

Utah Fire Service Certification System

RESPONDERS TO HAZARDOUS MATERIALS/WEAPONS OF MASS DESTRUCTION INCIDENTS

**Hazardous Materials Awareness
Hazardous Materials Operations**



CERTIFICATION STANDARD

*January 2014
Updated March 2014*

Utah Fire Service Certification Council

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Hazardous Materials / Weapons of Mass Destruction Incidents Technical Committee

The Certification Council would like to recognize and extend a voice of appreciation to the following fire service professionals for their work on the Hazardous Materials/Weapons of Mass destruction Incidents certification standard. These individuals devoted many hours to reviewing the National Fire Protection Association (NFPA) 472 standard, certification test bank, and reviewing and developing the skills for this standard.

Thank You...

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INTRODUCTION

The world we live in is changing so fast, and the many phases of the Emergency Service are becoming so technical and complex that 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 a necessity in this process.

The Emergency Service in Utah, through a State Certification Program, can meet the needs of future growth and establish uniformity through certification. Certification provides a more effective and efficient utilization of resources to provide the best possible protection for all Utah citizens.

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*, 2013 Edition, as verified and adopted by the Utah Fire Service Certification Council (UFSCC).

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

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

Hazardous Materials Awareness Level -

The focus and purpose of the Awareness level 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.

Hazardous Materials Operations Level -

The focus and purpose of the Operations Level First Responder is to give the front line firefighter the ability to:

- Perform all competencies as developed at the Awareness level.
- Collect information using MSDS, CHEMTREC, local LEPC
- Perform LIMITED defensive actions.
- Establish and manage a decontamination corridor (under direction from a qualified HM Technician).
- Don splash type protective clothing to assist as needed at a hazardous materials incident.

With successful completion of this standard which is based on the NFPA 472, 2013 edition, a candidate will have satisfied all requirements for the Hazardous Materials Awareness and Operation levels as listed in the **OSHA 29 CFR 1910.120(q)(6)(i) Awareness and OSHA 29 CFR 1910.120(q)(6)(ii) Operations.**

CERTIFICATION REQUIREMENTS

AWARENESS LEVEL

Entrance Requirements

Occupational Safety and Health Requirements

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

- 1- Complete Entrance Requirements.
- 2- Train on the required written objectives.
- 3- Pass a written examination administered by the Certification Council.
- 4- Request Awareness level Certification.
- 5- Request re-certification

The UFSCC 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 UFSCC. The Council 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 Utah Fire Service Certification Council strongly recommends careful evaluation before altering or doing away with existing entrance requirements.**

The requirements as listed in NFPA 1001, Chapter 4 are:

- 1- Meet the minimum educational requirements established by the authority having jurisdiction.
- 2- The Utah Fire Service Certification Council Policy 11.3 requires that a candidate must be 18 years of age to be certified.
- 3- Meet the medical requirements of NFPA 1582, *Standard on Comprehensive Occupational Medical Program for Fire Departments*
- 4- 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.

The requirements listed in NFPA 1500, 2013, Chapter 7, are:

1. Meet the Protective Clothing and Protective Equipment requirements of NFPA 1500, Policy A.7.13.1.
2. Meet OSHA 29 CFR 1910.134(g) contains the statement, "Respirators shall **not** be worn when conditions prevent a good face seal."
3. Meet OSHA 1910.134 (g)(1)(i)(A) Occupational health and safety regulatory requirements.

Department Training Officers

In order for a department to enroll in the certification process, it is necessary for the department to assign training officers. It is recommended that the department 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 Certification Council strongly recommends those training officers be state certified as a Fire Service Instructor I.

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 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 Utah Fire And Rescue Academy at (801) 863-7700 or 1-888-548-7816 for assistance in setting up and monitoring certification training.

The final entrance requirement is to complete the "Intent to Participate" form provided in Appendix D and return it to the Certification Council. Remember, participation in the certification process is **VOLUNTARY**. Once you have enrolled, you can withdraw if desired.

If a department is already participating in the Utah Fire Service Certification System, it will not be necessary to file another "Intent to Participate" form.

DEPARTMENT **TRAINING**

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

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

- 1- Hazardous Materials - Awareness level course sponsored by the Utah Fire & Rescue Academy.
- 2- Hazardous Materials - Awareness level course as taught by Utah Division of Emergency Services & Homeland Security's Hazardous Materials Institute (HMI). Participants who have completed this training should have their department request certification examination (written) from the Utah Fire Service Certification Council. Certification examination can be administered upon completion of the Awareness course.
- 3- Department Based Training – Departments can create their own Hazardous Materials - Awareness level course which meets the requirements as outlined in NFPA 472, 2013, Chapter 4. Testing will be conducted at the conclusion of the course upon request from the department training officer or administrator.

Written Objectives

Written objectives for the Awareness level are covered in the following text:

- **IFSTA, Hazardous Materials for First Responders, 4th Edition.**
- **Emergency Response Guidebook (current edition)**

There are **No** manipulative skill examination requirements for the Awareness Personnel Level. The manipulative skill for this level is demonstrated during the written examination by using the current edition of the Emergency Response Guidebook.

CERTIFICATION EXAMINATIONS

Written Examinations

After completion of the training process, the Chief/Administrator can request testing for the candidate using the "Request for Examination" form in Appendix D. The candidate will then have three attempts to pass the written examination. A separate application must be sent to the Certification Council for each attempt. Request forms must reach the Certification Council no later than **30 days** prior to the examination date. The entire examination process must be completed within one year of the first written exam date.

The written examination is a randomly generated **60-question** test covering the written objectives of the Awareness level. This examination is based on the candidate's ability to use the North American Emergency Respond Guidebook (NAERG); therefore this book is used during the test. A minimum score of **70%** is required to pass the certification exam. Firefighters failing the first attempt of the written exam will be permitted to retest no sooner than 30 days from the date of the last exam. Three attempts are given to pass the exam. If a participant fails the written examination three times, he/she has failed the certification process and must wait **1 year** from the date of the last failed exam before re-entering testing. Exam results are forwarded to the Chief/Administrator within 30 days following the receipt of the completed Exam.

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 Transportation (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.

Manipulative Objectives

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

AWARENESS
LEVEL
CERTIFICATION

When all requirements for certification have been met, applicants are eligible to be certified. The Chief/Administrator may apply to the Utah Fire Service Certification Council for certification for those participants who have successfully completed the certification training/testing process. Request for state certification will be submitted to the Council using the "Request for Certification" form provided in Appendix D. The names are then checked against the official state records to ensure that each individual listed has met all requirements.

Those applicants who have met the requirements are issued a wallet card and certificate. These are sent to the Chief/Administrator for disbursement. There is no cost for testing/certification if the candidate passes their written examination on the first attempt. A \$40 testing/certification fee will be assessed if the candidate passes their written exam on the 2nd attempt, and a \$60 fee will be assessed if the candidate passes their written exam on the 3rd attempt. This fee schedule is applicable as of July 1, 2013.

***The above fee table applies to Utah Fire Departments only. All other agencies will be assessed a testing/certification fee of \$90.00 per level.**

Re-certification

Certifications are valid for a three-year period. Each certified Firefighter may renew certification by having the Chief of the Participating Agency submit an "Application for Re-certification" provided in Appendix D.

Each certified Firefighter shall participate in at least 36 hours of structured class and manipulative training per year. A total of 108 hours of training is required during the previous certification period.

*For more information
on Utah Firefighter
Certification contact
the:*

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Utah Fire and Rescue Academy
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CERTIFICATION REQUIREMENTS

OPERATIONS LEVEL

Entrance Requirements

Department Training Officers

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

- 1- Complete Entrance Requirements.
- 2- Meet pre-requisites, certified at the Awareness level with UFSCC.
- 3- Set up and maintain department records.
- 4- Train on the required written and manipulative objectives.
- 5- Pass a department "In House" practical skills examination.
- 6- Meet any other training requirements/prerequisites as defined by the Certification Council.
- 7- Pass both written and practical skills examination administered by the Certification Council.
- 8- Request Basic Operations level Certification.
- 9- Request re-certification.

The UFSCC 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 UFSCC. The Council 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. Since this is a local decision, this is permitted. However, due to the amount of physical, mental and emotional stress inherent in this profession, **the Utah Fire Service Certification Council strongly recommends careful evaluation before altering or doing away with existing entrance requirements.**

The requirements as listed in NFPA 1001, Chapter 4 are:

- 1- Meet the minimum educational requirements established by the authority having jurisdiction.
- 2- The Utah Fire Certification Council Policy 11.3 requires that a candidate must be 18 years of age to test and be certified.
- 3- Meet the medical requirements of NFPA 1582, *Comprehensive Occupational Medical Program for Fire Departments*
- 4- 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.

In order for a department to enroll in the certification process, it is necessary for the department to assign training officers. It is recommended that the department 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 Certification Council strongly recommends those training officers be state certified as a Fire Service Instructor I.

Departments who **do not** have certified personnel to act as training officers for certification training should contact the Utah Fire And Rescue Academy at (801) 863-7700 or 1-888-548-7816 for assistance in setting up and monitoring certification training.

The final entrance requirement is to complete the "Intent to Participate" form provided in Appendix D and return it to the Certification Council. Remember, participation in the certification process is **VOLUNTARY**. Once you have enrolled, you can withdraw if desired.

If a department is already participating in the Utah Fire Service Certification System, it will not be necessary to file another "Intent To Participate" form.

DEPARTMENT TRAINING

Hazardous Materials Operations level training is a basic level of knowledge that all firefighters should master. NFPA 1500 strongly suggests that all firefighters who could respond to a potential hazardous materials spill be certified Operations level as a minimum. The Operations level is also a prerequisite for certification at the Firefighter I level.

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

- 1- Hazardous Materials –Operations level course sponsored by the Utah Fire & Rescue Academy.
- 2- Hazardous Materials – Operations level course as taught by Utah Division of Emergency Services & Homeland Security's Hazardous Materials Institute (HMI). Participants who have completed this training should have their department request certification examinations (written and manipulative) from the Utah Fire Service Certification Council. Certification examinations can be administered upon completion of the Operations level course.
- 3- Department Based Training – Departments can create their own Hazardous Materials Operations level course which meets the requirements as outlined in NFPA 472, 2013, Chapter 5, 6.2, and 6.6. The skills and Training Record as given in this standard must be completed for each person and a completed training record must exist for each participant. Testing will be conducted at the conclusion of the course upon request from the department training officer or administrator.

Written Objectives

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

- **IFSTA, Hazardous Materials for First Responders, 4th Ed.**
- **Emergency Response Guidebook (current 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 an 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 Utah Standard. This includes performing the proper steps in sequence. Competence will be measured in accordance with the UFSCS manipulative skill objectives.

*Department Training
Records*

Each participant shall have a current training record on file with the department which indicates that he/she has trained on all manipulative skill objectives. Training records must have the date and Instructors original signature and/or initials for each line. Departments may set up their own training records or use the one provided in Appendix A.

*Department "In-House"
Manipulative Skills
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" skill 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.

Proctor instructions for the examination are in Appendix B. In-house testers shall follow the proctor instruction sheet to provide for uniformity and fairness during the exam. It is recommended that 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 Council's manipulative skills "spot check" examination. Department records must show that all participants have successfully passed the "in-house" exam.

CERTIFICATION EXAMINATIONS

Written Examinations

After completion of the training process, the Chief/Administrator can request testing for the candidate using the "Request for Examination" form in Appendix D. The candidate will then have three attempts to pass the written examination and three attempts to pass the manipulative skill "spot check" examination. A separate application must be sent to the Certification Council for each attempt. Request forms must reach the Certification Council no later than **30 days** prior to the examination date. The entire examination process must be completed within one year of the first written exam date.

The written examination is a randomly generated **80-question** test covering the written objectives of the Hazardous Materials Operations level standard. This examination allows the use of the Emergency Responds Guidebook. A minimum score of **70%** is required to pass the certification exam. Firefighters failing the first attempt of the written exam will be permitted to retest no sooner than **30 days** from the date of the last exam. Three attempts are given to pass the exam. If a participant fails the written examination three times, he/she has failed the certification process and must wait **1 year** from the date of the last failed exam before re-entering testing. Exam results are forwarded to the Chief/Administrator within 30 days following the receipt of the completed exam.

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 Skills *"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 Utah Fire Service Certification Council 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- 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 skill objective must be completed within the allotted time.
- **Safely** -Each manipulative skill objective must be completed safely. Conduct that could injure an 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 Utah Standard. This includes performing the proper steps in sequence. Competence will be measured in accordance with the UFSCS 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.

OPERATIONS **LEVEL** **CERTIFICATION**

When all requirements for certification have been met, applicants are eligible to be certified. The Chief/Administrator may apply to the Utah Fire Service Certification Council for certification for those participants who have successfully completed the certification training/testing process. Request for state certification will be submitted to the Council using the "Request for Certification" form provided in Appendix D. The names are then checked against the official state records to ensure that each individual listed has met all requirements.

Those applicants who have met the requirements are issued a wallet card and certificate. These are sent to the Chief/Administrator for disbursement. There is no cost for testing/certification if the candidate passes their written examination on the first attempt. A \$40 testing/certification fee will be assessed if the candidate passes their written exam on the 2nd attempt, and a \$60 fee will be assessed if the candidate passes their written exam on the 3rd attempt. This fee schedule is applicable as of July 1, 2013.

***The above fee table applies to Utah Fire Departments only. All other agencies will be assessed a testing/certification fee of \$40.00 per level.**

Prerequisites for Certification

Applicants for certification at the Operations level **must** be state certified through the Utah Fire Service Certification System at the **Hazardous Materials Awareness level**. Hazardous Materials Operations level certification **will not** be issued until participants have fulfilled this requirement.

Re-certification

Certifications are valid for a three-year period. Each certified Firefighter may renew certification by having the Chief of the Participating Agency submit an "Application for Re-certification" provided in Appendix D.

Each certified Firefighter shall participate in at least 36 hours of structured class and manipulative training per year. A total of 108 hours of training is required during the previous certification period.

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HAZARDOUS
MATERIALS
OPERATIONS
LEVEL
CERTIFICATION
CHECKLIST

ENTRANCE REQUIREMENTS:

Each participant has met requirements listed in NFPA 1001, 2008 Edition, Chapter 4 or those established by the authority having jurisdiction.

Department has filed an "Intent to Participate" form with the UFSCC.

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

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" manipulative skills examination

* Results of exam are documented in department training records

ADDITIONAL TRAINING/PREREQUISITE REQUIREMENTS:

* Each participant is state certified through the UFSCC at the Hazardous Materials Awareness level

CERTIFICATION EXAMINATIONS:

Each participant has passed the UFSCC written examination

* Each participant has passed the UFSCC manipulative skills "Spot Check" examination administered by an approved Certification Tester

(*) Required for First Responder Operations level **ONLY**

OPERATIONS LEVEL MANIPULATIVE SKILL OBJECTIVES

REPORTING AND DOCUMENTATION

1. Demonstrate procedures for establishing and transferring command at a Hazardous Materials/WMD incident, utilizing an incident management system.

REFERENCE: NFPA 472, 2013 Edition, 5.1.2.2(3)(c)

CONDITION: Given a Local Emergency Response Plan (LERP) provided by the Authority Having Jurisdiction (AHJ), a scenario for a Hazardous Materials/WMD incident and an Emergency Response Guide (ERG) and a tactical worksheet as provided by UFRA or AHJ.

COMPETENCE:

- Give a brief size-up:
 - Unit on scene
 - Location
 - Nature of incident (i.e. Containers, location, nearby exposures, risks)
 - Current conditions (This is what I see)
- Identify material.
- Identify the isolation zones
- Implement appropriate emergency operations
- Implement site safety and control plan
- Designate a safety officer
- Establish Incident Command & Accountability and announce location
- Name the Incident

TIME: 7:00 Minutes

2. Brief assigned personnel so that the personnel are informed of specific tasks, standards, safety, operational, and special interest area considerations for the following:

REFERENCE: NFPA 472, 2013 Edition, 5.5.2

CONDITION: Given one of two scenarios involving HazMat/WMD incidents, including a completed Incident Action Plan

COMPETENCE:

- Status of incident
- Hazards identified
- Tasks to be performed
- Description of the site
- Expected duration of the tasks
- PPE requirements
- Monitoring requirements
- Describe emergency radio traffic procedures
- Describe evacuation signal procedures

TIME: 7:00 Minutes

3. Identify and complete the reporting and documentation requirements within the emergency response plan or IAP regarding PPE.

REFERENCE: NFPA 472, 2013 Edition, 6.2.5.1

CONDITION: Given a scenario and a blank ICS 202 & ICS 204 or other documents used by the AHJ to meet FEMA and/or department SOG's, document the type of PPE required by the scenario and special instructions.

COMPETENCE:

- ICS 202 (General Safety Message)
 - *Requires the use of PPE when exposures are expected.
- Fill out the ICS 204 (Special Instructions)
 - Identify type of PPE required by scenario
 - Identify when it is to be worn
 - Reinforce compliance

TIME: 10:00 Minutes (time begins after scenario has been reviewed)

DECONTAMINATION

4. Demonstrate Emergency Decontamination of a victim or responder by using water.

REFERENCE: NFPA 472, 2013 Edition, 5.1.2.2(3)(e)

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

COMPETENCE:

- Select appropriate site to minimize runoff contamination.
- Responder directs victim on procedures. (flush, strip, flush, cover)
- Rinse personnel starting from the head, working towards the feet.
- Victim being decontaminated removes contaminated clothing as much as possible.
- If absolutely necessary, decon team members touch outside of clothing being removed to avoid cross contamination.
- Victim places contaminated articles in one designated area within contamination zone.
- Victim is rinsed head to toe again
- Victim given protective clothing.
- Victim directed to exit warm zone for further evaluation

TIME: 5:00 Minutes

5. Demonstrate the setting up of a multiple station decontamination corridor.

REFERENCE: NFPA 472, 2013 Edition, Utah Standard (see Sample in Appendix C) 6.3.1.2.2(2), 6.3.3.2(4), 6.4.4.2(1)(2)

CONDITION: Given equipment and diagram as determined by incident, department SOG's, or qualified hazmat technician, 2-member team.

COMPETENCE:

- Select appropriate site, up wind of incident, drainage towards "hot" zone.
- Clearly marked entry point.
- Tool drop.
- Confinement of decon solutions and runoff water.
- Wash station, (may be multiple).
- Rinse station, (may be multiple).
- SCBA drop/Bottle change.
- PPE drop station(s).
- Clearly marked exit point.

TIME: 10:00 Minutes

6. Demonstrate decontamination of emergency responder.

REFERENCE: NFPA 472, 2013 Edition, Utah Standard 5.1.2.2(3)(e)

CONDITION: Given a decon corridor, water supply, hose/nozzles, 2-member team, a responder dressed in appropriate level of protection to be decontaminated. Minimum Splash Suit and SCBA for person conducting decontamination.

COMPETENCE:

- Direct responder to enter entry point.
- Direct responder to drop tools in designated area.
- Direct responder to enter wash station.
- Wash responder starting from the head.
- Decon personnel control run-off of wash station.
- Direct responder to drop SCBA in designated area without removing facepiece.
- Decon team members touch outside of clothing being removed to avoid contaminating responders.
- Remove contaminated PPE or clothing.
- Place contaminated articles in one designated area within corridor.
- Direct responder to remove face piece and remove inner gloves.
- Direct responder to exit warm zone for further evaluation.

TIME: Wet 15:00 Minutes
Dry 10:00 Minutes

PERSONAL PROTECTIVE EQUIPMENT

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

REFERENCE: NFPA 472, 2013 Edition, 5.3.3(1)(a)(b)

CONDITION: Given a Self-Contained Breathing Apparatus (SCBA) used by the responder.

COMPETENCE:

- Identify and describe the backpack/harness
- Identify and describe the air cylinder - cylinder, valve, and pressure gauge.
- Identify and describe the regulator assembly - high pressure hose, low pressure alarm, main line valve, emergency by-pass valve, PASS device if equipped
- Identify and describe the facepiece assembly - low pressure hose/mask-mounted regulator, exhalation valve, and head harness

TIME: 5:00 Minutes

8. Demonstrate donning Self-Contained Breathing Apparatus (SCBA).

REFERENCE: NFPA 472, 2013 Edition, 6.2.4.1(3)(5)

CONDITION: Given a Self-Contained Breathing Apparatus (SCBA) used by the responder.

COMPETENCE:

- Check SCBA cylinder pressure gauge for full level.
- Open cylinder valve fully, verbalize pressure.
- Check regulator and cylinder gauge - gauges should read within 100 psi of each other.
- Don backpack and fasten/tighten all straps.
- Don face piece, adjust head harness.
- Check seal, positive/negative pressure check.
- Attach supply hose to regulator **or** face piece.
- Turn on PASS device if equipped.

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

TIME: 1:00 Minute

9. **Demonstrate doffing Self-Contained Breathing Apparatus (SCBA).**

REFERENCE: NFPA 472, 2013 Edition, 5.4.4(7), 6.2.4.1(3)(5)

CONDITION: Given a Self-Contained Breathing Apparatus.

COMPETENCE:

- Disconnect regulator from facepiece or low-pressure hose from regulator.
- Doff SCBA and place on ground, close cylinder valve.
- Relieve excess pressure from regulator, listen for low-pressure alarm.
- Turn off PASS device, if equipped.
- Fully extend all straps on SCBA backpack.
- Fully extend all straps on facepiece.
- Inspect entire SCBA and Facepiece for cleanliness and damage.

TIME: 2:00 Minutes

10. **Assist/Don emergency response personnel in donning chemical splash protective clothing and SCBA.**

REFERENCE: NFPA 472, 2013 Edition, 5.1.2.2, 6.2.4.1(3)

CONDITION: Given a splash suit (as used by the AHJ), Boots, Gloves, Duct Tape, Helmet, SCBA, 2-member team, **one person donning and one dressing.**

COMPETENCE: **Skills for person Donning Splash suit.**

- Don hooded splash suit.
- Don boots.
- Don SCBA.
- Don face piece.
- Check face seal.
- Don inner gloves.
- Don outer gloves.
- Don head protection.

Skills for person assisting in Donning of Splash suit.

- Assist donning splash suit.
- Assist donning boots.
- *Correctly tape suit to boots
- *Completely tape hood of PPE to SCBA face piece, do not cover field of vision on face piece.
- Assist donning SCBA.
- *Tape front closure area and neck area.
- Assist donning inner gloves.
- Assist donning outer gloves.
- *Correctly tape suit to outer glove.
- Assist responder to go on air
- Fold all ends of tape (2" minimum).

*** Taping not required for encapsulating splash suits unless gloves and/or boots are not integrated into the suit.**

TIME: 6:00 Minutes encapsulating suit
12:00 Minutes non-encapsulating suit

PERFORMING DEFENSIVE CONTROL ACTIONS

11. Demonstrate stopping product release by closing remote valves.

- REFERENCE: NFPA 472, 2013 Edition, 5.1.2.2(4)(a),6.6.4.1(3)(H)(4)(5)
- CONDITION: Given a simulated spill from a tank or a fixed facility, wearing full PPE as defined by the Emergency Response Guide, remote valve, 2-member team
- COMPETENCE:
- Confirm location of remote valve.
 - Approach valve location staying out of product.
 - Open or close valve.
 - Exit area maintaining team integrity.
 - Evaluate whether shutting off the remote valve stopped the leak. (Must verbalize)
- TIME: 2:00 Minutes

12. Demonstrate the proper application of fire fighting foam on a simulated hazardous materials spill.

- REFERENCE: NFPA 472, 2013 Edition, 6.6.4.1(1)(2)(a)(b)(c)(d)
- CONDITION: Given a simulated gasoline spill (36 sq.ft.), wearing full PPE as defined by the Emergency Response Guide, foam application system (apparatus or foam extinguisher), 2-member team.
- COMPETENCE:
- Approach spill upwind/upgrade out of product.
 - Demonstrate proper application techniques.
 - Select one of the three methods of foam applications (roll on, bank, rain down)
 - Do not direct stream directly into pool.
- TIME: 4:00 Minutes

13. Demonstrate construction of a dike to divert a spill

- REFERENCE: NFPA 472, 2013 Edition, 5.1.2.2(4)(a),6.6.4.1(3)(d)(f)
- CONDITION: Given a simulated moving spill, wearing full PPE as defined by the Emergency Response Guide sand or dirt, shovels, plastic, 3-member team.
- COMPETENCE:
- Construct a dike 6 feet long and 6 inches high.
 - Work ahead of spill, out of product.
 - Two personnel build dike and one standby as safety.
 - Divert spill.
 - Evaluate whether the dike is constructed appropriately and accomplishes objective. (Must verbalize)
- TIME: 5:00 Minutes

14. Demonstrate construction of a simple dam to control a spill

REFERENCE: NFPA 472, 2013 Edition, 6.6.4.1(3)(c)(g)

CONDITION: Given a simulated spill, wearing full PPE as defined by the Emergency Response Guide sand or dirt, shovels, plastic, 3-member team.

COMPETENCE:

- Construct a dam 6 ft. long, 8-12 inches high.
- Work ahead of spill out of product.
- **Two** personnel to build dam and **one** member to standby as safety.
- Control spill.

TIME: 5:00 Minutes

15. Demonstrate the use of absorbent material to control a spill of a hazardous material.

REFERENCE: NFPA 472, 2013 Edition, 6.6.4.1(3)(a)

CONDITION: Given a simulated spill, wearing full PPE as defined by the Emergency Response Guide, absorbent pad or other material, shovels, 3-member team.

COMPETENCE:

- Control or absorb spill by putting absorbent materials in place.
- Work ahead of spill out of product.
- **Two** personnel to put materials in place and **one** member to standby as safety.

TIME: 5:00 Minutes

16. Demonstrate control activity by dilution of product.

REFERENCE: NFPA 472, 2013 Edition, 6.6.4.1(3)(e)

CONDITION: Given a simulated 5 gallon spill of alcohol, apparatus, hoselines, water source, diking or spill retention material as appropriate, wearing full PPE as defined by the Emergency Response Guide, Firefighter Turnouts, SCBA, and a 2-member team under the direction of a qualified technician level responder.

COMPETENCE:

- Select location to efficiently and safely perform dilution operations.
- Evaluate the rate of flow of the leak to determine required capacity of the retention area and the quantity of water required to dilute the material to a safe level.
- Working as a team, monitor and assess the leak.
- Advance hoselines and tools to retention area.
- Flow correct amount of water to dilute spilled material to safe level.
- Apply the water for dilution from a distance without making any contact with the spilled material
- Monitor any diking or dams to ensure integrity of retention area.
- Notify command upon completion of assignment.

TIME: 15:00 Minutes

17. Demonstrate proper evidence preservation for suspected criminal or terrorist acts.

REFERENCE: NFPA 472, 2013 Edition, 5.1.2.2(3)(b)

CONDITION: Given a scenario, wearing full PPE as defined by the Emergency Response Guide, barrier, tape, and road cones.

COMPETENCE:

- Prevent individuals from altering or destroying physical evidence.
- Restrict responder movement, location and activity around the evidence location.
- Secure and mark evidence location (barrier tape/road cones).
- Notify command immediately of findings including location and time.

TIME: 5:00 Minutes

APPENDIX – A
TRAINING RECORD

**UTAH FIRE SERVICE CERTIFICATION SYSTEM
HAZARDOUS MATERIALS OPERATIONS**

NFPA 472, 2013 Edition

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

NAME: _____ **DEPARTMENT:** _____

SECTION	TRAINING RECORD		IN-HOUSE COMP. EXAM			MANIPULATIVE SKILL-DEMONSTRATE
	DATE	INST.	DATE	INST.	PASS	
Reporting and Documentation						1. Demonstrate procedures for establishing and transferring command.
						2. Brief assigned personnel of tasks, standards, safety, operational and special interest areas.
						3. Identify and complete the reporting and documentation requirements within the emergency response plan or IAP regarding PPE.
Decontamination						4. Demonstrate emergency decon of a victim by using water.
						5. Demonstrate setting-up a multiple station decontamination area.
						6. Demonstrate decontamination of emergency responder.
Personal Protective Clothing						7. Identify and describe the function of each component of the SCBA.
						8. Demonstrate donning SCBA.
						9. Demonstrate doffing SCBA.
						10. Assist/Don emergency response personnel in donning chemical splash protective clothing and SCBA.
Defensive Control						11. Demonstrate stopping product release by closing remote valves.
						12. Demonstrate proper application of firefighting foam on simulated hazardous materials spill.
						13. Demonstrate construction of a dike to divert spill.
						14. Demonstrate construction of a dam to control a spill.
						15. Demonstrate use of an absorbent material to control a spill of a hazardous material.
						16. Demonstrate control activity by dilution of a product.
						17. Demonstrate proper evidence preservation for suspected criminal or terrorist acts.

APPENDIX - B
DECONTAMINATION CORRIDOR

Sample Decontamination Corridor

HOT ZONE



Equipment Drop
Shuffle Pit



Wash Station



Rinse Station



Bottle Change



Outer PPE Removal



Inner Clothing
Removal



Personal Shower



Medical Evaluation

This is a sample of a multiple step decontamination corridor. Decontamination corridors will vary based on local jurisdictional SOP's / SOG's; however, all decontamination corridors will have these steps involved in the decontamination process.

APPENDIX - C
IN-HOUSE PROCTOR INSTRUCTIONS

Proctor Instructions for “IN-HOUSE” Comprehensive Examination

As the training officers for your department you are authorized by the Certification Council 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 both FF1 and 2, Awareness and Operations.

***PRIOR TO CONDUCTING THE 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.

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

1 - Keep in mind that this is a TEST and there should be NO COACHING or TRAINING during the testing process. If a candidate fails to perform a skill that skill will count as a first attempt failure and they will be given a second attempt. If they fail a second attempt, 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 that testing process conduct a meeting 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 - If possible, designate two separate areas for students testing. One area for those who are in the testing process and one area for those who have not yet begun the testing process. If separate areas are not available, make sure someone is in the room to ensure that students do not discuss the testing material. Make sure these areas have no training manuals, or other reference materials for students to look at while waiting testing.

4 - 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

5 - At each test station the Tester will read the Skill to be demonstrated, the Condition 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 stations. 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 the manner, you will prepare your candidates to successfully pass the State “Spot Check” exam. This will also assure that training records are current and that only those who are truly prepared take the Certification Examination.

APPENDIX - D
CERTIFICATION FORMS

Utah Fire Service Certification Council



INTENT TO PARTICIPATE

Organization Information

The following organization intends to participate in the Utah Fire Service Certification Program:

Department/Organization Name: _____

Department/Organization Type: Fire EMS Other _____

Address: _____ Dept. /Org Phone Number: _____

City: _____ State: _____ Zip Code: _____

Chief/Administrator: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Daytime Phone #: _____ Evening Phone #: _____

Training Officer: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Daytime Phone #: _____ Evening Phone #: _____

Chief/Administrator Signature

By signing below, I certify that the information listed is true and correct. I also certify that the above listed department/organization will follow all policies and procedures of the Utah Fire Service Certification system.

Chief/Administrator Signature: _____

Utah Fire Service Certification Council
C/O Utah Fire and Rescue Academy
3131 Mike Jense Parkway
Provo UT 84601
Fax: 801-374-0681

Certification Office Use Only

Department Name

Date

Please list the names of participants who will be taking the examination.

Applicant Name

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____
- 11 _____
- 12 _____
- 13 _____
- 14 _____
- 15 _____
- 16 _____
- 17 _____
- 18 _____
- 19 _____
- 20 _____

Please sign and return to:
Utah Fire Service Certification Council
C/O Utah Fire and Rescue Academy
3131 Mike Jense Parkway Provo UT 84601
Toll Free # 888-548-7816
Fax: 801-374-0681

**Utah Fire Service Certification Council
- CERTIFICATION – RECERTIFICATION REQUEST -**

Department Information

The following department/participating agency requests that the Utah Fire Service Certification Council certify / re-certify the individuals listed on the reverse side of this form.

Department Name: _____

Certification or Re-certification

(Place an "X" in the boxes that apply) Certification Re-Certification Reciprocity

Required Documentation and Signatures

If this is a request for **CERTIFICATION**, the chief or administrator of the organization shall attest and sign for the following:

By my signature below, I certify that department records exist to support that each individual listed on the reverse side of the form:

1. Received a learning experience in each subject area required for certification.
2. Successfully passed the state certification written exam for the level of certification being requested.
3. Successfully passed the in-house comprehensive manipulative skills exam as described in the certification standard (where applicable).
 - State certification standards can be found at <http://www.uvu.edu/ufra/certification/forms.html>.
4. Successfully passed the state certification manipulative skills exam for the level of certification being requested (where applicable).
5. Has met all other requirements for the level being examined as specified in the certification standard.
6. Is a member and in good standing with the department or organization.
7. Has not been convicted of a felony, capital crime, or a felony plea-bargained down to a misdemeanor.

If this is a request for **RE-CERTIFICATION**, the chief or administrator of the organization shall attest and sign for the following:

By my signature below, I certify that department records exist to support that each individual listed on the reverse side of this form has:

1. Remained active and in good standing with the department or organization for the past three years.
2. Successfully maintained all skills required for the levels of certification held.
3. Successfully completed a minimum of 36 hours of training each year or a total of 108 hours of training within the past three years.
4. Has met all other requirements for the re-certification levels requested as specified in the UFSCS Policy and Procedures.

Chief or Administrator Signature

Day Phone #

Chief or Administrator Name (Printed or Typed)

Evening Phone#

Department Mailing Address

City

State

Zip

**Please sign and return to:
Utah Fire Service Certification Council
C/O Utah Fire and Rescue Academy
3131 Mike Jense Parkway Provo UT 84601
Email: UFRACertification@uvu.edu
Fax: 801-374-0681
Phone Toll Free: 888-548-7816**

Utah Fire Service Certification Council
~REQUEST FOR CERTIFICATION / RECERTIFICATION~

Department/Organization Name _____

Date _____

Please type or print names as they should appear on each applicant's card and/or certificate. If this is for recertification, print "RECERT" on the level requested line.

Applicant Name	Social Security # (last four digits)	Date of Birth (mm/dd/yyyy)	Level Requested
1 _____	_____	____/____/____	_____
2 _____	_____	____/____/____	_____
3 _____	_____	____/____/____	_____
4 _____	_____	____/____/____	_____
5 _____	_____	____/____/____	_____
6 _____	_____	____/____/____	_____
7 _____	_____	____/____/____	_____
8 _____	_____	____/____/____	_____
9 _____	_____	____/____/____	_____
10 _____	_____	____/____/____	_____
11 _____	_____	____/____/____	_____
12 _____	_____	____/____/____	_____
13 _____	_____	____/____/____	_____
14 _____	_____	____/____/____	_____
15 _____	_____	____/____/____	_____
16 _____	_____	____/____/____	_____
17 _____	_____	____/____/____	_____
18 _____	_____	____/____/____	_____
19 _____	_____	____/____/____	_____
20 _____	_____	____/____/____	_____