



PENNSYLVANIA STATE FIRE ACADEMY HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC

Hazardous Materials Operations – Mission Specific Skill Stations

NFPA 1072 - Chapters 6 (2017 Edition)

Station A	Product Control: Foam Application Vapor Suppression	Mandatory Station
Station B	Product Control: Absorption / Adsorption	Mandatory Station
Station C	Product Control: Damming	Mandatory Station
Station D	Product Control: Diversion and Diking	Mandatory Station
Station E	Product Control: Dilution	Mandatory Station
Station F	Product Control: Vapor Dispersion and Remote Valve Shutoff	Mandatory Station
Station G	Product Control: Retention	Mandatory Station



PENNSYLVANIA STATE FIRE ACADEMY HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC

STATION A – Product Control: Foam Application Vapor Suppression		Reference NFPA 1072 – 2017 Edition, Chapter 6 Mandatory Station JPRs 6.2.1, 6.6.1	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: If a task (i.e., removes pick-up tube) is not applicable, please note N/A the in comments; then calculate PASS based on the remaining applicable “Yes” marks.

Directions: Given a scenario and an incident action plan involving hazardous materials and/or WMD materials, demonstrate the ability to don, work in, and doff Personal Protective Equipment (PPE) including Self-Contained Breathing Apparatus (SCBA). As part of a team and while wearing PPE and SCBA, demonstrate the proper application of a vapor suppressing agent/foam on a HAZMAT spill. When the task is completed, demonstrate proper doffing PPE procedures. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **9 of 9** tasks being correctly performed.

No.	Tasks	Yes	No
1	Establishes control zones		
2	Control efforts: considers wind direction, water spray and run off		
3	Selects, Don’s and Doff’s appropriate PPE		
4	Team properly assembles a foam delivery system (if applicable)		
5	Verify the system is a properly proportioned system		
6	Candidate applies foam to material spilled		
7	Candidate shuts down nozzle		
	<i>On evaluator command, candidates change positions and repeat Steps 6 and 7 (leave PPE in place)</i>		
8	Removes pick-up tube from foam & flushes hose line & pick-up tube (if applicable)		
9	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC

STATION B – Product Control: Absorption / Adsorption		Reference NFPA 1072 – 2017 Edition, Chapter 6 Mandatory Station JPRs 6.2.1, 6.6.1	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: You will act as the HAZMAT Technician and provide the candidate (who is in an operations-level role) the name of the product(s) spilled and the materials to be used in clean-up. The candidate will choose the appropriate products and follow directions as noted below to complete the tasks.

Directions: Given a scenario, appropriate tools and equipment, and while wearing PPE and working as part of a team, demonstrate the proper control activities for absorption and adsorption. First absorb the HAZMAT spill then apply adsorbent to the remaining product. Use two different materials to complete these tasks. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **12 of 12** tasks being correctly performed.

No.	Tasks	Yes	No
1	Establishes control zones		
2	Control efforts: considers wind direction, water spray and run off		
3	Selects, Don's and Doff's appropriate PPE		
ABSORPTION:			
4	Selects proper <i>absorption</i> material for the hazardous material involved. Check material type: ___ sand ___ soil ___ spill pads ___ vermiculite		
5	Properly places <i>absorbent</i> on the spill with minimal disruption to the spill.		
6	Waits for the <i>absorbent</i> to absorb as much product as practical		
7	Removes <i>absorbent</i> and places in a provided container		
ADSORPTION:			
8	Selects proper <i>adsorption</i> material for the hazardous material involved. Check material type: ___ sand ___ soil ___ kitty litter ___ vermiculite ___ activated charcoal		
9	Properly places <i>adsorbent</i> materials on the spill with minimal disruption		
10	Waits for the <i>adsorbent</i> to adsorb as much product as practical		
11	Removes <i>adsorbent</i> materials and places in a provided container		
12	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____

Evaluator # _____



PENNSYLVANIA STATE FIRE ACADEMY HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC

STATION C – Product Control: Damming		Reference NFPA 1072 – 2017 Edition, Chapter 6 Mandatory Station JPRs 6.2.1, 6.6.1	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: Indicate to the candidate which damming technique (i.e., underflow or overflow) to construct.

Directions: Given a scenario, appropriate tools and equipment, and while wearing PPE and working as part of a team, demonstrate the proper control activities for damming. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **8 of 8** tasks being correctly performed.

No.	Tasks	Yes	No
1	Establishes control zones		
2	Control efforts: considers wind direction, water spray and run off		
3	Selects, Don's and Doff's appropriate PPE		
4	Selects proper size and amount of pipe		
5	Constructs a dam using materials provided Check construction type: ___ underflow ___ overflow		
6	Places pipe (s) in proper location		
7	Size and amount of pipe adequately handles amount of water flow		
8	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____

Evaluator # _____



PENNSYLVANIA STATE FIRE ACADEMY HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC

STATION D – Product Control: Diversion and Diking		Reference NFPA 1072 – 2017 Edition, Chapter 6 Mandatory Station JPRs 6.2.1, 6.6.1	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: Given a scenario, appropriate tools and equipment, and while wearing PPE and working as part of a team, demonstrate the proper control activities of diversion and diking. First divert the flow of material to a safe location, then construct a dike around a leaking HAZMAT container. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **12 of 12** tasks being correctly performed.

No.	Tasks	Yes	No
1	Establishes control zones		
2	Control efforts: considers wind direction, water spray and run off		
3	Selects, Don's and Doff's appropriate PPE		
	DIVERSION:		
4	Selects proper diverting material		
5	Constructs a diversion device with material provided		
6	The flowing material is properly diverted to a safe location		
7	Size and angle of diversion adequately handles amount of hazardous flow		
	DIKING:		
8	Selects proper diking materials		
9	Constructs dike using materials provided.		
10	Places dike in proper location		
11	Size and amount of diking material adequately handles the volume of HAZMAT		
12	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC

STATION E – Product Control: Dilution		Reference NFPA 1072 – 2017 Edition, Chapter 6 Mandatory Station JPRs 6.2.1, 6.6.1	
Test Site	Test Date	Candidate #	Check the Test Type _____ Initial _____ Retest

Directions: Given a scenario, appropriate tools and equipment, and while wearing PPE and working as part of a team, demonstrate the proper control activities to dilute a HAZMAT spill. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **8 of 8** tasks being correctly performed.

No.	Tasks	Yes	No
1	Establishes control zones		
2	Control efforts: considers wind direction, water spray and run off		
3	Selects, don's and doff's appropriate PPE		
4	Identifies the material as one that can be diluted with water		
5	Determines if the amount of the product released can be effectively diluted		
6	Demonstrates the ability to perform a dilution process and indicates the estimated quantity of water to complete the task		
7	Request spill area be tested for adequate reduction of the hazardous material		
8	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____

Evaluator # _____



PENNSYLVANIA STATE FIRE ACADEMY HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC

STATION F – Product Control: Vapor Dispersion and Remote Valve Shutoff		Reference NFPA 1072 – 2017 Edition, Chapter 6 Mandatory Station JPRs 6.2.1, 6.6.1	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: Indicate below which scenario (Outside Handline or Interior PPV) is used.

Directions: Given a scenario, appropriate tools and equipment, and while wearing PPE / SCBA and working as a team, demonstrate the proper control activities for vapor dispersion and for a remote valve shutoff. Candidates will use a hose line for vapor dispersion, approach a leak, and shut off a remote valve (outside scenario); when done, candidates will change positions (i.e., nozzle operator) and repeat the evolution. If using the PPV scenario, each candidate will facilitate the evolution. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **9 of 9** tasks being correctly performed.

No.	Tasks	Yes	No
1	Establishes control zones		
2	Control efforts: considers wind direction, product flammability		
3	Selects, Don's, and Doff's appropriate PPE / SCBA		
4	Back-up person shuts off remote valve		
5(a)	____ Outside Scenario using Hand line <ul style="list-style-type: none"> • Selects hose-line no larger than 1 3/4" with a combination nozzle and starts advancing line using a modified fog pattern to disperse vapors to a safe area 	____	____
6(a)	<ul style="list-style-type: none"> • Back up person handles line to facilitate nozzle operator's actions and control. 	____	____
7(a)	<ul style="list-style-type: none"> • Team maintains control of the hose line at-all-times 	____	____
OR			
5(b)	____ Inside Scenario using PPV <ul style="list-style-type: none"> • Selects Positive Pressure Ventilation fan & sets it in appropriate position 	____	____
6(b)	<ul style="list-style-type: none"> • Starts and runs fan in a safe manner (<i>Mandatory YES to Pass</i>) 	____	____
7(b)	<ul style="list-style-type: none"> • Properly shuts down fan 	____	____
8	Monitors the dispersion for changing conditions		
<i>On evaluator command, candidates change positions and repeat Steps 5 - 7 (keep PPE in place)</i>			
9	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____

Evaluator # _____



PENNSYLVANIA STATE FIRE ACADEMY HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC

STATION G – Product Control: Retention		Reference NFPA 1072 – 2017 Edition, Chapter 6 Mandatory Station JPRs 6.2.1, 6.6.1	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: Given a scenario, appropriate tools and equipment, and while wearing PPE / SCBA and working as a team, demonstrate the proper control activities to construct a retention device to keep a HAZMAT from flowing into a storm drain. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **7 of 7** tasks being correctly performed.

No.	Tasks	Yes	No
1	Establishes control zones		
2	Control Efforts: considers wind direction, water spray and run off		
3	Selects, Don's, and Doff's appropriate PPE		
4	Selects proper retention material		
5	Constructs a retention device with material		
6	Product stopped before entering the storm sewer		
7	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____

Evaluator # _____