and Crown copyright is acknowledged, the OFMEM Standardized Curriculum Form may be reproduced for non-commercial purposes.

The OFMEM SCF may only be reproduced for commercial purposes under a licence from the Queen's Printer.

To request a licence to reproduce the OFMEM Standardized Curriculum Form for commercial purposes, or for information on Crown copyright generally, please contact:

Senior Copyright Analyst Publications Ontario (416) 326-5153 Copyright@ontario.ca





Course: Incident Safety Officer

Standard: NFPA 1521, Chapter 5, 2015 Edition

5.2 General Requirements.

NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
Perform the role of ISO within an incident command system (ICS) at an incident or planned event, given an incident or planned event, an ICS structure, a command post, a briefing from an incident commander (IC) or outgoing ISO, SOP related to health and safety, an incident action plan (IAP), applicable protective clothing and protective equipment, and communications and information recording equipment.	 Understand accepted safety and health principles, including issues such as the hierarchy of controls Specific technical or regulatory areas pertinent to the response Accepted management principles needed to promote safety in the response environment. [1026:5.2.1(A)]. 	 Prioritizing tasks Making decisions in an environment with a large number of unknowns Evaluating resource needs Recognizing the need for supplemental technical knowledge Taking action in a proactive manner to ensure responder safety and health. [1026:5.2.1(B)]. 	J&B FDISO, 3 rd Ed. Chapters 1, 2, 3, 10, 11, 12, 17 IFSTA FESSO, 2 nd Ed. Chapters 13, 15	2% of questions	Skill Sheet #1
5.2.2 Monitor the IAP, conditions, activities, and operations, given an incident or planned event, an IAP, and risk	Comprehensive knowledge of incident hazards, applicable legislation, regulations, codes, and standards, the incident management system (IMS)	 Ability to apply knowledge of fire behavior and fire dynamics Building construction Department SOP/Gs, training 	J&B FDISO, 3 rd Ed. Chapters 3, 7, 10, 13 IFSTA FESSO, 2 nd Ed. Chapters 13, 15	5% of questions	Skill Sheet #1

Version: November 2017 Page 5 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
management assessment criteria.	 Recognized safety practices Risk management criteria, including what constitutes unacceptable level of risk Fire department operations, training materials, and SOP/Gs. 	 Materials Applicable safety practices in a risk management assessment to determine the most appropriate actions to minimize health and safety risks. 			
Manage the transfer of ISO duties, given an incident or planned event, an established command structure and ISO, an IAP, an incident safety plan, a current situation status, incident resources, a command post, incident documentation, and communications equipment.	 AHJ's procedures for transfer of duty Information sources Resource accountability and tracking process Use of IMS forms Role and duties of an ISO within an IMS Organizational policies and procedures for safety Accountability protocols Resource types and deployment methods Documentation methods and requirements Availability, capabilities, and limitations of responders and other resources Communication problems and needs 	 Conducting a transfer briefing meeting Acquiring and documenting information and orders from the IC Using reference materials Evaluating incident information Managing communications Completing required ICS and health and safety forms Recognizing the need to expand and/or transfer the safety function in the ICS structure Reviewing, understanding, and conducting a transfer of duty briefing, including the completion of the transfer documents Communicating in a manner such that information is transferred and objectives are met [1026:5.2.2(B1)]. 	J&B FDISO, 3 rd Ed. Chapter 10 IFSTA FESSO, 2 nd Ed. Chapters 13, 15	2% of questions	Skill Sheets #1, #2

Version: November 2017 Page 6 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
	 Communications requirements Operational periods for ISO functions; and types of tasks and assignment responsibilities. 				
5.2.4 Stop, alter, or suspend operations based on imminent threats posed to fire fighter safety, given an incident or planned event that contains threats to fire fighter safety, an incident management structure, risk management criteria, and applicable SOP/Gs.	 Knowledge of what constitutes imminent hazards at an incident or planned event that could impact fire fighter safety IMS Radio protocols and transmission procedures Fire behavior/dynamics, hazardous energy Reading smoke Building construction Departmental SOP/Gs and training materials. 	 Ability to evaluate hazards Determine the relative degree of risk to members and whether they pose an imminent threat to fire fighter safety Use of department radios and communication abilities. 	J&B FDISO, 3 rd Ed. Chapters 7, 10, 11, 12, 13, 14, 15 IFSTA FESSO, 2 nd Ed. Chapters 13, 14, 15 OHSA Section 21 Guidance Notes #1-3, #1-9, #6-10, and Appendices	5% of questions	Skill Sheet #4
5.2.5 Monitor and determine the incident scene conditions, given an incident or planned event.	 Knowledge of what constitutes hazards at an emergency incident IMS Radio protocols and transmission procedures Incident hazards Departmental SOP/Gs. 	 Ability to evaluate hazards Determine the relative degree of risk to members Prioritize the risks Communicate this information to the IC. 	J&B FDISO, 3 rd Ed. Chapters 11, 12, 13, 14, 15 IFSTA FESSO, 2 nd Ed. Chapters 13, 15	6% of questions	Skill Sheet #1

Version: November 2017 Page 7 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.2.6 Monitor the accountability system, given an incident or planned event, an IMS, personal identification devices, radios, and applicable SOP/Gs.	 Knowledge of IMS Department accountability system positions and protocols Radio protocols and transmission procedures Departmental SOP/Gs. 	Ability to recognize inadequacies in the use of the accountability system.	J&B FDISO, 3 rd Ed. Chapters, 11, 12 IFSTA FESSO, 2 nd Ed. Chapters 13, 15	3% of questions	Skill Sheet #1
5.2.7 Determine hazardous incident conditions and advise the IC to establish or modify control zones, given an incident.	 Comprehensive knowledge of hazardous conditions Operations Departmental SOP/Gs and training materials Control zones protocols IMS. 	Ability to evaluate the effect of proximity for incident hazards so that risk to members will be limited to emergency responders assigned tasks to mitigate the incident.	J&B FDISO, 3 rd Ed. Chapters 8, 11 IFSTA FESSO, 2 nd Ed. Chapters 13, 14, 15	4% of questions	Skill Sheet #1
5.2.8 Identify motor vehicle incident scene hazards, given an apparatus and temporary traffic control devices, an incident or planned event.	 Knowledge of hazards associated with vehicle incidents and apparatus placement The IMS, departmental SOP/Gs and training materials State/provincial and local traffic regulations Risk management principles and criteria Applicable safety principles and practices. 	Ability to apply knowledge of hazards and regulations to an incident within a risk management framework to protect member safety.	J&B FDISO, 3 rd Ed. Chapter 15 IFSTA FESSO, 2 nd Ed. Chapters 13, 14	3% of questions	Skill Sheet #2

Version: November 2017 Page 8 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.2.9 Monitor radio transmissions; given an incident or planned event with radio transmissions.	 Knowledge of radio protocols and transmission procedures IMS Emergency incident hazards, and departmental SOP/Gs. 	Ability to recognize missed, unclear, or incomplete communications.	J&B FDISO, 3 rd Ed. Chapter 10 IFSTA FESSO, 2 nd Ed. Chapters 13, 15	2% of questions	Skill Sheet #1
5.2.10 Identify the incident strategic requirements (e.g., fire, technical rescue, hazmat), the corresponding hazards, the size, complexity and anticipated duration of the incident, including the associated risks, given an incident or planned event, an IMS, and applicable SOP/Gs.	 Comprehensive knowledge of incident hazards; applicable legislation Applicable legislation, regulations, codes, and standards IMS Recognized safety practices Risk management criteria, including what constitutes unacceptable level of risk Fire department operations, training materials, and SOP/Gs. 	Ability to recognize the types of hazards that might require additional ISOs or technical specialists, and applicable safety practices.	J&B FDISO, 3 rd Ed. Chapters 10, 12, 14, 15 IFSTA FESSO, 2 nd Ed. Chapters 13, 15	4% of questions	Skill Sheet #2
5.2.11 Determine the hazards associated with the designation of a landing zone and interface with helicopters, given an incident or planned event that requires the use of a helicopter and landing zone.	 Helicopter and landing zone requirements Hazards associated with helicopters and landing zones Safety issues associated with landing zones IMS. 	Ability to recognize landing zone locations and hazards.	J&B FDISO, 3 rd Ed. Chapter 15 IFSTA FESSO, 2 nd Ed. Chapter 15 ORNGE Heli Safety Fact Sheet and Video	1% of questions	Skill Sheet #1

Version: November 2017 Page 9 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.2.12 Notify the IC of the need for intervention resulting from an occupational exposure to atypical stressful events, given an incident or planned event and an awareness of incidents that can cause incident stress.	 Knowledge of incidents that can lead to occupational exposure to atypical stress Signs and symptoms of occupational exposure to atypical stress Difference between debriefing and defusing Support teams and other resources to provide assistance. 	 Ability to recognize signs and symptoms of occupational exposure to atypical stress Accepting and empathetic demeanor Good communication skills. 	J&B FDISO, 3 rd Ed. Chapter 16 IFSTA FESSO, 2 nd Ed. Chapter 15 OHSA Section 21 Guidance Note #2-4	3% of questions	Skill Sheet #1
5.2.13 Determine hazardous energy sources that can affect responder health and safety, given an incident or planned event, an active IAP with assigned responders, and an opportunity to perform environmental and operational reconnaissance.	 Common component assemblies for hazardous energy sources, including but not limited to gas, electrical, water, and pressure vessels Hazardous properties of common utility gases Common electrical distribution grid components and arrangements Control zone marking schemes as defined by 8.6.2 of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program. 	 Critical identification, analysis, and judgment abilities Prioritizing to address hazards on a most critical-first basis Communicating hazard information to personnel via the incident safety plan, IAP, face-to-face, radio, and safety briefings Determining boundaries and markings for control zones Formulating recommendations for IC action Exercising authority to suspend imminent danger operations Anticipating evolving site conditions that require IAP changes. 	J&B FDISO, 3 rd Ed. Chapter 8 IFSTA FESSO, 2 nd Ed. Chapters 14, 15	4% of questions	Skill Sheets #1, #2

Page 10 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.2.14 Monitor conditions, including weather, fire fighter activities, and work cycle durations, given an incident or planned event.	 Comprehensive knowledge of heat and cold assessment criteria, rehabilitation strategies, including NFPA 1584, Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises, SOP/Gs and training materials Available resources that can be used for rehabilitation, signs and symptoms of cardiac stress, and heat and cold stress. 	 Ability to recognize signs of cardiac, heat, and cold stress Set up a rehab area and ensure that members use it as designed. 	J&B FDISO, 3 rd Ed. Chapter 9 IFSTA FESSO, 2 nd Ed. Chapter 15	3% of questions	Skill Sheet #1





5.3 Fire Suppression Operations.

NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.3.1 Determine incident environmental and operational factors and confirm the establishment of rapid intervention crew (RIC) and evaluate the need to increase RIC capability, given an incident or planned event that includes one or more immediately dangerous to life and health (IDLH) elements, responders engaged in tactical operations, a preassigned RIC, and an IAP.	 RIC criteria for NFPA 1500, Standard on Fire Department Occupational Safety and Health Program; NFPA 1561, Standard on Emergency Services Incident Management System NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, and Special Operations to the Public by Career Fire Departments NFPA 1720, Standard for the Organization and Deployment of Fire Suppression Operations, and Special Operations to the Public by Volunteer Fire Departments AHJ SOP/Gs Directives for RIC establishment and use. 	 Interpret applicable regulations, guidelines, procedures, and consensus standards for implementation at incidents Audit conditions to ensure policies are being followed Formulate recommendations for incident command action. 	J&B FDISO, 3 rd Ed. Chapter 12 IFSTA FESSO, 2 nd Ed. Chapter 15 OHSA Section 21 Guidance Note #6-11	4% of questions	Skill Sheets #2, #3

Page 12 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.3.2 Communicate fire behavior, building access/egress issues, collapse, and hazardous energy issues to established RICs, given an incident or planned event.	Structural/compartmentalized fire behavior, building construction features and associated hazards, and hazardous energy properties and components.	Ability to interpret fire suppression hazards and operations and communicate through face-to-face and radio methods.	J&B FDISO, 3 rd Ed. Chapters 5, 12 IFSTA FESSO, 2 nd Ed. Chapters 14, 15	6% of questions	Skill Sheets #2, #3
5.3.3 Identify and estimate building/structural collapse hazards, given a building fire incident, a building collapse incident, reconnaissance opportunity, and established AHJ preincident building plan information.	 Building construction classifications and associated hazards Structural fire collapse indicators Building fire spread Fire effects on building materials, loads, and forces Structural conditions that warrant stopping, altering, or suspending incident or planned event operations Procedures for managing unsafe acts or operations and procedures for notifying command of stopped, altered, or suspended operations Methods for determining collapse zone distances AHJ pre-incident target building hazards. 	 Critical identification, analysis, and judgment abilities Applying AHJ building fire preplan systems at actual incidents Interpreting collapse hazards Communicating hazard information to personnel via the incident safety plan, IAP, face-to-face, radio, and safety briefings Determining boundaries and markings for control zones Formulating recommendations for incident command action Exercising authority to suspend imminent danger operations Anticipating evolving site conditions that require IAP changes. 	J&B FDISO, 3 rd Ed. Chapter 5 IFSTA FESSO, 2 nd Ed. Chapters 14, 15 OHSA Section 21 Guidance Note #6-18	6% of questions	Skill Sheets #2, #3





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.3.4 Determine flashover and hostile fire event potential at building fires, given an incident.	Compartmentalized fire behavior theory, flashover and other hostile fire incident indicators, ventilation flow path, fire-load (fuel) characteristics, effects of fire- fighting efforts on fire behavior.	 Critical identification, analysis, and judgment abilities Reading smoke (volume, velocity, density, and color) Communicating fire behavior concerns through face-to-face and radio methods. 	J&B FDISO, 3 rd Ed. Chapters 6, 12 IFSTA FESSO, 2 nd Ed. Chapter 14	6% of questions	Skill Sheets #2, #3
5.3.5 Determine fire growth and blow up, given wildland and cultivated vegetation fires.	Wildland and vegetation fire behavior and wildland fire phenomena such as blow ups and flaring.	 Critical identification, analysis, and judgment abilities Interpreting fuel, topography, flame length, and weather effects on wildland and vegetation fires Communicating fire behavior concerns through face-to-face and radio methods. 	J&B FDISO, 3 rd Ed. Chapter 13 IFSTA FESSO, 2 nd Ed. Chapters 14, 15	4% of questions	Skill Sheets #2, #3
5.3.6 Determine the suitability of building entry and egress options at building fires, given various building fire incidents.	 Building construction access and egress challenges AHJ building pre-fire systems Fire-fighting equipment capabilities and AHJ fire-fighting resource capabilities. 	 Critical identification, analysis and judgment abilities Communicating access and egress concerns through face-to-face and radio methods. 	J&B FDISO, 3 rd Ed. Chapter 12 IFSTA FESSO, 2 nd Ed. Chapters 13, 14	1% of questions	Skill Sheets #2, #3





5.4 Technical Rescue Operations.

NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.4.1 Determine the need for a rescue technician–trained ISO or assistant ISO, given a technical rescue incident, CFR 1910.146 [OHSA Section 21 Guidance Notes]; NFPA 1006, Standard for Technical Rescuer Professional Qualifications, and AHJ SOP/Gs for technical rescue operations.	Technical rescue incident types as defined in NFPA 1006, Standard for Technical Rescuer Professional Qualifications, and AHJ SOP/Gs for technical rescue operations.	Identifying technical rescue incident resource needs and forecasting stabilization strategies.	J&B FDISO, 3 rd Ed. Chapter 15 IFSTA FESSO, 2 nd Ed. Chapter 15 OHSA Section 21 Guidance Notes NFPA 1006, 2017 Ed.	3% of questions	Skill Sheet #4
Frepare a safety plan that identifies corrective or preventive actions, given a technical rescue incident, an IAP that includes situation and resource status information, an incident safety analysis form (ICS form 215A or its equivalent), weather condition information, special technical data (such as	 Risk management principles Technical rescue operations strategies and tactics Hazard mitigation and countermeasure strategies NIMS [Ontario IMS] IAP and planning processes NIMS [Ontario IMS] documentation system NFPA 1951, Standard on Protective Ensembles for 	 Critical identification, analysis, and judgment abilities Communicating safety issues within the command structure Reading/editing technical documentation. 	J&B FDISO, 3 rd Ed. Chapter 15 IFSTA FESSO, 2 nd Ed. Chapters 13, 15 OHSA Section 21 Guidance Notes Ontario IMS Forms 201, 202, 208 and 215-A	3% of questions	Skill Sheet #4

Version: November 2017 Page 15 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
safety data sheets and topographical information, blueprints, and building drawings), and predetermined incident information.	 Technical Rescue Incidents 29 CFR 1910.146 [OHSA Section 21 Guidance Notes] AHJ SOP/Gs for hazardous materials operations. 				
5.4.3 Deliver a safety briefing for technical rescue incident response members, given a technical rescue incident.	 OSHA 29 CFR 1910.146 [OHSA Section 21 Guidance Note] requirements for a site safety and health plan NIMS [Ontario IMS] forms and ICS processing criteria General technical rescue operations safety strategies AHJ technical rescue SOP/Gs. 	Ability to communicate critical messages in written and oral formats.	J&B FDISO, 3 rd Ed. Chapter 15 IFSTA FESSO, 2 nd Ed. Chapter 15 OHSA Section 21 Guidance Notes Ontario IMS Forms 201, 202, 208, and 215-A	2% of questions	Skill Sheet #4





5.5 Hazardous Materials Operations.

NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
Determine the need for a hazardous materials technician trained ISO or assistant ISO, given a hazardous materials incident, 29 CFR 1910.120 [OHSA Section 21 Guidance Notes]; NFPA 472, Standard for Competency for Responders to Hazardous Materials/Weapons of Mass Destruction Incidents; and AHJ SOP/Gs for hazardous materials operations.	Hazardous materials incident types as defined in NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, and AHJ SOP/Gs for hazardous materials operations.	 Identifying hazardous materials incident resource needed Forecasting stabilization strategies. 	J&B FDISO, 3 rd Ed. Chapter 14 IFSTA FESSO, 2 nd Ed. Chapter 15 OHSA Section 21 Guidance Notes NFPA 1072, 2017 Ed.	3% of questions	Skill Sheet #5
Prepare a safety plan that identifies corrective or preventive actions, given a hazmat incident, IAP that includes situation and resource status information, an incident safety analysis form (ICS form 215A or its equivalent), weather	 Risk management principles; hazardous materials operations strategies and tactics Hazard mitigation and countermeasure strategies NIMS [Ontario IMS] IAP and planning processes NIMS [Ontario IMS] documentation system 	 Critical identification, analysis, and judgment abilities Communicating safety issues within the command structure Reading/editing technical documentation. 	J&B FDISO, 3 rd Ed. Chapter 14 IFSTA FESSO, 2 nd Ed. Chapters 13, 15 Ontario IMS Forms 201, 202, 208, and 215-A	3% of questions	Skill Sheet #5

Version: November 2017 Page 17 of 20





NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
condition information, special technical data (such as safety data sheets and topographical information, blueprints, and building drawings), and predetermined incident information.	AHJ SOPs/Gs for hazardous materials operations.				
5.5.3 Deliver a safety briefing for hazardous materials incident response members, given a hazmat incident or scenario.	 OSHA 29 CFR 1910.120 [OHSA Section 21 Guidance Note] requirements for a site safety and health plan NIMS [Ontario IMS] forms and ICS processing criteria General hazmat operations safety strategies AHJ hazmat SOPs/Gs. 	Ability to communicate critical messages in written and oral formats.	J&B FDISO, 3 rd Ed. Chapter 14 IFSTA FESSO, 2 nd Ed. Chapter 15 OHSA Section 21 Guidance Notes Ontario IMS Forms 201, 202, 208, and 215-A	1% of questions	Skill Sheet #5
5.5.4 Identify that hazardous materials incident control zones have been established and communicated to personnel on the scene, given a hazardous materials incident and SOP/Gs.	 Common zoning strategies for hazardous materials operations, methods of marking zones, and AHJ SOP/Gs for zone communication NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, and other applicable NFPA documents. 	Ability to adapt zoning strategies to individual incident challenges such as topography, weather, and resource variants.	J&B FDISO, 3 rd Ed. Chapter 14 IFSTA FESSO, 2 nd Ed. Chapter 15 NFPA 1072, 2017 Ed.	2% of questions	Skill Sheet #5

Version: November 2017 Page 18 of 20





5.6 Accident Investigations and Review.

NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.6.1 Conduct a safety and health investigative process, given an incident or planned event, using applicable documents and techniques.	 Procedures for conducting, documenting, recording, and reporting a safety investigation, SOP/Gs and health and safety investigative policies used by the AHJ Procedures for preserving evidence and documentation Technical knowledge pertinent to the incident under investigation. 	 Analyzing information from different data sources Identifying equipment and materials that might be considered evidence Interacting with or interviewing personnel associated with the incident, often under conditions of personal stress Completing safety investigation documentation Identifying cause(s) of injury, death, or property damage Determining corrections to prevent similar losses in the future. 	J&B FDISO, 3 rd Ed. Chapter 16 IFSTA FESSO, 2 nd Ed. Chapter 16	4% of questions	Skill Sheet #6





5.7 Post-Incident Analysis (PIA).

NFPA Objective	Requisite Knowledge	Requisite Skills	Suggested Readings	Knowledge Test Weightings	Skill Sheet
5.7.1 Prepare a written post-incident analysis (PIA) from the ISO perspective, given a witnessed incident, exercise, or planned event.	 NFPA 1500, Standard on Fire Department Occupational Safety and Health Program PIA reporting criteria AHJ SOP/Gs for PIAs. 	Transferring incident observations into field notes and documenting field notes into a formal PIA structure.	J&B FDISO, 3 rd Ed. Chapter 16 IFSTA FESSO, 2 nd Ed. Chapters 13, 16	2% of questions	Skill Sheet #7
5.7.2 Report observations, concerns, and recommendations, given a witnessed incident or planned event and PIA group setting.	Group dynamics in problem solving.	 Active listening skills Composing and relaying constructive information in a group setting. 	J&B FDISO, 3 rd Ed. Chapter 16 IFSTA FESSO, 2 nd Ed. Chapters 13, 16	3% of questions	Skill Sheet #7