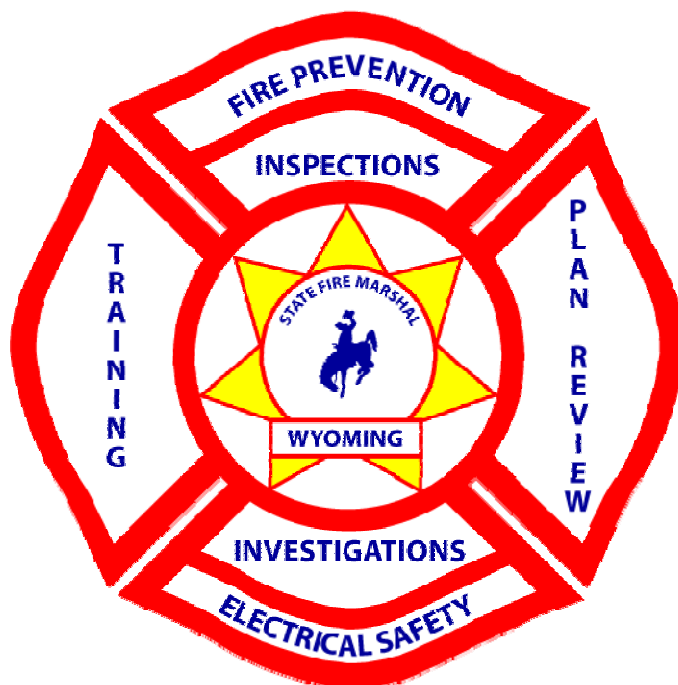


WYOMING FIREFIGHTERS CERTIFICATION SYSTEM



WYOMING HAZARDOUS MATERIAL AWARENESS & OPERATIONS STANDARD

**NFPA 472
2008 Edition**

**WYOMING DEPARTMENT OF FIRE PREVENTION
AND ELECTRICAL SAFETY**



16 Firefighter Life Safety Initiatives

1. Define and advocate the need for a cultural change within the fire service relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility. ***From top to bottom the culture of the fire service must change. You can change your behavior today. Lead by example and make a difference – be an agent of change.**
2. Enhance the personal and organizational accountability for health and safety throughout the fire service. *** Each fire service organization must promote safe practices; each individual must have the tools to be safe and adhere to safe practices at ALL TIMES.**
3. Focus greater attention on the integration of risk management with incident management at all levels, including strategic, tactical, and planning responsibilities. *** Learn the concept of "Risk Management," ensure everyone understands the difference between acceptable risk and an unacceptable risk. Develop and implement a system to pre-identify unacceptable risk. GO and NO GO.**
4. All firefighters must be empowered to stop unsafe practices. *** Firefighters must be allowed to identify and report unsafe practices. Be aware of safe practices and look for unsafe ones.**
5. Develop and implement national standards for training, qualifications, and certification (including regular recertification) that are equally applicable to all firefighters based on the duties they are expected to perform. *** Seek state and national certifications at all levels available to your department. Support refresher training, promote teaching new methods and improve skills which are used infrequently.**
6. Develop and implement national medical and physical fitness standards that are equally applicable to all firefighters, based on the duties they are expected to perform. ***Departments should establish and enforce SOP's which support wellness. Adopt a "heart healthy" life style.**
7. Create a national research agenda and data collection system that relates to the initiatives. *** Encourage your department to participate in WFIRS. Support data gathering at your department.**
8. ***Utilize available technology wherever it can produce higher levels of health and safety.**
9. Thoroughly investigate all firefighter fatalities, injuries, and near misses. *** Implement investigation without delay.**
10. *** Grant programs should support the implementation of safe practices and/or mandate safe practices as an eligibility requirement.**
11. National standards for emergency response policies and procedures should be developed and championed. *** National standard for emergency response policy and procedures should be developed. At the local level – help adopt safe driving rules and enforce them – "arrive alive."**
12. National protocols for response to violent incidents should be developed and championed. *** Fire and EMS workers deserve to have policies which will reduce their exposure to all threats of violence.**
13. Firefighters and their families must have access to counseling and psychological support. *** Firefighting is a high risk occupation, which can put firefighters and their families under extreme stress. They deserve access to mental health care.**
14. Public education must receive more resources and be championed as a critical fire and life safety program. *** Public education is a responsibility of all fire service personnel. It should not be reserved for one week in October. Make communicating the fire prevention message to the community a priority.**
15. Advocacy must be strengthened for the enforcement of fire codes *** Make sure all firefighters understand how sprinkler systems operate and the value they bring to reducing Line of Duty Death.**
16. Safety must be a primary consideration in the design of apparatus and equipment. *** Encourage your department to make safety the highest priority in equipment and apparatus purchases – as high as design and price.**



16 Firefighter Life Safety Initiatives

The 16 initiatives, listed on the preceding page, address the 6 root causes of firefighter injuries, close calls, and Line of Duty Death.

1. Ineffective policies and procedures.
2. Ineffective decision making.
3. Lack of preparedness.
4. Ineffective leadership.
5. Lack of personal responsibility.
6. Extraordinary and unpredictable circumstances.

For more information on the

Courage to be safe So everyone goes home program

Contact the Department of Fire Prevention

Training Division

At 307-777-7288

Or

View the Courage to be Safe Drills on our website at: <http://wyofire.state.wy.us>

Wyoming Firefighters Certification Committee

The WFCC is an 11 member board, which consists of 8- members from the fire service; 1- member from the State Forestry Rural Training Officer, 1- member representing the State Fire Marshals Office, 1- member representing a college with an emergency services program. The committee members function as liaison between the fire service and the Wyoming State Fire Marshal. The committee also serves in an advisory capacity to consider needs and plans of the DFPES.

**Please visit the SFMO website at <http://wyofire.state.wy.us>
For a current list of the members of the
Wyoming Firefighters Certification Committee**

Wyoming State Fire Marshal Department of Fire Prevention and Electrical Safety

Please direct Wyoming Firefighter certification questions and comments to:

Certification Coordinator
DFPES-Training Division
Herschler Building 1 West
122 W. 25th Street
Cheyenne, Wyoming 82002

PH: (307) 777-7288

FAX: (307) 777-7119

Please visit our Web site at: <http://wyofire.state.wy.us>

Wyoming Firefighter Certification Standards Technical Committee

The Department of Fire Prevention and Electrical Safety would like to recognize and extend our appreciation to all the fire service professionals who worked on the firefighter certification standards. These individuals devoted many hours reviewing the National Fire Protection Association Standards, certification test banks and developing skills for these standards. To everyone involved you can take great satisfaction of knowing you have contributed to the professional development and safety of the fire service of Wyoming.

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HAZARDOUS MATERIALS AWARENESS

INTRODUCTION

The world we live in is changing so fast, and the many phases of the fire service are becoming so technical and complex that fire service training must be utilized to its maximum potential. Any overlap, fragmentation, and lack of basic structure must be eliminated. Standardization is the natural complement and necessity.

The fire service in Wyoming, through a state certification program, can meet the needs of future growth and establish uniformity through certification. We will then have more effective and efficient utilization of resources so as to provide the best possible fire protection service for all the citizens throughout the state of Wyoming

The following certification requirements are based on the objectives listed in the National Fire Protection Association (NFPA) 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, as verified and adopted by the Department of Fire Prevention and Electrical Safety (DFPES) and the Wyoming Firefighters Certification Committee (WFCC).

Through these national standards and certification, firefighters and fire departments have a tool to measure specific levels of skills, abilities and knowledge. The DFPES and the WFCC believe by participating in this certification program, Wyoming firefighters and fire departments will be better prepared to provide quality life safety and fire protection for their communities.

The following Wyoming Hazardous Materials state standard covers two levels of certification:

Hazardous Materials First Responder Awareness Level- The focus and purpose of the Awareness Level First Responder is to give the front line firefighter the ability to:

- Detect and identify the presence of a hazardous material.
- Collect information from the Emergency Response Guidebook.
- Take protective actions by isolating the area and denying entry.
- Make proper notifications to local/state/national organizations.

With successful completion of this standard, which is based on the NFPA 472, a candidate will have satisfied all requirements for the Hazardous Materials Awareness.

HMA CERTIFICATION REQUIREMENTS

Entrance Requirements

In order to certify within the Wyoming Hazardous Materials Awareness program, departments/firefighters must fulfill the following requirements:

1. Complete department entrance requirements.
2. Set up and maintain department records.
3. Train on the required written objective.
4. Meet any other training requirements/prerequisites as defined by the DFPES.
5. Pass written examinations administered by the DFPES.
6. Request Hazardous Materials Awareness certification.

The DFPES acknowledges the importance of and need for entrance requirements as listed in the NFPA 1001, *Standard on Fire Fighter Professional Qualifications*. Many agencies and departments have existing policies, regulations, etc. already in place regarding these requirements. The handling of entrance requirements is a **LOCAL MATTER**, outside the authority and jurisdiction of the DFPES. The DFPES will not check, test, evaluate or determine how individual agencies meet these requirements. Some departments have found it necessary to waive any type of entrance requirements due to their own special needs. As a local decision, this is permitted. However, due to the amount of physical, mental and emotional stress inherent in this profession, **the DFPES strongly recommends careful evaluation before altering or doing away with any existing entrance requirements.**

Physical Fitness Requirements

The requirements listed in NFPA 1001, Chapter 4 are:

1. Meet the minimum educational requirements established by the authority having jurisdiction.
2. Meet the medical requirements of NFPA 1582, *Comprehensive Occupational Medical Program for Fire Departments*.
3. Physical fitness requirements for entry-level personnel shall be developed and validated by the authority having jurisdiction. Physical fitness requirements shall be in compliance with applicable Equal Employment Opportunity regulations and other legal requirements.

DEPARTMENT TRAINING

Hazardous Materials Awareness level training is a basic level of knowledge all firefighters should master. The Awareness Level is a pre-requisite for certification at the Firefighter I Level, Hazardous Materials Operations level, Fire Service Inspector I and Fire Investigator.

Training for Hazardous Materials Awareness is conducted at the department level or could be received through a joint training agreement between departments on a regional level. Regardless of where the training is received, it must prepare the candidate to be a competent and effective firefighter.

There are different methods a department can use to receive training the Hazardous Materials Awareness Level.

- Hazardous Materials – Awareness course sponsored by the Wyoming Department of Fire Prevention and Electrical Safety.
- SFMO HMA Training Online Course. **Website:** <https://firetraining.state.wy.us/>
- Department Based Training – Departments can create their own Hazardous Materials - Awareness course which meets the requirements as outlined in NFPA 472, Chapter 4. Testing will be conducted at the conclusion of the course upon request from the department training officer or administrator.

Written Objectives

A written objective for First Responder - Awareness level is covered in the following text:

1. Wyoming Department of Fire Prevention & Electrical Safety – Hazardous Materials Awareness course.
2. Delmar, *Hazardous Materials Incidents*, 2nd Edition.
3. FPP, *Hazardous Materials: Managing the Incident*, 3rd Edition.
4. IFSTA, *Hazardous Materials for First Responders*, 3rd Edition.
5. DOT, *Emergency Response Guidebook*.
6. NFA, *Emergency Response to Terrorism: Basic Concepts*, Student Manual.
7. Delmar, *Firefighter's Handbook Workbook*, 2nd Edition.
8. North American Emergency Response Book.

There are no manipulative skill examination requirements for the First Responder Awareness Level. The manipulative skill for this level is demonstrated during the written examination by using the North American Emergency Response Guidebook.

Department Training Officers

For departments to enroll in their certification process, it is necessary for the departments to assign training officers. It is recommended departments assign **at least two** personnel as training officers to coordinate and provide certification training.

Department training officers shall be state certified at the level they are teaching. In addition, the DFPES strongly recommends training officers be state certified at the Instructor I level.

Department training officers will be responsible for certification training. Their primary responsibility will be to teach, evaluate, and in-house test department personnel on the manipulative skill and evolution requirements for each level of certification training.

Departments who **do not** have certified personnel to act as training officers for certification training should contact the DFPES for assistance in setting up and monitoring certification training.

Departments who do not have certified personnel to act as training officers for certification training should contact the DFPES-Certification Coordinator at (307) 777-7288 for assistance in setting up and monitoring certification training.

HAZARDOUS MATERIALS AWARENESS CERTIFICATION EXAMINATIONS

After completion of the training process, the Fire Chief/Head of Department can request testing for the department. Using the “Request Examination” form in Appendix C. Fire Chief/Head of Department may request a written examination for certification. A testing fee *may* be charged at the time of certification.

Written Examinations

The written examination is a randomly generated **20-question** test covering the written objectives of the First Responders – Awareness Level. This examination is based on the candidate’s ability to use the Northern American Emergency Respond Guidebook (NAERG); therefore this book is used during the test. A minimum score of 80% is required to pass the certification exam. Firefighters failing the first attempt of the written exam will be permitted to retest no sooner than **2 weeks** from the date of the last exam. Exam results are forwarded to the Fire Chief/Head of Department with 30 days following the receipt of the completed examination.

SAMPLE WRITTEN EXAMINATION QUESTIONS:

What is the ID Number for Ammonium benzoate?

- a. 9081
- b. 9080**
- c. 2693
- d. 2818

The U.S. Department of Transportations (DOT) applies its definition of “any substance that poses an unreasonable risk to public safety and health” in commerce to:

- a. hazardous materials.**
- b. consumer commodities
- c. chemical substitutes
- d. elementary particles.

There is no separate Manipulative examination for the First Responder – Awareness level. This is accomplished during the written examination in using the Emergency Response Guidebook.

HAZARDOUS MATERIALS AWARENESS CERTIFICATION

When all requirements for certification have been met, applicants are eligible to be certified.

Those applicants who have met the requirements are issued a certificate. These are sent to the Fire Chief/Head of Department for disbursement.

For more information on Wyoming Hazardous Materials Awareness certification contact the:

DFPES Certification Coordinator
Herschler Building 1 West
122 W. 25th Street
Cheyenne, WY 82002
307-777-7288
<http://wyofire.state.wy.us>

HAZARDOUS MATERIALS AWARENESS CERTIFICATION CHECKLIST

ENTRANCE REQUIREMENTS:

- Each candidate has met requirements listed in NFPA 1001, Chapter 4 or those established by the authority having jurisdiction.

DEPARTMENT TRAINING RECORDS:

- The manipulative skill for the awareness level is demonstrated during the written examination by using the North American Emergency response Guidebook. (ERG).

DEPARTMENT "IN-HOUSE" MANIPULATIVE SKILLS EXAMINATION:

- Not applicable for Awareness Level certification.

CERTIFICATION EXAMINATIONS:

- Each candidate has passed the DFPES written examination.

HAZARDOUS MATERIALS AWARENESS – CERTIFICATION:

- When all requirements for certification have been met, applicants are eligible to be certified. Those applicants who have met the requirements are issued a certificate. These are sent to the Fire Chief/Head of Department for disbursement.

HAZARDOUS MATERIALS OPERATIONS

INTRODUCTION

The following certification requirements are based on the objectives listed in the National Fire Protection Association (NFPA) 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, as verified and adopted by the Department of Fire Prevention and Electrical Safety (DFPES) and the Wyoming Firefighters Certification Committee (WFCC).

Through these national standards and certification, firefighters and fire departments have a tool to measure specific levels of skills, abilities and knowledge. The DFPES and the WFCC believe by participating in this certification program Wyoming firefighters and fire departments will be better prepared to provide quality life safety and fire protection for their communities.

The operations level responder shall be that person who responds to hazardous materials/weapons of mass destruction (WMD) incidents for the purpose of protecting nearby person, the environment, or property from the effects of the release.

Operations level responders shall be able to:

- Analyze a hazardous materials/WMD incident.
- Plan an initial response to a hazardous materials/WMD incident.
- Implement the planned response for a hazardous materials/WMD.
- Evaluate the progress of the actions taken at a hazardous materials/WMD incident.

With successful completion of this standard which is based on the NFPA 472, a candidate will have satisfied all requirements for the Hazardous Materials Operations level as listed in OSHA 29 CFR 1910.120(q)(6)(ii) Operations.

HAZARDOUS MATERIALS OPERATIONS CERTIFICATION REQUIREMENTS

Entrance Requirements

In order to certify within the Wyoming Hazardous Materials Operations program, departments/firefighters must fulfill the following requirements:

1. Complete department entrance requirements.
2. Set up and maintain department records.
3. Train on the required written and practical objectives.
4. Pass a department “In-House” skills examination.
5. Meet any other training requirements/prerequisites as defined by the DFPES.
6. Pass written examinations administered by the DFPES.
7. Request Hazardous Materials Operations certification.

The DFPES acknowledges the importance of and need for entrance requirements as listed in the NFPA 1001, *Standard on Fire Fighter Professional Qualifications*. Many agencies and departments have existing policies, regulations, etc. already in place regarding these requirements. The handling of entrance requirements is a **LOCAL MATTER**, outside the authority and jurisdiction of the DFPES. The DFPES will not check, test, evaluate or determine how individual agencies meet these requirements. Some departments have found it necessary to waive any type of entrance requirements due to their own special needs. As a local decision, this is permitted. However, due to the amount of physical, mental and emotional stress inherent in this profession, **the DFPES strongly recommends careful evaluation before altering or doing away with any existing entrance requirements.**

Physical Fitness Requirements

The requirements listed in NFPA 1001, Chapter 4 are:

1. Meet the minimum educational requirements established by the authority having jurisdiction.
2. Meet the medical requirements of NFPA 1582, *Comprehensive Occupational Medical Program for Fire Departments*.
3. Physical fitness requirements for entry-level personnel shall be developed and validated by the authority having jurisdiction. Physical fitness requirements shall be in compliance with applicable Equal Employment Opportunity regulations and other legal requirements.

DEPARTMENT TRAINING

Hazardous Material Operations is the second level of training referenced in the NFPA 472 standard which firefighters should master. The hazardous materials operator shall be trained to meet all competencies of the awareness level (Chapter 4), all core competencies at the Operations level (Chapter 5, Chapter 6.2 and 6.5). The NFPA 1500 strongly suggests all firefighters who could respond to a potential hazardous materials spill be certified Operations level as a minimum.

The Operations level is a pre-requisite for certification at the Firefighter I level.

There are different methods a department can use to receive training at the Hazardous Materials Operations Level.

Hazardous Materials - Operations course sponsored by the Wyoming Department of Fire Prevention & Electrical Safety – Training Division.

Hazardous Materials – Operations training that is offered by the Emergency Response Training Center, Transportation Technology Center in Pueblo, Colorado.

Department Based Training – Departments can create their own Hazardous Materials - Operations course which meets the requirements as outlined in NFPA 472, Chapter 5, 6.2, 6.5. Testing will be conducted at the conclusion of the course upon request from the department training officer or fire chief/head of department.

Written Objectives

Written objectives for Hazardous Materials Operations Level are covered in the following text:

1. Wyoming Department of Fire Prevention & Electrical Safety – Hazardous Materials Operations course.
2. Delmar, *Hazardous Materials Incidents*, 2nd Edition.
3. FPP, *Hazardous Materials: Managing the Incident*, 3rd Edition.
4. IFSTA, *Hazardous Materials for First Responders*, 3rd Edition.
5. DOT, *Emergency Response Guidebook*.
6. NFA, *Emergency Response to Terrorism: Basic Concepts*, Student Manual.
7. Delmar, *Firefighter's Handbook Workbook*, 2nd Edition.

Manipulative Objectives

Each participant **must** be trained and evaluated in the performance of **all** manipulative skill objectives. Each of the manipulative skill objectives shall be completed swiftly, safely and with competence as defined below:

- **Swiftly** -Each manipulative skill objective must be completed within the allotted time.
- **Safely** -Each manipulative skill objective must be completed safely. Conduct that could injure individual or damage equipment is unacceptable. Equipment should be checked prior to skill testing or training to see that it is safe and functional.
- **Competence** - Each manipulative skill objective is performed in accordance with the Wyoming Standard. This includes performing the proper steps in sequence. Competence will be measured in accordance with the DFPES manipulative skill objectives.

Department Training Officers

For departments to enroll in their certification process, it is necessary for departments to assign training officers. It is recommended departments assign **at least two** personnel as training officers to coordinate and provide certification training.

Department training officers shall be state certified at the level they are teaching. In addition, the DFPES strongly recommends training officers be state certified at the Instructor I level.

Department training officers will be responsible for certification training. Their primary responsibility will be to teach, evaluate, and in-house test department personnel on the manipulative skills and evolution requirements for each level of certification training.

Departments who do not have certified personnel to act as training officers for certification training should contact the DFPES-Certification Coordinator at (307) 777-7288 for assistance in setting up and monitoring certification training.

Department Training Records

Each participant shall have a training record on file with the department, which indicates whether he/she has trained on all manipulative skills objectives. This record shall be signed off or initialed by a department training officer. Training records must indicate the date, instructor, and total number of hours trained for each manipulative skill objective. Departments may set up their own training records or use the one provided in Appendix A.

Department “In - House” Manipulative Skill Examination

At the completion of the department's manipulative skills training, the department is required to hold an “In-House” skills examination for the level being trained. This is a comprehensive "In House" skills test conducted by the department training officers. This test is to ensure that skill mastery has been maintained from the beginning to the end of the training process, and to prepare participants for the state examination. Training officers may utilize other personnel to assist in administering the exam; however, all that assist must be certified at the level they are in-house testing.

Tester instructions for the examination are in Appendix C. In-house testers shall follow the Proctor Instruction sheet to provide for uniformity and fairness during the exam. It is recommended participants be given two attempts at any skill. **If they fail on the second try, then they have failed the evaluation and are required to go through additional training by the department trainer.** No training, teaching, or coaching is allowed during the test. After the evaluation, using the test to teach and train is recommended.

If manipulative skill weaknesses are evident, the department shall conduct additional training and hold a new department "in house" manipulative skills examination to ensure their personnel have fully mastered all required skills. Only those participants who successfully pass the department's skills test will be allowed to participate in the Certification Committee's manipulative skills "spot check" examination. Department records must show all participants have successfully passed the “In-House” exam.

CERTIFICATION EXAMINATIONS

After completion of the training process, the Fire Chief/Head of Department can request testing for the department. Using the “Firefighter Examination/Certification/Request” form in Appendix C. Fire Chief/Head of Department may request a written examination and manipulative test for certification. A testing fee *may* be charged at the time of certification.

Written Examinations

The written examination is a randomly generated **50-question** test covering the written objectives of the Hazardous Materials Operations Level standard. This examination is based on the candidate’s ability to use the Emergency Respond Guidebook (ERG); therefore this book is used during the test. A minimum score of 80% is required to pass the certification exam. Firefighters failing the first attempt of the written exam will be permitted to retest no sooner than **2 weeks** from the date of the last exam. Exam results are forwarded to the Fire Chief/Head of Department with 30 days following the receipt of the completed examination.

SAMPLE WRITTEN EXAMINATION QUESTIONS:

The operation of limiting the size of the Hazmat release area, once it has escaped from its container, best describes:

- a. Containment
- b. Concealment
- c. Control
- d. Confinement**

Health effects appearing within 72 to 96 hours following an exposure to a toxin would be considered:

- a. Sub-acute
- b. Chronic
- c. Acute**
- d. Post chronic

Manipulative Skill “Spot Check” Examination

This is a two-step examination. The first step is a department records check and the second step is the manipulative skills "spot check" examination. A Certification Tester appointed by the DFPES conducts the examination.

Training records are checked. If records are inadequate, corrective action must be taken before proceeding to the next step. The records must meet minimum requirements and are checked for the following:

1. Trainee has been trained in each manipulative skill for the level being evaluated.
2. A department training officer has signed off each manipulative skill.
3. The total number of hours trained on each manipulative skill is listed.
4. Each trainee has passed a department “In-House” manipulative skills examination.

The manipulative skills "spot check" examination is graded on a 100% pass/fail basis. The test is graded in the following three areas:

- **Swiftly** -Each manipulative skills objective must be completed within the allotted time.
- **Safely** -Each manipulative skills objective must be completed safely. Conduct that could injure individual or damage equipment is unacceptable. Equipment should be checked prior to skill testing or training to see that it is safe and functional.
- **Competence** - Each manipulative skill objective is performed in accordance with the Wyoming Standard. This includes performing the proper steps in sequence. Competence will be measured in accordance with the DFPES manipulative skill objectives.

Participants are "spot checked" on **THREE (3)** manipulative skills. No prior notification of the skills being tested will be given. Participants are given two attempts if necessary to perform each skill. If they fail on the second attempt, the applicant must wait 30 days before the third and final attempt. Participants taking third attempts will test on the skill they missed plus an additional skill from the same section of the standard they failed during the previous two attempts. **No training, teaching, or coaching is allowed during this state test.**

Participants who have failed the third attempt of the written examination or the manipulative skills examination have failed the certification process and must wait 1 year from the date of the failed third attempt before they can re-enter state testing. After waiting 1 year, participants begin a new testing cycle beginning with a first attempt of a written or manipulative examination.

HAZARDOUS MATERIALS OPERATIONS CERTIFICATION

When all requirements for certification have been met, firefighters are eligible to be certified. The Fire Chief/Head of Department may apply to DFPEs for certification for those firefighters who have successfully completed the certification training/testing process. Request for state certification will be submitted to the DFPEs using the "Firefighter Examination/Certification/Request" form provided in Appendix C. The names are then checked against the official state records to ensure each individual listed has met all requirements.

Those applicants who have met the requirements are issued a certificate. These are sent to the Fire Chief/Head of Department for disbursement.

Prerequisites for Certification:

Applicants for certification at the Operations level must be State certified through the Department of Fire Prevention and Electrical Safety (DFPEs) Certification system at the Hazardous Materials First Responder Awareness Level. Hazardous Materials Operations Level certification will not be issued until participants have fulfilled this requirement.

For more information on Wyoming Hazardous Materials Operations certification contact the:

DFPEs Certification Coordinator
Herschler Building 1 West
122 W. 25th Street
Cheyenne, WY 82002
307-777-7288
<http://wyofire.state.wy.us>

HAZARDOUS MATERIALS OPERATIONS
CERTIFICATION CHECKLIST

ENTRANCE REQUIREMENTS:

- Each participant has met requirement listed in NFPA 1001, Chapter 4 or those established by the authority having jurisdiction.

DEPARTMENT TRAINING RECORDS:

- Each participant has a training record on file with the department that shows:
1. A learning experience in each manipulative skill objective.
 2. Dates of training.
 3. Initials of instructors.
 4. Total number of hours trained in each manipulative skill objective.
 5. Dates of training.
- Each participant has trained on the Awareness and/or Operations level written objectives.

DEPARTMENT "IN-HOUSE" MANIPULATIVE SKILLS EXAMINATION:

- Each participant has successfully completed an "In-House" examination.
- Results of exam are documented in department training records.

ADDITIONAL TRAINING/PREREQUISITE REQUIREMENTS:

- Each participant is state certified through the DFPES at the Hazardous Materials First Responder Awareness Level.
- Complete ICS-100: Introduction to ICS.
- Complete ICS-200: Basic ICS.

CERTIFICATION EXAMINATIONS:

- Each participant has passed the DFPES written examination.
- Each participant has passed the DFPES manipulative skills "Spot Check" examination administered by an approved Certification Tester.

MANIPULATIVE SKILL OBJECTIVES

DECONTAMINATION

The Courage to be Safe Drills can be found online at <http://wvofire.state.wv.us>

NFPA 472, 5.1.2.2(3), 5.1.2.2(3) d - e, 5.3.3, 5.4.1(4), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13
Skill 1: Demonstrate Emergency Decontamination of a victim using water.

CONDITION: Given water supply, hose/nozzles, and a 2-firefighter team. Victim to be decontaminated to be dressed in splash suit or fighter turnouts or street clothing. PPE for responders:
 Fire Service – Minimum Firefighter Turnouts, SCBA.
 Police/EMS – Minimum Splash Suit, SCBA.
 *PPE donned before skill begins.

TIME: 5:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
1. Select appropriate site to minimize runoff contamination.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Responder directs victim on procedures.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Rinse personnel starting from the head, working towards the feet.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Victim being decon removes contaminated clothing as much as possible.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. As necessary, decon team members touch outside of clothing being removed to avoid cross contamination.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Victim places contaminated articles in one designated area within contamination zone.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Victim given protective clothing.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8. Victim directed to exit area for further evaluation.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

	<u>PASS</u>	<u>FAIL</u>
First Attempt	<input type="checkbox"/>	<input type="checkbox"/>
Second Attempt	<input type="checkbox"/>	<input type="checkbox"/>

NFPA 472, 5.1.2.2(3) a – e, 5.4.1, 5.4.2, Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13
Skill 2: Demonstrate the setting up of a multiple station decontamination corridor.

CONDITION: Given equipment as determined by incident and qualified hazmat technician, and a 2-member team and using the incident management system.

TIME: 15:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	<u>Y N</u>	<u>Y N</u>
1. Establish and enforce scene control.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Establish means of evidence preservation.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Select appropriate site, up wind of incident, drainage towards “hot” zone.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Clearly marked entry point.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Tool drop.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Confinement of decon solutions and runoff water.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Wash station, (may be multiple).	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8. Rinse station, (may be multiple).	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9. SCBA drop/Bottle change.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
10. PPE drop station(s).	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
11. Clearly marked exit point.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt
 Second Attempt

<u>PASS</u>	<u>FAIL</u>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

NFPA 472, 5.1.2.2(3) e, 5.3.3, 5.4.1(4), 5.4.2, 5.4.4(6-7) Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13
Skill 3: Demonstrate decontamination of emergency responder.

CONDITION: Given a Decon corridor, water supply, hose/nozzles, a 2-member team, and a responder dressed in appropriate level of protection to be decontaminated. PPE as determined by incident and qualified hazmat technician:
 Fire Service – Minimum Firefighter Turnouts, SCBA.
 Police/EMS – Minimum Splash Suit, SCBA.

TIME: 15:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
1. Direct responder to enter entry point.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Direct responder to drop tools in designated area.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Direct responder to enter wash station.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Rinse personnel starting from the head.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Decon personnel control run-off of wash station.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Direct responder to drop SCBA on designated area.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Decon team members touch outside of clothing being removed to avoid contaminating responders.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8. Remove contaminated PPE or clothing.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9. Place contaminated articles in one designated area within corridor.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
10. Direct responder to exit designated point for:		
- Inner clothing removal	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Personnel shower	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Medical evaluation	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt
 Second Attempt

<u>PASS</u>	<u>FAIL</u>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

PERSONAL PROTECTIVE EQUIPMENT

NFPA 472, 5.1.2.2(2)c, Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13

Skill 4: Identify and describe the function of each component of the Self-Contained Breathing Apparatus (SCBA).

CONDITION: Given a Self-Contained Breathing Apparatus as used by department.

TIME: 5:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
1. Backpack/harness.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Air cylinder: cylinder, valve, and pressure gauge.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Regulator assembly: high-pressure hose, low-pressure alarm, main line valve, emergency by-pass valve, secondary gauges.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Face piece assembly: low pressure hose, exhalation valve, and head harness.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. PASS device.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt
Second Attempt

<u>PASS</u>	<u>FAIL</u>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

NFPA 472, 5.3.3(1), 5.4.4(7), 6.2.4.1, 6.2.4.1(3), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13
Skill 5: Demonstrate donning and doffing Self-Contained Breathing Apparatus (SCBA).

CONDITION: Wearing full protective clothing and SCBA.

TIME: 1:00 minute to don / No time limit to doff

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
Donning		
1. Crouch or kneel at SCBA (if donned from ground).	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Check SCBA cylinder pressure gauge (verbalize pressure).	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Open cylinder valve fully.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Check regulator and cylinder gauge-gauges should be within 100 psi of each other.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Don backpack and fasten/tighten all straps (over-the-head or coat method).	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Don face piece, adjust head harness, and check seal and exhalation valve.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Don protective hood.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8. Attach low-pressure hose to regulator or face piece.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9. Turn on or ensure PASS is active.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
10. Don helmet.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
11. Don gloves.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Steps may vary between various manufactures; however, all of the above should be covered during the donning process.

NFPA 472, 5.3.3(1), 5.4.4(7), 6.2.4.1, 6.2.4.1(3), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
Doffing		
1. Disconnect regulator from face piece or low-pressure hose from regulator.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Doff SCBA and place on ground, close cylinder valve.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Relieve excess pressure from regulator, listen for low-pressure alarm.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Fully extend all straps on SCBA backpack.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Fully extend all straps on face piece.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Don face piece, adjust head harness.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Inspect entire apparatus for cleanliness and damage.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt
Second Attempt

<u>PASS</u>	<u>FAIL</u>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

NFPA 472, 5.3.3, 5.4.4, 6.2.3.1, 6.2.3.1(3), 6.2.4.1, 6.2.4.1(3) Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13
Skill 6: Assist/Don emergency response personnel in donning hooded chemical splash protective clothing and SCBA.

CONDITION: Given a hooded splash suit, boots, gloves, duct tape, helmet, SCBA, and a 2-member team, **one person donning** and **one dressing**.

TIME: 12:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
1. Select appropriate PPE.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Skills for person Donning Splash suit.		
- Don hooded splash suit.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Don boots.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Don SCBA.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Don face piece.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Check face seal.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Don inner gloves.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Don outer gloves.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Don head protection.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Skills for person assisting in Donning of Splash suit.		
- Assist donning hooded splash suit.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Assist donning boots.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Correctly tape suit to boots.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Completely tape hood of PPE to SCBA face piece, do not cover field of vision on face piece.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Assist donning SCBA.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Tape front closure area and neck area.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Assist donning inner gloves.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Assist donning outer gloves.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Connect low pressure hose to SCBA regulator.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
- Tab all ends of tape (2" minimum).	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt
 Second Attempt

<u>PASS</u>	<u>FAIL</u>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

PERFORMING DEFENSIVE CONTROL ACTIONS

NFPA 472, 6.6.4.1(4-5), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13

Skill 7: Demonstrate stopping product release by closing remote valves.

CONDITION: Given a simulated spill from a tank, remote valve, and a 2-firefighter team, PPE:

Fire Service – Minimum Firefighter Turnouts, and SCBA.

Police/Ems – Minimum Splash Suit, and SCBA.

*PPE donned before skill begins.

TIME: 2:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
1. Identify appropriate level of PPE.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Confirm location of remote valve.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Approach valve location staying out of product.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Open or close valve.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Exit area maintaining team integrity.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt

Second Attempt

PASS

FAIL

NFPA 472, 6.6.3.1, 6.6.4.1, 6.6.4.1(3), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13
Skill 8: Demonstrate use of unmanned master stream (300 gpm or greater) for vapor suppression or dispersion.

CONDITION: Given a simulated spill, water supply, appliance, 100 ft. 2 ½” hose, and a 2-firefighter team, PPE for responders:
 Fire Service – Minimum Firefighter Turnouts, and SCBA.
 Police/Ems – Minimum Splash Suit, and SCBA.
 *PPE donned before skill begins.

TIME: 2:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>		<u>2nd Att.</u>	
	Y	N	Y	N
1. Determine system is set up correctly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signals for water.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Adjust stream of appliance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Flow for 1 minute.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Completed skill in allotted time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

	<u>PASS</u>	<u>FAIL</u>
First Attempt	<input type="checkbox"/>	<input type="checkbox"/>
Second Attempt	<input type="checkbox"/>	<input type="checkbox"/>

NFPA 472, 6.6.3.1, 6.6.4.1, 6.6.4.1(1 & 3), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13
Skill 9: Demonstrate the proper application of fire fighting foam on a simulated hazardous materials spill or fire.

CONDITION: Given a simulated spill (36 sq. ft.), foam application system (apparatus or foam extinguisher), PPE:
 Fire Service – Minimum Firefighter Turnouts, and SCBA.
 Police/Ems – Minimum Splash Suit, and SCBA.
 *PPE donned before skill begins.

TIME: 2:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>		<u>2nd Att.</u>	
	Y	N	Y	N
1. Approach spill upwind/upgrade.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Demonstrate proper application techniques.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Do not direct stream directly into pool.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Deflect foam off solid surface or “rain” onto surface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

	<u>PASS</u>	<u>FAIL</u>
First Attempt	<input type="checkbox"/>	<input type="checkbox"/>
Second Attempt	<input type="checkbox"/>	<input type="checkbox"/>

NFPA 472, 6.6.3.1, 6.6.4.1, 6.6.4.1(3), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13**Skill 10: Construct a dike to divert a spill.**

CONDITION: Given a simulated moving spill, sand or dirt, shovels, plastic, and a 3-person team, PPE:
 Fire Service – Minimum Firefighter Turnouts, and SCBA.
 Police/Ems – Minimum Splash Suit, and SCBA.
 *PPE donned before skill begins.

TIME: 10:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
1. Construct a dike 6 feet long and 6 inches high.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Work ahead of spill, out of product.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Two personnel build dike and one standby as safety.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Divert spill.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt
 Second Attempt

<u>PASS</u>	<u>FAIL</u>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

NFPA 472, 6.6.3.1, 6.6.4.1, 6.6.4.1(3), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13**Skill 11: Construct a simple dam to retain a spill.**

CONDITION: Given a simulated spill, sand or dirt, shovels, plastic, and a 3-person team, PPE:
 Fire Service – Minimum Firefighter Turnouts, and SCBA.
 Police/Ems – Minimum Splash Suit, and SCBA.
 *PPE donned before skill begins.

TIME: 10:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
1. Construct a dam 6 feet long and 8-12 inches high.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Work ahead of spill, out of product.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Two personnel build dam and one member to standby as safety.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Retain spill.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt
 Second Attempt

<u>PASS</u>	<u>FAIL</u>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

NFPA 472, 6.6.3.1, 6.6.4.1, 6.6.4.1(3), Courage to be Safe Drill, 1, 4, 8, 10, 11, 12, 13

Skill 12: Demonstrate the use of absorbent material to control a spill of a hazardous material.

CONDITION: Given a simulated spill, absorbent pad or other material, shovels, and a 3-person team, PPE:
 Fire Service – Minimum Firefighter Turnouts, and SCBA.
 Police/Ems – Minimum Splash Suit, and SCBA.
 *PPE donned before skill begins.

TIME: 5:00 minutes

APPLICANT PERFORMED THE FOLLOWING COMPETENCIES:

	<u>1st Att.</u>	<u>2nd Att.</u>
	Y N	Y N
1. Retain spill by putting absorbent materials in place.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Work ahead of spill, out of product.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Two personnel to put materials in place and one member to standby as safety.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

PERFORMANCE RATING ON THIS SKILL:

First Attempt
 Second Attempt

<u>PASS</u>	<u>FAIL</u>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX A
TRAINING RECORD

**HAZARDOUS MATERIALS FIRST RESPONDER - OPERATIONS
TRAINING RECORD / IN-HOUSE COMPREHENSIVE EXAM**

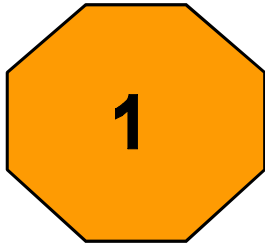
NAME: _____ SSN: _____ - _____ - _____ DEPARTMENT: _____

SECTION	TRAINING RECORD			IN-HOUSE COMP. EXAM			MANIPULATIVE SKILL-DEMONSTRATE
	DATE	INST.	HR'S	DATE	INST.	P/F	
Decontamination							1. Emergency Decontamination - Wet
							2. Demonstrate setting-up a multiple station decon area
							3. Demonstrate deconning emergency responders or victims
Personal Protective Clothing							4. Identify and describe the function of each component of the SCBA.
							5. Demonstrate donning & doffing SCBA
							6. Assist emergency response personnel in donning hooded chemical splash protective clothing
Defensive Control							7. Demonstrate stopping product release by closing remote valves.
							8. Demonstrate use of unmanned master stream (300 gpm or greater) for vapor suppression or dispersion.
							9. Proper application of fire fighting foam on simulated hazardous materials spill or fire.
							10. Construct a dike to divert a spill.
							11. Construct a simple dam to retain a spill.
							12. Demonstrate use of an absorbent material.

**APPENDIX B
MILITARY PLACARDS AND
GLOSSARY**

Military hazardous materials markings provide information on explosives (fire symbols) and special (chemical) hazards.

1. Class 1, Division 1 - Materials that present a mass detonation hazard.
2. Class 1, Division 2 - Materials that present an explosion with fragmentation hazard



3. Class 1, Division 3 - Materials that present a mass fire hazard.
4. Class 1, Division 4 - Materials that present a moderate fire hazard.



The following terms are used during the teaching portion of the Hazardous Materials Operations level course. Knowing these terms will aid the student in preparing for the certification examination.

Absorption - The process by which one substance combines with another by becoming physically part of that substance.

Acute toxicity – Refers to the sudden, severe onset of symptoms due to an exposure.

Air purifying respirators (APR) – Devices worn to filter particulates and contaminants from the air. Cannot be worn in oxygen deficient atmospheres.

Asphyxiant – Simple Asphyxiant act on the body by displacing or reducing the oxygen in the air for normal breathing.

Biological agents/toxins - Living organisms, or materials derived from them, that cause disease in or injury to humans, animals or plants or cause deterioration of material. Agents can be used in liquid droplets, aerosols, or dry powders.

B-NICE - An acronym for biological, nuclear, incendiary, chemical, or explosives.

Boiling Liquid Expanding Vapor Explosion (BLEVE) - A major container failure, into two or more pieces, at a moment in time when the contained liquid is at a temperature well above its boiling point at normal atmospheric pressures.

Boiling point – The temperature of a substance when the vapor pressure exceeds atmospheric pressure and the liquid turns into a gas at the surface.

Carcinogen – A material that can cause cancer in an organism.

Carboy - A bottle or rectangular container for liquids of about 5-to 15-gallon capacity that is made of glass, plastic, or metal and is often cushioned in a protective container.

Ceiling level (TLV-C) – The maximum concentration to which a healthy adult can be exposed without risk of injury.

Chemical reactivity – The susceptibility of a material to release energy either by itself or in combination with other materials.

Chemical Transportation Emergency Center (CHEMTREC) – A public service of the Chemical Manufacturers Association, located in Washington, D.C. CHEMTREC provides the on-scene commander with immediate advice by telephone and contacts the involved shipper for detailed assistance and response follow-up.

Chronic health hazards – Hazards that include carcinogen, mutagen, and teratogen.

Command post – On scene location where the incident commander develops goals and objectives for the incident. If possible, the command post should be located where the incident can be viewed.

Confinement – Those procedures taken to keep a material, once released, in a defined or local area.

Contamination – The process of transferring a hazardous material from its source to people, animals, the environment, and/or equipment, which may act as a carrier.

Control zones – The areas at hazardous materials incidents that are designated based upon the degree of hazard. These areas are defined as HOT, WARM, or COLD.

Convulsant – A chemical that could cause the body to have violent spasms or uncontrolled muscle cramping.

Corrosively (pH) – A measure of a substance's tendency to deteriorate in the presence of another substance or in a particular environment. A corrosive material such as a liquid or solid that causes visible destruction or irreversible alterations in human skin tissue at the site of contact or that causes steel to corrode at a severely accelerated rate. The degree of corrosiveness is measured by pH, which ranges from 1 to 14. A pH of 7 is neutral, while a pH below 7 is acidic and a pH above 7 represents a base.

Decontamination – The process of reducing and preventing the spread of contamination from person and equipment used at a hazardous materials incident by physical and/or chemical processes.

Delayed toxicity – The effects of delayed toxicity may not develop for hours or linger after an exposure.

Etiologic – Events created by uncontrolled exposures to living microorganisms.

Evacuation – The removal of the public from an area due to the release or potential release of a chemical. The incident commander determines an evacuation area based on type of chemical, weather conditions, and information found in reference materials used at the incident.

Explosive Limits - (flammable range) all concentrations of a mixture of flammable vapor or gas in air, usually expressed in percent by volume, in which a flash will occur or a flame will travel if the mixture is ignited.

Flash point – The minimum temperature at which a liquid gives off vapors in sufficient concentrations to form an ignitable mixture with air.

Heat exhaustion – A mild form of shock caused when the circulatory system begins to fail as a result of the body's inadequate effort to give off excessive heat. Symptoms include increased respiratory rate, weak pulse, weakness, heavy perspiration and cold/clammy skin.

Heat stroke – A severe and sometimes fatal condition resulting from the failure of the temperature regulating capacity of the body. Symptoms include body temperature of 105 degrees F. or higher, rapid pulse, hot skin, headache, confusion, unconsciousness and convulsions.

Hyperthermia – Condition of increased body temperature, above 98.6 degree F.

Hypothermia – Condition of decreased body temperature, below 98.6 degree F.

Ignition temperature – The minimum temperature of a substance, whether solid, liquid, or gaseous, required to cause self-sustained combustion in the absence of any source of ignition.

Incident Command System (ICS) – An organized system of roles, responsibilities, and standard operating procedures used to manage and direct emergency operations.

Incident commander – The person responsible for all decisions relating to the management of the incident.

Immediately dangerous to life and health (IDLH) – An atmospheric concentration of any toxic, corrosive or asphyxiant substance that poses an immediate threat to life or would cause irreversible or delayed adverse health effects or would interfere with an individual's ability to escape from a dangerous atmosphere.

Incident safety officer – Assigned person responsible for the safety of all personnel, including monitoring and assessing safety hazards, unsafe situations, and developing measures for ensuring personnel safety.

Irritant – A chemical that is not corrosive but causes a reversible inflammatory effect on living tissue by chemical action at the site of contact.

Lethal concentration (LC50) - A value for gases that provides the amount of chemical that could kill 50 percent of the exposed group.

Lethal Dose (LD50) – A value for solids and liquids that provides the amount of a chemical that could kill 50 percent of the exposed group.

Materials Safety Data Sheet (MSDS) – A form, provided by manufacturers and compounders (blenders) of chemicals, containing information about chemical composition, physical and chemical properties, health and safety hazards, emergency response, and waste disposal of the material.

Mutagen – A material that creates a change in gene structure which is potentially capable of being transmitted to the offspring.

Parts per million/billion (ppm/ppb) – The values used to establish the exposure limits above are quantified in parts per million or parts per billion. For example: 1 percent equals 10,000 ppm, 1 percent equals 1,000 ppb.

Permissible exposure limits (PEL) – Term used by OSHA, same definition as TLV-TWA.

Radiation - Any materials that spontaneously emit ionizing and non-ionizing radiation. Examples are Alpha, Beta, gamma, and neutron particles.

Routes of exposure –

Inhalation: Irritants or toxins enter the body through the nose, mouth, and lungs as a result of the respiratory process.

Ingestion: The process of consuming contaminated food or water.

Absorption: The process by which hazardous materials are absorbed into the body through the skin.

Injection: The process by which a toxic substance is introduced directly into the blood by a needle, cannula or some other mechanical means.

Secondary contamination – The process by which a contaminant is carried out of the hot zone and contaminates people, animals, the environment, or equipment.

Self contained breathing apparatus (SCBA) – Type of respiratory protection used by the fire service. Consists of a harness, bottle, regulator and face piece.

Sensitizer/allergen – A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemicals.

Shelter-in-place protection – When evacuation cannot be performed or when evacuating the public would put them at greater risk, the public is directed to remain in their homes, businesses or building. They should close doors, windows and turn off HVAC systems.

Shipping papers – When materials are transported papers accompany them to identify origination, destination and the carrier.

Route of Transport	Title of Papers	Location	Responsible Person
Highway:	Bill of lading or freight bill,	Cab	Driver.
Rail	Waybill and/or consist	Member of crew	Conductor
Water	Dangerous cargo manifest	Wheelhouse	Captain
Air	Air bill	Cockpit	Pilot

Short-term exposure limit (TLV-STEL) – Is the maximum average concentration, averaged over a 15-minute period, to which healthy adults can be safely exposed for up to 15 minutes continuously. Exposure should not occur more than four times a day with at least 1 hour between exposures.

Specific gravity – The ration of the weight of a volume of liquid or solid to the weight of an equal volume of water, with the gravity of water being 1.0.

States of matter – A matter is either in the form of a solid, liquid or gas. Materials can move between the different states when exposed to the environment.

Teratogen – A material that affects the offspring when the embryo or fetus is exposed to that material.

Threshold limit value (TLV-TWA) – The maximum concentration, averaged over 8 hours, to which a healthy adult can be repeatedly exposed for 8 hours per day, 40 hours per week.

Toxic products of Combustion - The toxic byproducts of the combustion process.

Vapor density – Measures the weight of a given vapor as compared with an equal volume of air, with air having a value of 1.0.

Vapor pressure – The pressure exerted on the inside of a closed container by the vapor in the space above the liquid in the container.

Water solubility – The degree to which a substance is soluble in water.

**APPENDIX C
IN-HOUSE PROCTOR
INSTRUCTIONS AND REQUEST
FOR CERTIFICATION FORMS**

Tester Instructions for “In-House” Comprehensive Examination

As the training officers for your department you are authorized by DFPES to conduct the 100% skills test for this level of certification. You must be certified to the level that you are testing, i.e., if you’re FF2 you can test FF1 and FF2, Hazardous Material Operations.

***PRIOR TO CONDUCTING TEST, REVIEW TRAINING RECORDS**

It is important that before doing this “In-House” exam that the candidate has completed training in all areas for the level being tested. ***SAFETY OFFICER SELECTED AND BRIEFED**

Select a Safety Officer to assist you during the test. This person, if possible, should not be taking the same test that is being given. The Safety Officer will not assist with the testing process. The Safety Officer is there to protect the CANDIDATES from injury during the testing process. .

The Safety Officer shall be in a position to observe all students and ensure their safety at all times during the testing procedure.

By using the following instructions you will be able to evaluate the skill being tested and determine the candidate’s readiness for the State “Spot Check” exam.

1. Keep in mind this is a **test** and there should be **no coaching or training** during the testing process. If a candidate fails to perform a skill, it will count as a first attempt failure and they will be given a second attempt. If they fail a second time they need to be retrained on that skill and tested again. Only **qualified** candidates that have passed with **100%** should be allowed to take the State SPOT CHECK exam.
2. Before beginning the testing process meet with all candidates and review the testing process. Explain that this is a **test** and that the same process being used for the “In-House” will be used during the state exam.
3. Designate a secure location for the candidates to remain in while the “In-House” exam is conducted. This location should be away from the area where the exam is being conducted.
4. If possible, separate your testing stations so candidates cannot observe each other during the test.
5. To evaluate a candidate’s performance, use the following as a guide.
 - a. the skill is completed in the allotted time,
 - b. competence is shown by completing all performance criteria,
 - c. safety is shown while completing the skill.
6. At each test station the tester will read the **SKILL** to be demonstrated, the **CONDITIONS** to be met and the **TIME** limit to complete each skill. This information is contained in the skill section of each standards packet. Do this with each student as they come to each testing station. Ask for any questions. As each skill is tested and completed, sign it off in the section provided on the candidates training record. By conducting the “In-House” test in this manner, you will prepare your candidates to successfully pass the state “spot check” exam. This will also assure training records are current and only those who are truly prepared take the state certification examination.

Wyoming Department of Fire Prevention & Electrical Safety

EXAMINATION REQUEST / CERTIFICATION REQUEST FORM

Please complete all information on BOTH sides of this form and return to the DFPES at least **30 days prior** to the requested examination date. A separate request **MUST** be made for each level of certification exam desired and for each exam date. Phone Number: 307-777-7288. FAX: 307-777-7119

Department Information

Department Name: _____

Examination Request for Written / Skills – Circle the appropriate level

WRITTEN Examination: FF I FF II HMA HMO ADO –Aerial ADO –Pumper Fire Officer I Fire Instructor I
Fire Investigator

MANIPULATIVE Examination: FF I FF II HMO ADO –Aerial ADO –Pumper Fire Officer I Fire Instructor I

Requested Date and Time: _____

Number taking Written Examination: _____ Number taking Manipulative exam: _____

Examination Location: _____

Street Address: _____ City/State: _____ Zip: _____

By your signature below we acknowledge that training records exist to support that each individual who will attend the exam has received a learning experience in each subject area required for testing and has met all other requirements for the level being examined for as specified in the Certification Policy and Procedures. Department requesting the above exam, will have appropriate space and safe accommodations and equipment for all written and manipulative skills.

Fire Chief/Head of Department (Signature)

Training Officer (Signature)

Fire Chief/Head of Department (typed/printed)

Training Officer (type/printed)

Department Mailing Address

Daytime Phone Number

Second contact number

Certification Request

The following department or agency requests that the Department of Fire Prevention & Electrical Safety certify the individuals listed on reverse side of this form. **NOTE: The original "Training Record" of the individuals must be sent with this form - if the "Training Record" has not been presented to the DFPES during a "Spot Check Skills" testing event. Please keep a copy of the "Training Record" for your files.**

Department Name _____

By my signature below, I attest that the individuals listed on the reverse side of this form have completed all requirements for certification as defined in the Wyoming Firefighters Policy and Procedures Manual.

Fire Chief/Head of Department (Signature)

Fire Chief/Head of Department (typed/Printed)

Department Mailing Address

Daytime Phone Number

Second contact number

HMA and HMO Certification Standard

Approved April 2008 / Updated December 2009

Department Name: _____ Date: _____

Type or print names of participants who will be taking the examination.

APPLICANT NAME	LEVEL REQUESTED
1. _____ - _____ - _____	_____
2. _____ - _____ - _____	_____
3. _____ - _____ - _____	_____
4. _____ - _____ - _____	_____
5. _____ - _____ - _____	_____
6. _____ - _____ - _____	_____
7. _____ - _____ - _____	_____
8. _____ - _____ - _____	_____
9. _____ - _____ - _____	_____
10. _____ - _____ - _____	_____
11. _____ - _____ - _____	_____
12. _____ - _____ - _____	_____
13. _____ - _____ - _____	_____
14. _____ - _____ - _____	_____
15. _____ - _____ - _____	_____
16. _____ - _____ - _____	_____
17. _____ - _____ - _____	_____
18. _____ - _____ - _____	_____
19. _____ - _____ - _____	_____
20. _____ - _____ - _____	_____
21. _____ - _____ - _____	_____
22. _____ - _____ - _____	_____
23. _____ - _____ - _____	_____
24. _____ - _____ - _____	_____

Send Request form to:
 Department of Fire Prevention And Electrical Safety
 122 W. 25th Street, Herschler 1 West,
 Cheyenne, WY 82002
 Attention: Certification Coordinator