

Fire Service Certification Program
January 2020



**FIRE PROTECTION TECHNOLOGY
CERTIFICATION GUIDE**
Hazardous Materials Operations



NFPA 1072
***Standard for Hazardous Materials/Weapons of Mass Destruction
Emergency Response Personnel Professional Qualifications***
2017 Edition

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Basic Certification Information

Each individual seeking International Fire Service Accreditation Congress (IFSAC) accredited certification from Portland Community College (PCC), Fire Protection Technology (FPT) Program **MUST** do the following:

- [Register](#); and
- [Submit an Application for Certification Testing Date](#).

The Registration and Application for Certification Testing Date **MUST** be completed online. A list of current fees and the online registration and test date application forms may be found at: <http://www.pcc.edu/programs/fire-protection/>.

Once a person has [Registered](#) and submitted an [Application for Certification Testing Date](#), PCC FPT will evaluate the registration and application to ensure the person meets the criteria for the certification level for which they applied. The requirements for **Hazardous Materials Operations Level Responder** (Haz Mat Operations) **certification** are located on page 4 of this guidebook. Following the evaluation, the person will be notified whether they meet the criteria for admission into the **Certification Process**. Upon acceptance into the **Certification Process**, the person is considered a **candidate for certification** and has **one year to complete** the process.

During the **Certification Process** for Haz Mat Operations, candidates are responsible to know and be able to perform all competencies identified in Chapter 5, Core Competencies for Operations Level Responders; Section 6.2, Mission-Specific Competencies: Personal Protective Equipment; and Section 6.6, Mission-Specific Competencies: Product Control, of NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 Edition (NFPA 1072-2017).

NOTE: The certification examination process for Haz Mat Operations, in addition to requiring the candidate to know all the competencies identified in Chapter 5 of NFPA 1072-2017, requires the candidate to know the JPRs, requisite knowledge, and requisite skills identified in Section 6.2, Mission-Specific Competencies: Personal Protective Equipment and Section 6.6, Mission-Specific Competencies: Product Control of NFPA 1072-2017.

The reason for requiring the candidate to know the competencies identified in Sections 6.2 and 6.6, in addition to those identified in Chapter 5 of NFPA 1072, is because the Haz Mat Operations certification process is an integral component of the Fire Fighter I level certification process. Section 5.1, of NFPA 1001, *Standard for Fire Fighter Professional Qualifications*, 2017 edition states, "...and the requirements defined in Chapter 5, Core Competencies for Operations Level Responders, and Section 6.6, Mission-Specific Competencies: Product Control, of NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*."

As a result, all candidates seeking Hazardous Materials Operations Level Responder certification are required to know the core competencies identified in Sections 6.2 & 6.6 of NFPA 1072-2017, as well as those in Chapter 5.

Certification candidates are given two opportunities to successfully complete the written and skills portions of the certification examination component, including the original examination. The candidate must complete both the written and skills portions within the 12 month certification period. Failure to successfully complete all portions (written and skill examinations) within the 12 month period, will be deemed as failure of the attempted certification level.

Candidates that fail a certification level must reapply by submitting a new [Registration](#) and an [Application for Certification Testing Date](#), including appropriate application fees.

Haz Mat Operations Certification Information:

The certification examination process for becoming certified as a Haz Mat Operations Level Responder is as follows:

- Candidate must complete the online [Registration](#).
- Candidate must complete the online [Application for Certification Testing Date](#), including a statement of ability to perform skills at least 15 days prior to the requested test date.
- Candidate must take the Haz Mat Operations written examination and skills examination (written and skill testing). NOTE: The written and skills tests may be taken on the same testing date or on different testing dates, i.e., the written may be taken on one date and the skills may be taken at a later date as long as it occurs within the 12 month certification period.
- Written examinations **will not be scored** at the testing site.
- Haz Mat Operations certification written examination:
 - The written examination includes three parts.
 - A score of 70 percent or more is required on each part of the written examination to receive a passing grade on the written portion of the certification examination process. The following are the three parts included in the written examination:
 - ◆ Chapter 5, NFPA 1072, Operations Level Responder
 - ◆ Section 6.2, NFPA 1072, Mission-Specific Competencies: Personal Protective Equipment
 - ◆ Section 6.6, NFPA 1072, Mission-Specific Competencies: Product Control
 - A score of 69 percent or less on any part of the written examination is deemed failing. Candidates that score 69 percent or less on any part of the written examination will be deemed to have failed the written portion of the certification examination process.
 - If the test (initial test) is failed, the candidate must schedule a second written test (retest) to occur between 21 days and 6 months following the first failed written test. This second test will be a new, randomly generated, written test.
 - If the second test (retest) is failed, the candidate will be considered to have failed the entire certification process.
- Haz Mat Operations certification skills examination:
 - Candidates will be tested over a minimum of three (3) randomly selected skill events, including at least one skill from each of the following:
 - ◆ Chapter 5, NFPA 1072, Operations Level Responder
 - ◆ Section 6.2, NFPA 1072, Mission-Specific Competencies: Personal Protective Equipment
 - ◆ Section 6.6, NFPA 1072, Mission-Specific Competencies: Product Control
 - Candidates should be prepared to test on any skill event listed in the **Skill Assessment Guide** found on page 21 of this study guide.
 - Skill event examinations are assessed on a **Pass/Fail** basis.
 - **ALL** skill events selected as part of the certification examination process must be passed to receive a passing score for the skills examination component of the certification process.
 - The candidate will be considered to have passed the skills assessment portion of the certification examination process if all skill events tested during the certification skills examination portion are passed on either the first or second attempt.*
 - * **IMPORTANT NOTE:** During the first skills examination, the candidate will be provided two attempts to pass each skill event. If the first attempt is failed, the candidate will, immediately, be provided a second attempt to pass the skill event. If the second attempt is failed, the candidate will be considered to have failed the event.
 - Candidates that fail one skill event **are not** considered to have failed the entire skills examination process, but only that individual event.

- Candidates that fail one event must retest the skill event failed and one randomly selected event.
- Candidates that fail two skill events will be considered to have failed the entire skill examination test and must retest an entire new set of skill events consisting of a minimum of three (3) randomly selected skill events, including at least one skill from each of the previously identified list.
- The skill retest must be scheduled to occur between 21 days and 6 months following the first failed test.
- The second test (retest) will be conducted as follows:
 - The candidate will be give “one attempt” (**not** two attempts as provided in the first test) to pass each failed skill event from the first skills test.
 - If the skill events failed as part of the first skill test are passed on the first attempt, the candidate will be required to pass an additional, randomly, selected skill event for each event failed during the first test. NOTE: The candidate will be provided two attempts to pass each of the randomly selected skill events.
 - If the original skill events and the randomly selected events are passed, the candidate will be deemed to have passed the skills examination portion of the certification examination process.
 - If the candidate fails to pass the skill event, or events, failed during the first test or fails a randomly selected skill event during the retest, the candidate will be deemed to have failed the entire certification process.
- If the certification process is failed, the candidate must wait 12 months, from the original examination date (**not** the registration date), to reapply for certification at the Haz Mat Operations Responder Level.
- If a skill or written examination is failed during the first test, the candidate is responsible for registering online for the retest.

Requirement for admission to the Haz Mat Operations certification written and/or skills examination process, including retests:

- **An official government issued ID (state or federal) with picture must be shown for admittance to all examinations, including retests.**
- **Candidates must provide proof of certification to Chapter 4, Awareness Level Personnel, NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications, 2017 Edition*. Documentation of certification must include a certificate with an IFSAC seal and registry number.**
- **NOTE:** Candidates are permitted to pursue Hazardous Materials Awareness Level Personnel certification simultaneously with Haz Mat Operations certification.

Certification Examination Instructions Haz Mat Operations NFPA 1072-2017

Certification Prerequisites and Requirements:

Candidates seeking Haz Mat Operations certification from PCC, FPT must meet the following requirements:

1. Candidates must meet the age and residency requirement as identified in **Chapter Four**, current Edition of PCC, FPT [*Certification Policy and Procedure Manual*](#).
2. Successful completion of written and skills examination at the Haz Mat Operations level.
3. Candidates must provide proof of certification to Chapter 4, Awareness Level Personnel, NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition. Documentation of certification must include a certificate with an IFSAC seal and registry number.

NOTE: Candidates are permitted to pursue Hazardous Materials Awareness Level Personnel certification simultaneously with Haz Mat Operations.

Candidates that meet all the identified requirements will be awarded certification at the Haz Mat Operations Responder Level and receive a certificate with an official IFSAC seal and registry number.

Certification Examination Process

Written Examination:

The Haz Mat Operations written examination component of the certification examination process consists of one written test based on **Core Competencies** listed in Chapter 5, Core Competencies for Operations Level Responders; Section 6.2, Mission-Specific Competencies: Personal Protective Equipment; and Section 6.6, Mission-Specific Competencies: Product Control, of NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 Edition (NFPA 1072-2017).

- The Haz Mat Operations certification written test consists of a total of 100 multiple choice test items. The test items cover Haz Mat Operations level knowledge requirements as identified in Chapter 5 (80 test items); Mission-Specific Competencies: Personal Protective Equipment knowledge requirements as identified in Section 6.2 (10 test items); and Mission-Specific Competencies: Product Control knowledge requirements as identified in Section 6.6 (10 test items) of NFPA 1072-2017.
- Candidates are required to score a minimum of 70% on each part of the written test, i.e., 70% on the Chapter 5 test items, 70% on the Section 6.2 test items, and 70% on the Section 6.6 test items. Failure to achieve 70% on any part of the test will result in failure of the entire test.
- Candidates are allowed two (2) hours to complete the test.
- Test items are constructed using the multiple choice format.

Example:

1. How many total tests items are on the Haz Mat Operations certification examination?
 - a. 25
 - b. 50
 - c. 75
 - d. 100

Skills Examination:

The Haz Mat Operations skills examination component of the certification examination consists of practical skill assessments based on the **Core Competencies** listed in Chapter 5; Section 6.2; and Section 6.6 of NFPA 1072-2017.

- Candidates will be assessed on a minimum of three (3), randomly selected skill events, including at least one skill from Chapter 5; one skill from Section 6.2; and one skill from Section 6.6 of NFPA 1072-2017.
- Candidates will be required to pass all skill examinations assessed.
- All skill examinations are scored on a pass/fail basis.
- All skill evaluation forms are included in this guide.

References and Textbooks:

- Department of Transportation, *Emergency Response Guidebook, 2016 Edition*.
- IFSTA, *Hazardous Materials for First Responders*, 5th Edition.
- NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 Edition.
- Portland Community College, *Hazardous Materials Awareness and Operations Level Responder Skills Booklet*, 2019 Edition.

Required Equipment For Haz Mat Operations Certification Examination

1. Each candidate applying to certify at the Haz Mat Operations level is required to bring the following NFPA compliant personal protective clothing and equipment to the test site:
 - Structural fire fighting helmet.
 - Structural fire fighting gloves.
 - Structural fire fighting boots (leather or rubber).
 - Structural fire fighting protective hood.
 - Structural fire fighting turnout coat.
 - Structural fire fighting turnout pants with suspenders.
 - Safety glasses or goggles (ANSI Standard Z87.1 compliant).
 - Self-contained breathing apparatus (SCBA). NOTE: SCBA may be shared among candidates from the same department so long as each candidate has his/her own facepiece.

OR

- EPA Level B or Level C chemical protective clothing (CPC).
 - Appropriate respiratory protection for the level of CPC to be used.
 - Appropriate head protection for the level of CPC to be used.
 - Appropriate hand protection for the level of CPC to be used.
 - Appropriate foot protection for the level of CPC to be used.
2. The following are **recommended**, but not required of candidates:
 - NFPA compliant uniform “t-shirt”
 - NFPA compliant uniform pants
 - Outer garment suitable for the weather
 - Water or sports drink for hydration

Mask Fit Compliance:

Candidates with beards, facial hair, or unshaven in the area of the RESPIRATORY PROTECTION FACEPIECE seal **WILL NOT** be permitted to participate in the skills testing portion of the Haz Mat Operations certification skills examination.

Written Examination Study Guide

Standard:

All written examination test items are based on Chapter 5, Core Competencies for Operations Level Responders; Section 6.2, Mission Specific Competencies: Personal Protective Equipment; and Section 6.6, Mission Specific Competencies: Product Control of NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition. Reference to the NFPA 1072 standard in the following study guide material is not the complete or official position of the NFPA. The official position of the NFPA is only represented by the “Standard” when printed in its entirety.

References:

1. Any textbook covering basic hazardous material first responder awareness and operations level knowledge and techniques appropriate for “fire academy” instruction can be used to prepare for the Haz Mat Operations written examination. However, PCC has chosen to adopt and reference the International Fire Service Training Association (IFSTA), *Hazardous Materials for First Responders*, 5th Edition.
2. The Department of Transportation (DOT), *Emergency Response Guidebook (ERG)*, 2016 Edition is required to answer specific test items included in the HM Operations test. Candidates are expected to know how to use the ERG prior to the examination. Only a PCC FPT copy of the ERG issued at the time of the examination will be permitted to be used for certification testing. Candidates **will not** be permitted to use their personal copy of the ERG for certification testing.

HAZ MAT OPERATIONS – CHAPTER 5

NFPA Standard Chapter/Section	IFSTA and DOT Reference Page(s)
<p>General Knowledge Requirements: 5.1.5</p> <ul style="list-style-type: none"> • Role of operations level responders at a hazardous materials/WMD incident • 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. 	<p>IFSTA: 13-15, 289 -291</p> <p>DOT: 1, 4, 6 – 25, 289 – 293, 370 – 372</p>

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<p>Identify the Scope of the Problem at a Hazardous Materials/WMD Incident: 5.2.1</p> <ul style="list-style-type: none"> • Definitions of hazard classes and divisions • Types of containers • Container identification markings, including piping and pipeline markings and contacting information • Types of information to be collected during the hazardous materials/WMD incident survey • Availability of shipping papers in transportation and of safety data sheets (SDS) at facilities • Types of hazard information available from and how to contact CHEMTREC, CANUTEC, and SETIQ, governmental authorities, and manufacturers, shippers, and carriers • How to communicate with carrier representatives to reduce impact of a release • Basic physical and chemical properties <ul style="list-style-type: none"> • Boiling point • Chemical reactivity • Corrosivity (pH) • Flammable (explosive) range [LFL (LEL) and UFL (UEL)] • Flash point • Ignition (auto ignition) temperature • Particle size • Persistence • Physical state (solid, liquid, gas) • Radiation (ionizing and nonionizing) • Specific gravity • Toxic products of combustion • Vapor density • Vapor pressure • Water solubility • How to 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 • Examples of potential criminal and terrorist targets • Indicators of possible criminal or terrorist activity for each of the following: <ul style="list-style-type: none"> ○ Chemical agents ○ Biological agents ○ Radiological agents ○ Illicit laboratories (i.e., clandestine laboratories, weapons, labs, ricin labs) ○ Explosives • Additional hazards associated with terrorist or criminal activities, such as secondary devices • How to determine the likely harm and outcomes associated with the identified behavior and the surrounding conditions 	<p>IFSTA: 137 – 205, 211 – 281, 332 – 334, 365 – 366, 368 – 370</p> <p>DOT: 12-13</p>
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<p>Identify the Action Options for a Hazardous Materials/WMD Incident: 5.3.1</p> <ul style="list-style-type: none"> • Policies and procedures for hazardous materials/WMD incident operations • Basic components of an incident action plan (IAP) • Modes of operation (offensive, defensive, and nonintervention) • Types of response objectives • Types of action options • Types of response information available from the <i>Emergency Response Guidebook</i> (ERG), safety data sheets (SDS), shipping papers with emergency response information, and other resources • Types of information available from and how to contact: <ul style="list-style-type: none"> ○ CHEMTREC, CANUTEC, and SETIQ ○ Governmental authorities ○ Manufacturers ○ Shippers and carriers (highway, rail, water, air, pipeline) • Safety procedures • Risk analysis concepts • Purpose, advantages, limitations, and uses of approved PPE to determine if PPE is suitable for the incident conditions • Difference between exposure and contamination • Contamination types, including sources and hazards of carcinogens at incident scenes • Routes of exposure • Types of decontamination (emergency, mass, and technical) • Purpose of emergency decontamination • Advantages of emergency decontamination • Limitations of emergency decontamination • Procedures for performing emergency decontamination. • Tools and equipment used for performing emergency decontamination 	<p>IFSTA: 23 – 24, 173 – 175, 203 – 205, 289 – 314, 412 – 413, 421 – 454, 462 – 463, 479 – 483, 487</p> <p>DOT: 12-13</p>
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<p>Perform Assigned Tasks at a Hazardous Materials/WMD Incident: 5.4.1</p> <ul style="list-style-type: none"> • Scene control procedures • Procedures for protective actions, including evacuation and sheltering-in-place • Procedures for ensuring coordinated communications between responders and to the public • Evidence recognition and preservation procedures • Incident command organization • Purpose, importance, benefits, and organization of incident command at hazardous materials/WMD incidents • Policies and procedures for implementing incident command at hazardous materials/WMD incidents • Capabilities, limitations, inspection, donning, working in, going through decontamination while wearing, doffing approved PPE • Signs and symptoms of thermal stress • Safety precautions when working at hazardous materials/WMD incidents • Purpose, advantages, and limitations of gross decontamination • 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 • Gross decontamination procedures for personnel, tools, equipment, and PPE • Cleaning, disinfecting, and inspecting tools, equipment, and PPE 	<p>IFSTA: 321 – 354, 421 – 442, 455 – 458, 460 – 467, 486</p> <p>DOT: 12-13</p>
<p>Perform Emergency Decontamination at a Hazardous Materials/WMD Incident: 5.5.1</p> <ul style="list-style-type: none"> • Contamination, cross contamination, and exposure • Contamination types • Routes of exposure • Types of decontamination (emergency, mass, and technical) • Purpose, advantages, and limitations of emergency decontamination • Policies and procedures for performing emergency decontamination • Approved tools and equipment for emergency decontamination • Hazard avoidance for emergency decontamination 	<p>IFSTA: 23 -24, 460 – 466, 479 – 483, 487</p>
<p>Evaluate and Report the Progress of the Assigned Tasks for a Hazardous Materials/WMD Incident: 5.6.1</p> <ul style="list-style-type: none"> • Components of progress reports • Policies and procedures for evaluating and reporting progress • Use of approved communication tools and equipment • Signs indicating improving, static, or deteriorating conditions based on the objectives of the action plan • Circumstances under which it would be prudent to withdraw from a hazardous materials/WMD incident 	<p>IFSTA: 351 – 354</p>

HAZ MAT OPERATIONS – SECTION 6.2

NFPA Standard Chapter/Section	IFSTA and DOT Reference Page(s)
<p>Select, Don, Work in, and Doff Approved PPE at a Hazardous Materials/WMD Incident: 6.2.1</p> <ul style="list-style-type: none"> • Policies and procedures for PPE selection and use • Importance of working under the guidance of a: <ul style="list-style-type: none"> ○ Hazardous materials technician when selecting and using PPE ○ Allied professional when selecting and using PPE ○ Emergency response plan when selecting and using PPE ○ Standard operating procedures when selecting and using PPE • The capabilities and limitations of and specialized donning, doffing, and usage procedures for approved PPE • Components of an incident action plan (IAP) • Procedures for decontamination, inspection, maintenance, and storage of approved PPE • Process for being decontaminated while wearing PPE • Procedures for reporting and documenting the use of PPE 	<p>IFSTA: 421 – 467, 487 – 496</p> <p>DOT: 363 - 364</p>

HAZ MAT OPERATIONS – SECTION 6.6

NFPA Standard Chapter/Section	IFSTA and DOT Reference Page(s)
<p>Perform Product Control Techniques With a Limited Risk of Personal Exposure at a Hazardous Materials/WMD Incident: 6.6.1</p> <ul style="list-style-type: none"> • Types of PPE and the hazards for which they are used • Importance of working under the guidance of a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures • Definitions of control, confinement, containment, and extinguishment • Policies and procedures • Product control methods for controlling a release with limited risk of personal exposure • Safety precautions associated with each product control method • Location and 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 • Characteristics and applicability of approved product control agents • Use of approved tools and equipment • Requirements for reporting and documenting product control operations 	<p>IFSTA: 442 – 454, 460 – 466, 607 – 638</p> <p>DOT: 365 - 366</p>

Chapters to review for written test:

IFSTA, *Hazardous Materials for First Responders Handbook, 5th Edition*:

- Chapters 4, 5, 6, 7, 8, 9, 10, & 13.

Skills Examination Study Guide

Standard:

All skills examination test items are based on Chapter 5, Core Competencies for Operations Level Responders, Section 6.2, Mission-Specific Competencies: Personal Protective Equipment, and Section 6.6, Mission-Specific Competencies: Product Control, NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 Edition. This material is not the complete or official position of the NFPA. The official position of the NFPA is only represented by the “Standard” when printed in its entirety.

References:

Textbook: Any textbook covering basic hazardous materials knowledge and techniques for first responder personnel and operations level responders appropriate for instruction can be used to prepare for the HM Operations written examination. However, PCC has chosen to adopt and reference one textbook: International Fire Service Training Association (IFSTA), *Hazardous Materials for First Responders*, 5th Edition. **NOTE: In the matrix below, “N/A” indicates a skill sheet is Not Available.**

Skill Events Booklet: For instructional purposes, PCC has developed and publishes a skills booklet: Fire Protection Program, *Hazardous Materials Operations Level Responder Skills Booklet*, 2015 edition for use in teaching its FP 123, Haz Mat Awareness/Operations course. The *Hazardous Materials Operations Level Responder Skills Booklet*, 2015 Edition is available from PCC FPT.

This Haz Mat Operations study guide references skill sheets included in IFSTA, *Hazardous Materials for First Responders*, 5th Edition and FPT, *Hazardous Materials Operations Level Responder Skills Booklet*, 2015 edition.

HAZ MAT OPERATIONS – CHAPTER 5

NFPA Standard Section & Number	IFSTA Textbook Skill Sheet(s)	PCC Haz Mat Skills Booklet Skill Sheet(s)
<p>Identify Potential Hazards: 5.2</p> <ul style="list-style-type: none"> Identify the scope of the problem at a hazardous materials/WMD incident. Identifying container types, materials, location of release, and surrounding conditions at a hazardous materials/WMD incident Collecting hazard information; communicating with pipeline operators or carrier representatives Describing the likely behavior of the hazardous materials or WMD and its container Describing the potential hazards, harm, and outcomes associated with that behavior and the surrounding conditions 	5-1	HMO Skill #1

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<p>Identify Action Options: 5.3</p> <ul style="list-style-type: none"> • Identify the action options for a hazardous materials/WMD incident • Identifying response objectives and action options based on the scope of the problem and available resources • Identifying whether approved PPE is suitable for the incident conditions • Identifying emergency decontamination needs based on the scope of the problem 	6-1	Skill #1 Skill #3
<p>Action Plan Implementation: 5.4</p> <ul style="list-style-type: none"> • Perform assigned tasks at a hazardous materials/WMD incident • Establishing and maintaining scene control • Recognizing and preserving evidence • Inspecting, donning, working in, going through decontamination while wearing, and doffing approved PPE • Isolating contaminated tools, equipment, and PPE • Conducting gross decontamination of contaminated personnel, tools, equipment, and PPE in the field • Cleaning, disinfecting, and inspecting approved tools, equipment, and PPE. 	7-1	Skill #1
<p>Emergency Decontamination: 5.5</p> <ul style="list-style-type: none"> • Perform emergency decontamination at a hazardous materials/WMD incident • Selecting an emergency decontamination method • Setting up emergency decontamination in a safe area • Using PPE in the proper manner • Implementing emergency decontamination • Preventing spread of contamination • Avoiding hazards during emergency decontamination 	10-1 10-2	Skill #2
<p>Progress Evaluation and Reporting: 5.6</p> <ul style="list-style-type: none"> • Evaluate and report the progress of the assigned tasks for a hazardous materials/WMD incident • Determining incident status • Determining whether the response objectives are being accomplished • Using approved communications tools and equipment • Communicating the status of assigned tasks 	7-2	Skill #1

HAZ MAT OPERATIONS – SECTION 6.2

NFPA Standard Section & Number	IFSTA Textbook Skill Sheet(s)	PCC Haz Mat Skills Booklet Skill Sheet(s)
<p>Personal Protective Equipment: 6:2</p> <ul style="list-style-type: none"> • Select, don, work in, and doff approved PPE at a hazardous materials/WMD incident • Selecting PPE for the assignment • Inspecting, maintaining, storing, donning, working in, and doffing PPE • Going through decontamination (emergency and technical) while wearing the PPE • Reporting and documenting the use of PPE 	9-2 9-3	Skill #3

HAZ MAT OPERATIONS – SECTION 6.6

NFPA Standard Section & Number	IFSTA Textbook Skill Sheet(s)	PCC Haz Mat Skills Booklet Skill Sheet(s)
<p>Product Control: 6.6</p> <ul style="list-style-type: none"> • Perform product control techniques with a limited risk of personal exposure at a hazardous materials/WMD incident • Selecting and using PPE • Selecting and performing product control techniques to confine/contain the release with limited risk of personal exposure • Using approved control agents and equipment on a release involving hazardous materials/WMD • Using remote control valves and emergency shutoff devices on cargo tanks and intermodal tanks in transportation and containers at fixed facilities • Performing product control techniques 	13-1 13-2 13-3 13-4 13-5 13-6 13-7 13-8 13-9	Skill # 4 Skill #5 Skill #6 Skill #7 Skill #8 Skill #9 Skill #10 Skill #11 Skill #12 Skill #13 Skill #14 Skill #15

IFSTA *Hazardous Materials for First Responders*, 5th Edition – Skill Sheets, in numerical order:

5-1
6-1
7-1, 7-2
9-2, 9-3
10-2
13-1, 13-2, 13-3, 13-4, 13-5, 13-6, 13-7, 13-8, 13-9

PCC *Hazardous Materials Awareness and Operations Level Responder Skills Booklet*, 2019 Edition – Skill Sheets in numerical order: HMO #1 – #15

Haz Mat Operations

Skill Assessment Sheets

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HMO Skill Sheet #1: Implement the Planned Response

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Chapter 5, Sections 5.4.1 and 5.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: Personal Protective Clothing and Respiratory Protection.

Required Instructor Equipment: Scenario, Scene Tape, Traffic Cones, and Portable Radios.

Read To Candidate:

At this station, you will be required to initiate the Incident Command System (ICS); transfer Command; and after transferring command, implement actions as described in the incident action plan (IAP). I will serve as the Battalion Chief. You are required to wear PPE and respiratory protection, but you do not have to be “on air” except when you are performing decon or product control. When performing tasks other than decon and product control, you **DO NOT** need to be “on air” but you **MUST** wear the facepiece. You are required to establish scene control zones, establish means for evidence preservation (if appropriate), and communicate status of procedures to Command. You should not enter the “Hot Zone” while establishing scene control zones. Entry into the “Hot Zone” will constitute failure of this skill event (skill assessment item #6 below). You will be read an “Incident Scenario” prior to performing the skill.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*).

P-Pass / F-Fail

1st Attempt 2nd attempt

- | | | |
|-------|-------|---|
| _____ | _____ | 1. Initiated an ICS. |
| _____ | _____ | 2. <i>Transferred command.</i> |
| _____ | _____ | 3. <i>Confirmed order to establish scene control procedures.</i> |
| _____ | _____ | 4. Established scene control procedures. |
| _____ | _____ | 5. Established control zones. (hot, warm, & cold zones) |
| _____ | _____ | 6. Remained outside Hot Zone while establishing control zones. (critical: safety failure) |
| _____ | _____ | 7. Enforced scene control procedures. |
| _____ | _____ | 8. Established means of evidence preservation (if suspected criminal or terrorist act) |
| _____ | _____ | 9. Performed assigned tasks as identified in IAP. (For this skill the assigned task is establish control procedures and control zones) |
| _____ | _____ | 10. Determined status of assigned tasks. |
| _____ | _____ | 11. Determined whether the objectives are being accomplished. |
| _____ | _____ | 12. Used approved communications tools and equipment. |
| _____ | _____ | 13. Communicated the status of assigned tasks to Command. |

Candidate's Name: _____ **Station:** P _____ F _____
1st Attempt

P _____ F _____
2nd attempt

Evaluator's Signature: _____

Skill Sheet #2: Emergency Decontamination

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Chapter 5, Section 5.5.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2020 edition.

Required Candidate Equipment: Structural PPE ensemble, respiratory protection.

Required Instructor Equipment: Victim, Water, Hose Line, Cones.

Read To Candidate:

At this station, you will be given a simulated victim who has been exposed to a hazardous material and requires emergency decontamination. You will be required to direct the victim from the contaminated area to the emergency decontamination area and perform emergency decontamination actions. You are required to wear PPE and respiratory protection. If you use self-contained breathing apparatus (SCBA) for respiratory protection, you **DO NOT** need to be “on air” while performing the emergency decontamination action, but you **MUST** wear the facepiece.

During this test, you will not be responsible for containing run-off from the emergency decontamination area. However, if the run-off runs into the area where you or other responders are located, you will fail this assessment. You will be responsible to isolate and deny entry to the decontamination run-off area during and after you complete decontamination of the victim.

Removal of the victim’s clothing will be simulated. If the simulated victim is a fire service responder, you must flush with water and then direct the person to remove their PPE and respiratory protection. After completing emergency decontamination, the simulated victim must be transferred to medical personnel for follow-up. Your assignment will be completed when you communicate appropriate information to medical personnel and the Incident Commander. I will serve as both the medical personnel and Incident Commander for the scenario.

To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*).

P-Pass / F-Fail

1st Attempt 2nd attempt

- | | | |
|-------|-------|---|
| _____ | _____ | 1. <i>Confirmed order to establish emergency decon.</i> |
| _____ | _____ | 2. <i>Determined PPE requirement to perform emergency decontamination and donned PPE.</i> |
| _____ | _____ | 3. Selected emergency decontamination method. |
| _____ | _____ | 4. Set up emergency decontamination in a safe area. (Positioned up-hill and up-wind so run-off does not run into area with responders) |
| _____ | _____ | 5. Removed victim from contaminated area without becoming cross-contaminated or coming in contact with the contaminant. |
| _____ | _____ | 6. Decontaminated victim. |
| _____ | _____ | 7. <i>Transferred victim to medical personnel.</i> |
| _____ | _____ | 8. Decontaminated responders (emergency decon personnel). |
| _____ | _____ | 9. Prevented spread of contamination. |
| _____ | _____ | 10. Avoided hazards during decontamination. |
| _____ | _____ | 11. <i>Isolated and denied entry to emergency decon area and decon water run-off area.</i> |
| _____ | _____ | 12. <i>Reported completion of assignment.</i> |

Candidate’s Name: _____ **Station:** P _____ F _____
1st Attempt 2nd attempt

Evaluator’s Signature: _____

Skill Sheet #3: Don, Doff, & Work In PPE

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Chapter 6, Section 6.2.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition

Required Candidate Equipment: Structural Firefighters Protective Clothing (PPE) **OR** Chemical Protective Clothing (CPC) and respiratory protection (SCBA or air-purifying respirator) if used by candidate's organization.

Required Instructor Equipment: Gross Decon Equipment and Water, Barricade Tape and/or Safety Cones.

Read To Candidate:

There **are four parts** for this skill event. Each part will be evaluated. In **Part I**, you will be required to demonstrate donning personal protective equipment (PPE) provided by your organization, including respiratory protection. There are two PPE donning **options**. The PPE **option** you are required to demonstrate will be determined based on your organization's requirements, e.g., your organization requires members to use chemical protective clothing including respiratory protection or your organization only uses structural firefighter protective clothing including SCBA. The exact sequence of donning your PPE and respiratory protection will not be evaluated. However, once donned, all components of the PPE (and respiratory protection) must be correctly worn. You **MUST** be breathing air provided through the respiratory protection. Once you advise me you have completed donning your PPE, you **ARE NOT** permitted to touch it until I complete the evaluation.

In **Part II**, you will be required to demonstrate the ability to work in PPE. I will assign you a mission-specific task to perform. **NOTE:** Only the ability to work in PPE is assessed on this skill sheet. The mission-specific task is assessed determining the "Product Control" portion of the skill assessment. When demonstrating the ability to work in PPE you are required to wear full PPE and SCBA, including the facepiece. However, you are not required to be "on-air" during the product control portion.

In **Part III**, you will be required to demonstrate the ability to doff PPE. You will demonstrate doffing your PPE after perform the mission-specific task I assigned. The exact sequence of doffing your PPE and respiratory protection will not be evaluated. However, once doffed; it must be properly handled, e.g., prevent exposure and/or cross contamination.

In **Part IV**, you will be required to demonstrate gross decontamination and cleaning of tools, equipment, and PPE. You must perform the gross decontamination so as to prevent exposure and cross contamination.

The skills demonstrated during this assessment **are not timed**, but should be accomplished within a reasonable time. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in **ALL FOUR PARTS**.

P-Pass / F-Fail

1st Attempt 2nd attempt

Skill Demonstration: Part I

OPTION A: Donning structural firefighters' protective clothing

- | | | |
|-------|-------|--|
| _____ | _____ | 1. Donned boots, turnout pants, and suspenders. (<u>Check to Ensure:</u> All fasteners secured) |
| _____ | _____ | 2. Donned protective hood. (<u>Check to Ensure:</u> Hood is around neck and under coat) |
| _____ | _____ | 3. Donned turnout coat. (<u>Check to Ensure:</u> All fasteners (including collar) are secured) |
| _____ | _____ | 4. Donned SCBA. (<u>Check to Ensure:</u> Cylinder valve fully opened and gauges checked) m |
| _____ | _____ | 5. All SCBA straps secured and tightened. (<u>Check to Ensure:</u> facepiece regulator hose is not caught in straps) |
| _____ | _____ | 6. Donned and checked facepiece for seal. |
| _____ | _____ | 7. Pulled hood over facepiece straps. |
| _____ | _____ | 8. Replaced helmet & fastened chinstrap. |
| _____ | _____ | 9. Connected regulator correctly to facepiece. |
| _____ | _____ | 10. Breathed air from the SCBA. |
| _____ | _____ | 11. Donned gloves. |
| _____ | _____ | 12. <i>Team member visually inspected PPE.</i> |

Skill Demonstration: Part I

OPTION B: Donning chemical protective clothing

- | | | |
|-------|-------|---|
| _____ | _____ | 1. Performed a visual inspection of CPC for damage or defects. |
| _____ | _____ | 2. Donned CPC. (Including helmet if required by AHJ) |
| _____ | _____ | 3. All CPC closures secured. |
| _____ | _____ | 4. Donned work boots. |
| _____ | _____ | 5. Donned respiratory protection. |
| _____ | _____ | 6. Respiratory protection secured and tightened. |
| _____ | _____ | 7. Breathed through respiratory protection. |
| _____ | _____ | 8. Donned inner gloves. |
| _____ | _____ | 9. Donned outer gloves. |
| _____ | _____ | 10. <i>Team member visually inspected CPC.</i> |

1st Attempt 2nd attempt

Skill Demonstration: Part II

Worked in PPE (This skill is assessed while the candidate is performing an operations level mission-specific task)

- | | | |
|-------|-------|--|
| _____ | _____ | 1. <i>Confirmed work assignment with officer.</i> |
| _____ | _____ | 2. Checked PPE to ensure it is donned properly prior to entering hazard zone. |
| _____ | _____ | 3. Performed work without compromising the integrity of PPE. |
| _____ | _____ | 4. Exited work area prior to removing PPE. |
| _____ | _____ | 5. Isolated contaminated tools and equipment upon returning from hazard zone mission. |
| _____ | _____ | 6. Isolated contaminated PPE following gross decontamination upon returning from hazard zone mission. |
| _____ | _____ | 7. Went through decontamination prior to doff PPE. |
| _____ | _____ | 8. <i>Reported completion of work assignment.</i> |

P-Pass / F-Fail

1st Attempt 2nd attempt

**Skill Demonstration: Part III
Doffing Personal Protective Equipment**

- | | | |
|-------|-------|--|
| _____ | _____ | 1. Doffed PPE (structural firefighters’ protective clothing or CPC – took precautions to prevent exposure and/or cross contamination while doffing PPE) |
| _____ | _____ | 2. Doffed SCBA/Respiratory Protection. (NOTE: atmosphere supplying respirators may be used in place of SCBA and APRs for testing) |
| _____ | _____ | 3. <i>Closed cylinder valve</i> (if applicable). |
| _____ | _____ | 4. <i>Bled air from system</i> (if applicable). |
| _____ | _____ | 5. <i>Disarmed PASS device</i> (if applicable). |
| _____ | _____ | 6. <i>Replaced or disposed of CPC according to procedures.</i> |
| _____ | _____ | 7. Inspected PPE for damage and need for decontamination. |
| _____ | _____ | 8. <i>Prepares structural firefighters’ protective clothing for reuse if not contaminated.</i> (NOTE: after candidate checks PPE, advise the PPE requires decon) |
| _____ | _____ | 9. Checked SCBA/respiratory protection for damage and need for decontamination. (NOTE: after candidate checks SCBA, advise the SCBA requires decon) |
| _____ | _____ | 10. Replaced SCBA air cylinder or replaced APR filter. |
| _____ | _____ | 11. <i>Returned PPS and respiratory protection to ready state.</i> |
| _____ | _____ | 12. Reported and documented the use of PPE. |

P-Pass / F-Fail

1st Attempt 2nd attempt

**Skill Demonstration: Part IV
Decontamination**

- | | | |
|-------|-------|--|
| _____ | _____ | 1. Conducted gross decontamination of contaminated personnel, tools, equipment, and PPE in the field. |
| _____ | _____ | 2. Cleaned, disinfected, and inspected approved tools, equipment, and PPE. |

Candidate’s Name: _____ Station: P _____ F _____
1st Attempt

P _____ F _____
2nd attempt

Evaluator’s Signature: _____

Skill Sheet #4: Product Control: *Use Hazard Suppressing Foams or Agents*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Chapter 6, Section 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition

Required Candidate Equipment: Structural PPE ensemble, respiratory protection.

Required Instructor Equipment: Pumper, Handline, Water Source, Foam, Foam Application Equipment.

Read To Candidate:

At this station, you are required to demonstrate the use of hazard suppressing foams to control a simulated hazardous materials ignitable liquid spill or fire. You will operate as a member of a team to demonstrate proper application of foam. I will indicate the type spill or fire you are required to control. You must select the proper type of foam concentrate, assemble the foam stream components, and then apply the foam stream on the simulated ignitable liquid to control the release. Once the vapor has been suppressed and/or fire extinguished, your team must maintain a foam stream for protection and continue facing the hazard while retreating to a safe haven.

This is **not** a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*).

P-Pass / F-Fail

1st Attempt 2nd attempt

- | | | |
|-------|-------|---|
| _____ | _____ | 1. <i>Selected proper type of foam concentrate for ignitable liquid.</i> |
| _____ | _____ | 2. <i>Assembled foam stream components.</i> |
| _____ | _____ | 3. <i>Safely approached the spill/fire as a member of a team.</i> |
| _____ | _____ | 4. Applied foam stream to surface using appropriate application technique. |
| _____ | _____ | 5. <i>Maintained foam blanket.</i> |
| _____ | _____ | 6. <i>Team retreated while facing hazard, reaching a safe haven.</i> |

Candidate's Name: _____ **Station:** P _____ F _____

1st Attempt

P _____ F _____

2nd attempt

Evaluator's Signature: _____

Skill Sheet #5: Product Control: *Absorption*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Absorbent material and Simulated incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone while performing your actions in **Skill Demonstration: Part I**). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4 (Performed product control function)* identified in **Skill Demonstration: Part I** below, will be assessed based on completion of **Skill Demonstration: Part II** of this skill sheet.

In **Part II**, you are required to demonstrate the confinement/spill control action, I assign, using defensive tactics. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Skill Demonstration: Part II of Skill Sheet #3*. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

P-Pass / F-Fail

1st Attempt 2nd attempt

Skill Demonstration: Part I

Product Control Functions

- | | | |
|-------|-------|--|
| _____ | _____ | 1. <i>Confirmed order with IC to perform product control.</i> |
| _____ | _____ | 2. Determined where product control functions will be performed as set-out in the IAP. (<u>Ensure</u> : the candidate determined wind direction, terrain slope, and where the hot zone is located) |
| _____ | _____ | 3. Planned response within capabilities of personal protective equipment (PPE). |
| _____ | _____ | 4. Performed product control function. |
| _____ | _____ | 5. Implemented planned response consistent with site safety plan while working in PPE. |
| _____ | _____ | 6. <i>Operated as a member of a team.</i> |
| _____ | _____ | 7. <i>Kept IC updated as to status of product control.</i> |
| _____ | _____ | 8. <i>Advised IC when product control has been completed.</i> |

Skill Demonstration: Part II

Absorption

- | | | |
|-------|-------|---|
| _____ | _____ | 9. <i>Gathered absorbent material necessary to perform absorption.</i> |
| _____ | _____ | 10. Performed absorption as set-out in the IAP. |
| _____ | _____ | 11. <i>Performed absorption as a defensive action from a safe location.</i> (Performed from an uphill position, with wind at their back and outside the hot zone) |

Candidate's Name: _____ Station: P _____ F _____
1st Attempt

P _____ F _____
2nd attempt

Evaluator's Signature: _____

Skill Sheet #6: Product Control: Adsorption

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Adsorbent material and Simulated incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4*, in the list below, will be determined by completing **Part II** of this skill sheet

In **Part II**, you are required to demonstrate the confinement/spill control action, I assign, using defensive tactics. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Part II* of *Skill Sheet #3*. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

P-Pass / F-Fail

1st Attempt 2nd attempt

Skill Demonstration: Part I

Product Control Functions

- | | | | |
|-------|-------|----|---|
| _____ | _____ | 1. | <i>Confirmed order with IC to perform product control.</i> |
| _____ | _____ | 2. | Determined where product control functions will be performed as set-out in the IAP. (<u>Ensure</u> : the candidate determined wind direction, terrain slope, and where the hot zone is located) |
| _____ | _____ | 3. | Planned response within capabilities of personal protective equipment (PPE). |
| _____ | _____ | 4. | Performed product control function. |
| _____ | _____ | 5. | Implemented planned response consistent with site safety plan while working in PPE. |
| _____ | _____ | 6. | <i>Operated as a member of a team.</i> |
| _____ | _____ | 7. | <i>Kept IC updated as to status of product control.</i> |
| _____ | _____ | 8. | <i>Advised IC when product control has been completed.</i> |

Skill Demonstration: Part II

Adsorption

- | | | | |
|-------|-------|-----|--|
| _____ | _____ | 9. | <i>Gathered adsorbent material necessary to perform adsorption.</i> |
| _____ | _____ | 10. | Performed adsorption as set-out in the IAP. |
| _____ | _____ | 11. | <i>Performed absorption as a defensive confinement action from a safe location.</i>
(Performed from an uphill position, with wind at their back and outside the hot zone) |

Candidate's Name: _____ Station: P _____ F _____ P _____ F _____
1st Attempt 2nd attempt

Evaluator's Signature: _____

Skill Sheet #7: Product Control: *Damming*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook, 2016 Edition*

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Shovels, Kitty Litter, ERGs, Absorbent Pigs, Simulated Incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4*, in the list below, will be determined by completing **Part II** of this skill sheet

In **Part II**, you are required to demonstrate the confinement/spill control action, I assign, using defensive tactics. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing PPE and respiratory protection. If you use self-contained breathing apparatus (SCBA) for respiratory protection, you **DO NOT** need to be “on air” while performing the confinement/spill control action, but you **MUST** wear the facepiece. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

P-Pass / F-Fail

1st Attempt 2nd attempt

- Skill Demonstration: Part I**
- | | | |
|-------|-------|--|
| _____ | _____ | 1. <i>Confirmed order with IC to perform product control.</i> |
| _____ | _____ | 2. Determined where product control functions will be performed as set-out in the IAP. (<u>Ensure</u> : the candidate determined wind direction, terrain slope, and where the hot zone is located) |
| _____ | _____ | 3. Planned response within capabilities of personal protective equipment (PPE). |
| _____ | _____ | 4. Performed product control function. |
| _____ | _____ | 5. Implemented planned response consistent with site safety plan while working in PPE. |
| _____ | _____ | 6. <i>Operated as a member of a team.</i> |
| _____ | _____ | 7. <i>Kept IC updated as to status of product control.</i> |
| _____ | _____ | 8. <i>Advised IC when product control has been completed.</i> |

- Skill Demonstration: Part II**
Damming
- | | | |
|-------|-------|---|
| _____ | _____ | 9. <i>Gathered equipment necessary to perform damming.</i> |
| _____ | _____ | 10. Performed damming as set-out in the IAP. |
| _____ | _____ | 11. <i>Performed damming as a defensive confinement action from a safe location.</i>
(Performed from an uphill position, with wind at their back and outside the hot zone) |

Candidate's Name: _____ Station: P _____ F _____
1st Attempt 2nd attempt

Evaluator's Signature: _____

Skill Sheet #8: Product Control: *Diking*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Dirt, Shovels, Simulated Incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4*, in the list below, will be determined by completing **Part II** of this skill sheet

In **Part II**, you are required to demonstrate the confinement/spill control action, I assign, using defensive tactics. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Part II* of *Skill Sheet #3*. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

Skill Sheet #9: Product Control: *Dilution*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Pumper, Handline, Water Source, Simulated Incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4*, in the list below, will be determined by completing **Part II** of this skill sheet

In **Part II**, you are required to demonstrate the confinement/spill control action, I assign, using defensive tactics. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Part II* of *Skill Sheet #3*. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

P-Pass / F-Fail1st Attempt 2nd attempt**Skill Demonstration: Part I****Product Control Functions**

- | | | | |
|-------|-------|----|---|
| _____ | _____ | 1. | <i>Confirmed order with IC to perform product control.</i> |
| _____ | _____ | 2. | Determined where product control functions will be performed as set-out in the IAP. (<u>Ensure</u> : the candidate determined wind direction, terrain slope, and where the hot zone is located) |
| _____ | _____ | 3. | Planned response within capabilities of personal protective equipment (PPE). |
| _____ | _____ | 4. | Performed product control function. |
| _____ | _____ | 5. | Implemented planned response consistent with site safety plan while working in PPE. |
| _____ | _____ | 6. | <i>Operated as a member of a team.</i> |
| _____ | _____ | 7. | <i>Kept IC updated as to status of product control.</i> |
| _____ | _____ | 8. | <i>Advised IC when product control has been completed.</i> |

Skill Demonstration: Part II**Dilution**

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 9. | <i>Set-up for the application of water to perform dilution.</i> |
| _____ | _____ | 10. | <i>Ensured the hazardous material was water-soluble and in a quantity small enough to dilute.</i> |
| _____ | _____ | 11. | Performed dilution as set-out in the IAP. |
| _____ | _____ | 12. | <i>Performed dilution as a defensive action from a safe location.</i> (Performed from an uphill position, with wind at their back and outside the hot zone) |

Candidate's Name: _____ Station: P _____ F _____
1st AttemptP _____ F _____
2nd attempt

Evaluator's Signature: _____

Skill Sheet #10: Product Control: *Diversion*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Dirt, Shovels, Simulated Incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4 (Performed product control function)* identified in **Skill Demonstration: Part I** below, will be assessed based on completion of **Skill Demonstration: Part II** of this skill sheet.

In **Part II**, you are required to demonstrate the confinement/spill control action, using defensive tactics that I assign. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/spill control action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Part II of Skill Sheet #3*. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

P-Pass / F-Fail

1st Attempt 2nd attempt

Skill Demonstration: Part I

Product Control Functions

- | | | | |
|-------|-------|----|---|
| _____ | _____ | 1. | <i>Confirmed order with IC to perform product control.</i> |
| _____ | _____ | 2. | Determined where product control functions will be performed as set-out in the IAP. (<u>Ensure</u> : the candidate determined wind direction, terrain slope, and where the hot zone is located) |
| _____ | _____ | 3. | Planned response within capabilities of personal protective equipment (PPE). |
| _____ | _____ | 4. | Performed product control function. |
| _____ | _____ | 5. | Implemented planned response consistent with site safety plan while working in PPE. |
| _____ | _____ | 6. | <i>Operated as a member of a team.</i> |
| _____ | _____ | 7. | <i>Kept IC updated as to status of product control.</i> |
| _____ | _____ | 8. | <i>Advised IC when product control has been completed.</i> |

Skill Demonstration: Part II

Diversion

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 9. | <i>Gathered equipment necessary to perform diversion.</i> |
| _____ | _____ | 10. | Performed diversion as set-out in the IAP. |
| _____ | _____ | 11. | <i>Performed diversion as a defensive confinement action from a safe location.</i>
(Performed from an uphill position, with wind at their back and outside the hot zone) |

Candidate's Name: _____ **Station:** P _____ F _____
1st Attempt

P _____ F _____
2nd attempt

Evaluator's Signature: _____

Skill Sheet #11: Product Control: *Retention*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Ladders, Salvage Covers, Dirt, Shovels, Simulated Incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4*, in the list below, will be determined by completing **Part II** of this skill sheet

In **Part II**, you are required to demonstrate the confinement/spill control action, I assign, using defensive tactics. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Part II* of *Skill Sheet #3*. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

Skill Sheet #12: Product Control: *Remote Valve Shutoff*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition, DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Pumper, Handline, Water Source, Remote Shutoff Valve Prop, Simulated Incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4*, in the list below, will be determined by completing **Part II** of this skill sheet

In **Part II**, you are required to demonstrate the confinement/spill control action, I assign, using defensive tactics. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Part II* of *Skill Sheet #3*. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

P-Pass / F-Fail

1st Attempt 2nd attempt

Skill Demonstration: Part I

Product Control Functions

- | | | |
|-------|-------|--|
| _____ | _____ | 1. <i>Confirmed order with IC to perform product control.</i> |
| _____ | _____ | 2. Determined where product control functions will be performed as set-out in the IAP. (<u>Ensure</u> : the candidate determined wind direction, terrain slope, and where the hot zone is located) |
| _____ | _____ | 3. Planned response within capabilities of personal protective equipment (PPE). |
| _____ | _____ | 4. Performed product control function. |
| _____ | _____ | 5. Implemented planned response consistent with site safety plan while working in PPE. |
| _____ | _____ | 6. <i>Operated as a member of a team.</i> |
| _____ | _____ | 7. <i>Kept IC updated as to status of product control.</i> |
| _____ | _____ | 8. <i>Advised IC when product control has been completed.</i> |

Skill Demonstration: Part II

Remote Valve Shutoff

- | | | |
|-------|-------|--|
| _____ | _____ | 9. <i>Determined location of remote shut-off.</i> |
| _____ | _____ | 10. <i>Determined if remote shut-off could be operated safely based on PPE available and training.</i> |
| _____ | _____ | 11. Performed remote shut-off as set-out in the IAP. |
| _____ | _____ | 12. <i>Performed remote shut-off as a defensive action from a safe location.</i> (Performed from an uphill position, with wind at their back and outside the hot zone) |

Candidate's Name: _____ Station: P _____ F _____
1st Attempt

P _____ F _____
2nd attempt

Evaluator's Signature: _____

Skill Sheet #13: Product Control: *Vapor Dispersion*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2016 edition.

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Pumper, Handline, Water Source, Positive Pressure Ventilation Fan/Blower, and Simulated Incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**. I will read you the incident scenario prior to beginning the evaluation.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are permitted to enter the hot zone with a hoseline to disperse vapor). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4*, in the skill evaluation check list below, will be determined by completing **Part II** of this skill sheet

In **Part II**, you are required to demonstrate the confinement/spill control action assigned. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Part II* of *Skill Sheet #3*. You are required to wear full PPE and self-contained breathing apparatus (SCBA) including facepiece. You are not required to be “on-air” when performing the skill, but you must have the facepiece donned.

NOTE: The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

Do you have any questions?

P-Pass / F-Fail

1st Attempt 2nd attempt

Skill Demonstration: Part I

Product Control Functions

- | | | |
|-------|-------|--|
| _____ | _____ | 1. <i>Confirmed order with IC to perform product control.</i> |
| _____ | _____ | 2. Determined where product control functions will be performed as set-out in the IAP. (<u>Ensure</u> : the candidate determined wind direction, terrain slope, and where the hot zone is located) |
| _____ | _____ | 3. Planned response within capabilities of personal protective equipment (PPE). |
| _____ | _____ | 4. Performed product control function. |
| _____ | _____ | 5. Implemented planned response consistent with site safety plan while working in PPE. |
| _____ | _____ | 6. <i>Operated as a member of a team.</i> |
| _____ | _____ | 7. <i>Kept IC updated as to status of product control.</i> |
| _____ | _____ | 8. <i>Advised IC when product control has been completed.</i> |

Skill Demonstration: Part II

Vapor Dispersion

- | | | |
|-------|-------|--|
| _____ | _____ | 9. <i>Gathered equipment and/or set-up for the application of a hose stream to perform vapor dispersion. (NOTE – if PPV is chosen, candidate must determine if equipment is compatible with the atmosphere, e.g., is blower intrinsically safe?)</i> |
| _____ | _____ | 10. <i>Determined wind direction and safe location from which to perform vapor dispersion.</i> |
| _____ | _____ | 11. <i>Determined if vapor dispersion could cause additional problems downwind.</i> |
| _____ | _____ | 12. Performed vapor dispersion as set-out in the IAP. |
| _____ | _____ | 13. <i>Performed vapor dispersion as a defensive action and in a safe manner. (Performed from an uphill position, with wind at their back and outside the hot zone)</i> |

Candidate’s Name: _____ Station: P _____ F _____
1st Attempt

P _____ F _____
2nd attempt

Evaluator’s Signature: _____

Skill Sheet #14: Product Control: *Vapor Suppression*

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials for First Responders*®, 5th Edition, 2018
DOT, *Emergency Response Guidebook*, 2016 edition

Required Candidate Equipment: PPE ensemble, respiratory protection.

Required Instructor Equipment: Pumper, Handline, Water Source, Foam Equipment and Foam Concentrate, Simulated Incident.

Read To Student:

At this station, you will demonstrate how to perform product control activities. You will operate as a member of a team. There are two **Parts** for this skill event. You are required to demonstrate both **Parts**.

In **Part I**, you are required to demonstrate basic product control functions. You are required to determine where the assigned confinement/spill control action will be performed, including determining wind direction, terrain, and hot zone (you are required to operate outside the hot zone). You must verbalize your thoughts regarding these items. **NOTE:** *Skill Demonstration Item #4*, in the list below, will be determined by completing **Part II** of this skill sheet

In **Part II**, you are required to demonstrate the confinement/spill control action, I assign, using defensive tactics. There is more than one way to accomplish a confinement/spill control action. You will not be assessed on the specific way you perform the confinement/spill control action, but rather on your ability to accomplish the specific assigned confinement/action using defensive tactics to control the product. You are required to demonstrate the confinement/spill control action while wearing the PPE you donned in *Part II* of *Skill Sheet #3*. **NOTE:** The confinement/spill control action assigned must be performed within the limits of an “operations level responder” and your training.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*) in both **Part I** and **Part II**.

P-Pass / F-Fail1st Attempt 2nd attempt**Skill Demonstration: Part I****Product Control Functions**

- | | | |
|-------|-------|--|
| _____ | _____ | 1. <i>Confirmed order with IC to perform product control.</i> |
| _____ | _____ | 2. Determined where product control functions will be performed as set-out in the IAP. (<u>Ensure</u> : the candidate determined wind direction, terrain slope, and where the hot zone is located) |
| _____ | _____ | 3. Planned response within capabilities of personal protective equipment (PPE). |
| _____ | _____ | 4. Performed product control function. |
| _____ | _____ | 5. Implemented planned response consistent with site safety plan while working in PPE. |
| _____ | _____ | 6. <i>Operated as a member of a team.</i> |
| _____ | _____ | 7. <i>Kept IC updated as to status of product control.</i> |
| _____ | _____ | 8. <i>Advised IC when product control has been completed.</i> |

Skill Demonstration: Part II**Vapor Suppression**

- | | | |
|-------|-------|---|
| _____ | _____ | 9. <i>Set-up for the application of foam to perform vapor suppression.</i> |
| _____ | _____ | 10. <i>Selected foam concentrate compatible with the material.</i> |
| _____ | _____ | 11. <i>Assembled foam stream components.</i> |
| _____ | _____ | 12. <i>Determined wind direction and safe location from which to perform vapor suppression.</i> |
| _____ | _____ | 13. Performed vapor suppression as set-out in the IAP. |
| _____ | _____ | 14. <i>Used appropriate technique for application of foam.</i> |
| _____ | _____ | 15. <i>Maintained vapor suppressive foam blanket.</i> |
| _____ | _____ | 16. <i>Performed vapor suppression as a defensive action and in a safe manner.</i> |
| _____ | _____ | 17. <i>Team retreated while facing hazard, reaching a safe haven.</i> |

Candidate's Name: _____ Station: P _____ F _____
1st AttemptP _____ F _____
2nd attempt

Evaluator's Signature: _____

Skill Sheet #15: Control a Flammable Gas Cylinder Fire

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, Sections 6.6.1

Reference: IFSTA *Hazardous Materials for First Responders*®, 5th Edition, 2018
DOT, *Emergency Response Guidebook*, 2016 edition

Required Candidate Equipment: Full Personal Protective Clothing and SCBA.

Required Instructor Equipment: Two Fire Department Engines, Simulated Flammable Gas Cylinder, Two Hydrants for Water Supply, Two Attack Lines (1 line from each engine), and Two Back-up Lines (1 line from each engine).

Read To Candidate:

At this station, you will operate as a member of a team to control a flammable gas cylinder fire outside a structure. You will be given a simulated flammable gas cylinder fire. Although, a candidate will be designated as team leader, all team members will function under the supervision of assigned support personnel (*SEE NOTE BELOW*). You must apply water using a technique appropriate for the given simulated flammable gas cylinder fire. Each team member must constantly evaluate the cylinder's integrity, as well as changes in conditions. The team must approach and retreat while facing the cylinder and all team members must remain behind the protective fire streams. The designated team leader will be required to operate the simulated shut off valve. The fire must not be extinguished until the fuel has been shut off. Once the shut-off has been operated, the team will retreat to a safe distance under the protection of water application.

NOTE: Because of the danger of controlling even simulated flammable gas cylinder fires, this test scenario must be conducted under the direct supervision of designated support personnel. Support personnel are responsible for supervising the assigned team leader and ALL Hazardous Materials Operations Level candidate team members.

This is not a timed event, but you should complete the assignment in a reasonable fireground time. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*).

P-Pass / F-Fail

1st Attempt 2nd attempt

- | | | |
|-------|-------|---|
| _____ | _____ | 1. <i>Confirmed order to attack flammable gas cylinder fire.</i> |
| _____ | _____ | 2. <i>Properly donned personal protective clothing and SCBA.</i> |
| _____ | _____ | 3. Advance was safe and effective. |
| _____ | _____ | 4. Water application was effective. |
| _____ | _____ | 5. Cylinder integrity & changing cylinder conditions were monitored. |
| _____ | _____ | 6. Operated control valve to stop fuel flow. |
| _____ | _____ | 7. Effective procedures implemented as conditions changed. |
| _____ | _____ | 8. <i>Flames were not intentionally extinguished by water application.</i> |
| _____ | _____ | 9. Retreat was safe and effective. |
| _____ | _____ | 10. <i>Notified Command upon retreating to safety.</i> |

Candidate's Name: _____ **Station:** P _____ F _____

1st Attempt

P _____ F _____

2nd attempt

Evaluator's Signature: _____

Skill Sheet #16: Identify Scope of Problem

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, 5.2.1 & 5.2.1(B)

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2020 edition.

Required Candidate Equipment: PPE ensemble.

Required Instructor Equipment: Hazmat incident set-up and reference sources.

Read To Candidate:

At this station, you are required to identify the scope of the problem at a hazardous materials/WMD incident, including container type or types, material or materials, location of any release, and surrounding conditions are identified. You are required to collect hazard information, identify potential behavior of the material or materials and its container or containers, and identify the potential hazards, harm, and outcomes associated with the potential behavior.

You will be provided with an assignment and reference material. You are not required to wear chemical protective clothing or self-contained breathing apparatus (SCBA). All actions shall be performed from safe positions. Entry into the hazard zone will be deemed a safety violation and you will be considered to have failed.

I will function as the telecommunicator (communications center person). I will serve as the carrier or facility representative.

I will also serve as the incident commander. You are required to communicate the incident information to me, including the scope of the problem, container type or types, location of the release, and surrounding conditions.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*).

Skill Sheet #17: Identify the Action Options

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, 5.3.1 & 5.3.1(B)

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2020 edition.

Required Candidate Equipment: PPE ensemble.

Required Instructor Equipment: Hazmat incident set-up and reference sources.

Read To Candidate:

At this station, you are required to identify the action options for a hazardous materials/WMD incident, given a hazardous materials/WMD incident and the scope of the problem. You are required to identify response objectives, action options, safety precautions, suitability of approved personal protective equipment (PPE) available, and emergency decontamination needs.

You will be provided with an assignment and reference material. You are not required to wear chemical protective clothing or self-contained breathing apparatus (SCBA). All actions shall be performed from safe positions. Entry into the hazard zone will be deemed a safety violation and you will be considered to have failed.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*).

P-Pass / F-Fail

1st Attempt 2nd attempt

- | | | |
|-------|-------|--|
| _____ | _____ | 1. Identified the response objectives, based on the scope of the problem and available resources. |
| _____ | _____ | 2. Identified whether approved and available PPE is suitable for the incident. |
| _____ | _____ | 3. Identified emergency decontamination needs, based on the scope of the problem. |
| _____ | _____ | 4. Did not enter the hazard zone |

Candidate's Name: _____ **Station:** P _____ F _____
1st Attempt 2nd attempt

Evaluator's Signature: _____ **Date:** _____

Skill Sheet #18: Hazardous Materials Incident/WMD Support

Portland Community College Operations Level Responder

Competency: NFPA 1072-2017, 5.4.1 & 5.4.1(B)

Reference: IFSTA *Hazardous Materials For First Responders*®, 5th Edition
DOT, *Emergency Response Guidebook*, 2020 edition.

Required Candidate Equipment: PPE ensemble and self-contained breathing apparatus (SCBA).

Required Instructor Equipment: Hazmat incident set-up with established scene control measures, tools & equipment, and technical decontamination set-up.

Read To Candidate:

At this station, you are required to perform assigned tasks at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; the scope of the problem, approved tools, and equipment, 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.

You will be provided with an assignment that has limited potential of contact with hazardous materials/WMD. You are not required to approved PPE and self-contained breathing apparatus (SCBA). All actions shall be performed from safe positions. Entry into the hot zone and/or contamination of yourself or other responders will be deemed a safety violation and you will be considered to have failed.

This is not a timed event, but you should complete the assignment as expeditiously as possible. To pass this station, you must successfully complete 100% of the critical steps (steps in **BOLD**) and a majority of the non-critical steps (steps in *italics*).

