Palm Beach County Fire Rescue
Haz-Mat Technician
Competency
Task Book

PALM BEACH COUNTY FIRE RESCUE
OPERATIONAL PROCEDURE # III-13

ISSUED DATE: 12/1/03 REVISED DATE: 12/1/03 IMPLEMENTATION DATE: 1/1/04

HAZARDOUS MATERIALS RECURRENCY TRAINING

SCOPE: This policy applies to all personnel and volunteers of Palm Beach County Fire Rescue.

PURPOSE: The purpose of this policy is to assure that Hazardous Materials Technicians meet/exceed the minimum levels of skill, knowledge, and functional levels required to respond to and operate at hazardous materials incidents

AUTHORITY: Fire Rescue Administrator
29 CFR 1910.120 q
NFPA 472, NFPA 473

POLICY: Palm Beach County Fire Rescue will comply with 29 CFR Part 1910 and NFPA 472 and 473 with respect to Hazardous Materials training.

PROCEDURE: The Training and Safety Division will be responsible for assuring that employees receive training in emergency response to hazardous materials incidents, based on their expected duties and functions. Such training must be completed before employees are permitted to perform at emergencies. All delivered training will meet/or exceed OSHA and NFPA curriculum requirements. In order to be compliant with 29 CFR Part 1910, each identified person must complete not only didactic instruction but must also demonstrate competency.

Initial Placement:
All employees who Abid@ into the Special Operations Teams must have successfully completed, and provide documentation of completion of a Hazardous Materials Technician course.

Refresher Program:
The Training and Safety Division has established a Hazardous Material Technician Refresher program that must be completed on an annual basis to assure all Hazardous Material Technicians receive sufficient training and can demonstrate competency in accordance with OSHA and NFPA requirements.

The refresher program shall consist of:

- ✍ Specific subjects and hours of training that the Hazardous Materials Technicians must complete
- ✍ Task Book to document required competencies

Specific Subjects

The specific subjects and hours that each Hazardous Material Technician must complete include:

✍ Local and State Emergency Response Plans	4 hours
✍ Detecting and Monitoring	16 hours
✍ Personal Protective Equipment	8 hours
✍ Planning, Management, and Safety	4 hours
✍ Containers and Tactical Control	16 hours
✍ Decontamination	8 hours
✍ Chemistry and Reference	14 hours

The Training and Safety Division is responsible for maintaining accurate training records. Training records will contain dates of training, student rosters, curriculum outlines, demonstration checklists or performance records and evaluation tools, and scores, if appropriate.

Task Book

The Task Book identifies specific competencies that must be demonstrated by each Hazardous Materials Technician. The Task Book identifies the subject and maximum hour credit that can be earned for each area completed. The Special Operations Captain is responsible for providing the direction and supervision to their crew. The Special Operations Captain may only sign off personnel who demonstrate competency in each identified knowledge and skill. The District Chief is responsible for providing the direction and supervision to the Special Operations Captains. The District Chief may only sign off Captains who demonstrate competency in each identified knowledge and skill.

The Training and Safety Division will assist in development, delivery, and revision of the Task Book. Throughout the entire process, the Training and Safety Division will communicate and coordinate with the District Chiefs and Special Operations Captains to assure compliance. The Training and Safety Division will offer support, technical assistance, and remediation where necessary.

Annual Certification:

Hazardous Materials Technicians will complete assigned training and competency requirements between the months of January through October of each year. In November of each year, the Training and Safety Division will perform an "audit" of all completed work and provide any additional training for personnel, if necessary. In December of each year, the Fire Chief will be presented with sufficient documentation to "certify" that specific members of the department have the competencies required for their level of service as defined in 29 CFR 1910.120. Personnel who fail to complete the required

subjects, hours, and Task Book will be ineligible for annual "certification" and may jeopardize their Special Operations assignment.

This document has been developed to provide guidance for regularly scheduled competency maintenance for Hazardous Materials Technicians. The skills found in these competencies are outlined in NFPA 472, OSHA 29CFR1910.120q. Training Guidelines have been brought together in a series of five operational sections of performance-based skills. This document is recommended for initial training of technicians as well as documentation of periodic maintenance of skills.

In accordance with OSHA 29 CFR 1910.120(q), the employer is responsible for designating appropriate recertification procedures and identifying the necessary qualification for those individual operating as technicians. This task book attempts to document those skills and indicate successful completion of a competency.

COMPETENCY CHECKLIST

Name _____ Station Shift _____

Note:

Blue highlight indicates Company Officer Responsibility, but many require support in the form of props, scenarios, and quizzes.

Yellow highlighted areas reflect Training and Safety Division responsibility.

1.1 Technician Roles and ICS
- 1.1.1 Completed
- 1.2.1 Completed
- 1.2.2 Completed

2.1 Hazard Risk Assessment Air Monitoring, Sample Collection, Qualitative Analysis
- 2.1.1 Completed
- 2.1.2 Completed
- 2.1.3 Completed
- 2.1.4 Completed
- 2.1.5 Completed
- 2.1.6 Completed
- 2.1.7 Completed
- 2.1.8 Completed
- 2.1.9 Completed
- 2.1.10 Completed

2.2 Hazard Risk Assessment Field Chemical analysis
- 2.2.1 Completed
- 2.2.2 Completed
- 2.2.3 Completed
- 2.2.4 Completed

2.3 Hazard / Risk Assessment Research
- 2.3.1 Completed
- 2.3.2 Completed
- 2.3.3 Completed
- 2.3.4 Completed
- 2.3.5 Completed
- 2.3.6 Completed
- 2.3.7 Completed
- 2.3.8 Completed
- 2.3.9 Completed
- 2.3.10 Completed

2.4 Hazard Risk Assessment Containers
- 2.4.1 Completed
- 2.4.2 Completed
- 2.4.2 Completed
- 2.4.3 Completed
- 2.4.4 Completed
- 2.4.5 Completed

2.5 Hazard Assessment Estimation Harm Behavior.
- 2.5.1 Completed
- 2.5.2 Completed
- 2.5.3 Completed
- 2.5.4 Completed

3.1 Garment Selection
- 3.1.1 Completed
- 3.1.2 Completed
- 3.1.3 Completed
- 3.1.4 Completed
- 3.1.5 Completed
- 3.1.6 Completed
- 3.1.7 Completed
- 3.1.8 Completed
- 3.1.9 Completed
- 3.1.10 Completed
- 3.1.11 Completed
- 3.1.12 Completed
- 3.1.13 Completed

3.2 Control Zones and Operational Areas
- 3.2.1 Completed
- 3.2.2 Completed
- 3.2.3 Completed

3.3 Protective Measures Decon
- 3.3.1 Completed
- 3.3.2 Completed

3.3.3 Completed
3.3.4 Completed
3.3.5 Completed
3.3.6 Completed
3.3.7 Completed
3.3.8 Completed
3.3.9 Completed
3.3.10 Completed
3.3.11 Completed
3.3.12 Completed

3.3 Protective Measures Medical
3.4.1 Completed
3.4.2 Completed
3.4.3 Completed
3.4.4 Completed
3.4.5 Completed
3.4.6 Completed
3.4.7 Completed

4.1 Action Options Incident Safety
4.1.1 Completed
4.1.2 Completed
4.1.3 Completed
4.1.4 Completed
4.1.5 Completed
4.1.6 Completed
4.1.7 Completed
4.1.8 Completed
4.1.9 Completed
4.1.10 Completed

4.2 Action Options Spill Control
4.2.1 Completed
4.2.2 Completed
4.2.3 Completed
4.2.4 Completed
4.2.5 Completed
4.2.6 Completed
4.2.7 Completed

4.3 Action Options Leak Control
4.3.1 Completed
4.3.2 Completed
4.3.3 Completed
4.3.4 Completed
4.3.5 Completed
4.3.6 Completed
4.3.7 Completed
4.3.8 Completed
4.3.9 Completed
4.3.10 Completed
4.3.11 Completed

5.1 Incident Termination & Documentation
5.1.1 Completed
5.1.2 Completed
5.1.3 Completed
5.1.4 Completed
5.1.5 Completed

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

In order to demonstrate continued ability at the technician level of training the following competencies should be demonstrated during a simulated or actual hazardous materials incident:

1.1 TECHNICIAN ROLES AND THE INCIDENT COMMAND SYSTEM

1.1.1 The technician has demonstrated an understanding of his role as a technician during an actual or simulated hazardous materials emergency.

(Signature) _____ __/__/__ (Date)

1.2.1 The technician has demonstrated an understanding of the roles, responsibilities and interrelationship between the various hazardous materials functions within the ICS management system as called for by the employers hazardous materials emergency response plan (ERP). These roles should include backup, decontamination, entry, safety officer(s), haz-mat group and/or branch, science, site access control, technical specialists.

(Signature) _____ __/__/__ (Date)

1.2.2 Demonstrate the ability to perform the duties of any assigned position within the hazardous materials group.

(Signature) _____ __/__/__ (Date)

_____

Evaluator Remarks

(Signature)_____ __/__/__ (Date)

INCIDENT COMMAND TECHNITIAN ROLES

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

The following air monitoring competencies should be demonstrated in a controlled environment such as skill stations or simulated incidents:

2.1 HAZARD AND RISK ASSESSMENT – AIR MONITORING, SAMPLE COLLECTION & QUALITATIVE ANALYSIS

2.1.1 Given various written scenarios, demonstrate the ability to select the appropriate air monitoring instrument(s) necessary for the qualitative and quantitative analysis of the potentially hazardous environment caused by airborne gases or vapors.

(Signature) _____ __/__/__(Date)

2.1.2 Given air monitoring devices provided by the employer, demonstrate the ability to complete the following: 1) determine the inherent safety rating of the instrument and 2) properly start and prepare the instrument for operation in accordance with manufacturer recommendations.

Signature) _____ __/__/__ (Date)

2.1.3 Demonstrate proper field maintenance of all air monitoring devices provided by the employer in accordance with the employer's written air monitoring equipment plan and the recommendations of the manufacturer.

(Signature) _____ __/__/__ (Date)

2.1.4 Given a simulated incident involving an unidentified hazardous material and equipment provided by the employer, demonstrate the ability to properly conduct air monitoring including proper: 1) monitoring sequence, 2) approach, 3) sampling patterns, 4) selection of elevations and, 5) speed and interpret the instrument readings.

(Signature) _____ __/__/__ (Date)

2.1.5 Given controlled skill stations with live samples, demonstrate proper reading and interpretation of potential false negatives and positives, for each of following types of air monitoring instruments

2.1.5.1 ? pH indicators or meters,
2.1.5.2 ? radiation survey instruments,
2.1.5.3 ? personal alarms and
2.1.5.4 ? dosimeters,
2.1.5.5 ? oxygen concentration instruments,
2.1.5.6 ? combustible gas indicators,
2.1.5.7 ? electro chemical gas monitors,
2.1.5.8 ? color-metric detectors tubes and/or badges ,
2.1.5.9 ? photo-ionization detectors,
2.1.5.0 ? IR Spectrometry and ? other instruments provided by the employer.

(Signature) _____ __/__/__ (Date)

2.1.6 Demonstrate the ability to properly document air monitoring activities in accordance with the employer's emergency response plan.

(Signature)_____ __/__/__(Date)

2.1.7 Properly describe to the assessor the differences between 1) instrument calibration, 2) field calibration check, 3) spanning and 4) bump test, as well as the application for each process.

(Signature)_____ __/__/__(Date)

COMPETENCY CHECKLIST

2.1 HAZARD AND RISK ASSESSMENT – AIR MONITORING, SAMPLE COLLECTION & QUALITATIVE ANALYSIS

2.1.8 Given an unknown gas or vapor, demonstrate the ability to identify or classify the material by hazard using air monitoring instruments.

(Signature)_____ __/__/__(Date)

2.1.10 Demonstrate the ability to document sample collection procedures and the chain of custody in a manner consistent with law enforcement evidence gathering procedures.

(Signature) _____ __/__/__(Date)

_____

Evaluator Remarks

(Signature) _____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

The following air monitoring competencies should be demonstrated in a controlled environment such as skill stations or simulated incidents:

2.1 HAZARD AND RISK ASSESSMENT – AIR MONITORING, SAMPLE COLLECTION & QUALITATIVE ANALYSIS

2.1.1 Given various written scenarios, demonstrate the ability to select the appropriate air monitoring instrument(s) necessary for the qualitative and quantitative analysis of the potentially hazardous environment caused by airborne gases or vapors.

(Signature) _____ __/__/__(Date)

2.1.2 Given air monitoring devices provided by the employer, demonstrate the ability to complete the following: 1) determine the inherent safety rating of the instrument and 2) properly start and prepare the instrument for operation in accordance with manufacturer recommendations.

Signature) _____ __/__/__ (Date)

2.1.3 Demonstrate proper field maintenance of all air monitoring devices provided by the employer in accordance with the employer's written air monitoring equipment plan and the recommendations of the manufacturer.

(Signature) _____ __/__/__ (Date)

2.1.4 Given a simulated incident involving an unidentified hazardous material and equipment provided by the employer, demonstrate the ability to properly conduct air monitoring including proper: 1) monitoring sequence, 2) approach, 3) sampling patterns, 4) selection of elevations and, 5) speed and interpret the instrument readings.

(Signature) _____ __/__/__ (Date)

2.1.5 Given controlled skill stations with live samples, demonstrate proper reading and interpretation of potential false negatives and positives, for each of following types of air monitoring instruments

2.1.5.1 ? pH indicators or meters,
2.1.5.2 ? radiation survey instruments,
2.1.5.3 ? personal alarms and
2.1.5.4 ? dosimeters,
2.1.5.5 ? oxygen concentration instruments,
2.1.5.6 ? combustible gas indicators,
2.1.5.7 ? electro chemical gas monitors,
2.1.5.8 ? color-metric detectors tubes and/or badges ,
2.1.5.9 ? photo-ionization detectors,
2.1.5.0 ? IR Spectrometry and ? other instruments provided by the employer.

(Signature) _____ __/__/__ (Date)

2.1.6 Demonstrate the ability to properly document air monitoring activities in accordance with the employer's emergency response plan.

(Signature)_____ __/__/__(Date)

2.1.7 Properly describe to the assessor the differences between 1) instrument calibration, 2) field calibration check, 3) spanning and 4) bump test, as well as the application for each process.

(Signature)_____ __/__/__(Date)

COMPETENCY CHECKLIST

2.1 HAZARD AND RISK ASSESSMENT – AIR MONITORING, SAMPLE COLLECTION & QUALITATIVE ANALYSIS

2.1.8 Given an unknown gas or vapor, demonstrate the ability to identify or classify the material by hazard using air monitoring instruments.

(Signature)_____ __/__/__(Date)

2.1.10 Demonstrate the ability to document sample collection procedures and the chain of custody in a manner consistent with law enforcement evidence gathering procedures.

(Signature) _____ __/__/__(Date)

_____

Evaluator Remarks

(Signature) _____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

The following air monitoring competencies should be demonstrated in a controlled environment such as skill stations or simulated incidents:

2.2 HAZARD/RISK ASSESSMENT – FIELD CHEMICAL ANALYSIS

2.2.1 Demonstrate the ability to select and establish a suitable location for the field chemical analysis of solid, liquid or gas samples being recovered from the isolation area for cold zone analysis.

(Signature)_____ __/__/__(Date)

2.2.2 Given two unidentified samples (one solid and one liquid) and, using the procedures identified by the employer, the technician will demonstrate the ability to properly perform a field chemical analysis process necessary to identify or classify the hazards of the material.

(Signature)_____ __/__/__(Date)

2.2.3 Demonstrate the ability to maintain a safe, clean and orderly field chemical analysis work area during all analysis procedures.

(Signature) _____ __/__/__(Date)

2.2.4 Demonstrate the ability to properly document the field chemical analysis procedures used and results obtained.

(Signature) _____ __/__/__(Date)

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Evaluator Remarks

(Signature)_____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

The following hazard/risk assessment competencies should be assessed during tabletop exercises or simulated incidents.

2.3 HAZARD/RISK ASSESSMENT – SCIENCE AND RESEARCH

2.3.1 Given no less than 5 incident scenarios, demonstrate the ability to select the reference sources or databases necessary to complete a hazard/risk assessment of the involved materials.
(Signature) _____ __/__/__ (Date)

2.3.2 Given no less than 5 incident scenarios, demonstrate the ability to obtain from employer provided reference materials and databases the information necessary to assess the hazards of given materials. This assessment shall include: 1) information concerning material identity and environmental reporting requirements, 2) physical and chemical characteristics, 3) flammability or combustibility, 4) toxicity information including all published exposure limits, 5) reactivity and radioactivity data, fire leak and spill control considerations, and 6) proper packaging and disposal procedures.
(Signature) _____ __/__/__ (Date)

2.3.3 Given incident scenarios including research data and data from air monitoring instruments, the technician will demonstrate the ability to assess the risks to response personnel and the public.
(Signature) _____ __/__/__ (Date)

2.3.4 Given 5 hazardous materials scenarios, the technician will determine the signs and symptoms of over-exposure to the materials involved.
(Signature) _____ __/__/__ (Date)

2.3.5 Given 2 hazardous materials scenarios involving multiple hazardous substances, the technician shall rank the materials with regards to anticipated level of risk.
(Signature) _____ __/__/__ (Date)

2.3.6 Given equipment provided by the employer, demonstrate the ability to setup real time surface meteorological monitoring capabilities and properly to interface the equipment with computers used for dispersion modeling.
(Signature) _____ __/__/__ (Date)

2.3.7 Given the quantity, concentration and rate of release of a material, the technician shall demonstrate the ability to model and predict dispersion patterns and necessary evacuation areas using employer provided databases and computer modeling software.
(Signature) _____ __/__/__ (Date)

2.3.8 Given the quantity, concentration and rate of release of a material, the technician shall demonstrate the ability to assess potential shelter in-place options.
(Signature) _____ __/__/__ (Date)

2.3.9 Demonstrate the ability to predict the necessary evacuation area for a leak from a domestic gas line and develop an air-monitoring plan necessary to validate those predicted areas.

(Signature) _____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

A combination of simulated incidents and tabletop activities with supporting photographs or other media can be used to demonstrate these competencies.

2.4 HAZARD/RISK ASSESSMENT – CONTAINER ASSESSMENT

2.4.1 Given various fixed, transportation and portable containers, the technician shall demonstrate the abilities to identify the container type and potential materials carried or stored within the container.
(Signature)_____ __/__/__(Date)

2.4.2 Given a scenario involving a highway transportation container with appropriate specification plates, determine the type, capacity and construction characteristics of the container necessary to conduct a container damage assessment.
(Signature) _____ __/__/__(Date)

2.4.3 Given a simulated incident with damaged containers, demonstrate the ability to collect information necessary for completion of a container damage assessment.
(Signature) _____ __/__/__(Date)

2.4.4 Given a simulated incident involving containers, demonstrate the ability to differentiate between liquid and vapor lines.
(Signature)_____ __/__/__(Date)

_____

Evaluator Remarks

(Signature)_____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

A combination of simulated incidents and tabletop activities with supporting photographs or other media can be used to demonstrate these competencies.

2.5 HAZARD/RISK ASSESSMENT – ESTIMATION OF BEHAVIOR AND HARM

2.5.1 Given a simulated incident or written scenario while acting in a Research Group function, the technician shall demonstrate the ability to develop an estimation of potential behavior and harm caused by the hazardous material(s).

(Signature) _____ __/__/__ (Date)

2.5.2 Given various scenarios, the technician will demonstrate the ability to properly perform a vapor dispersion model using computer-modeling equipment and software provided by the employer.

(Signature) _____ __/__/__ (Date)

2.5.3 Given a simulated incident and while operating in chemical protective clothing, demonstrate the ability to recognize potential IDLH conditions.

(Signature) _____ __/__/__ (Date)

2.5.4 While operating in chemical protective clothing at a simulated incident, the technician will, based upon risk/benefit analysis, demonstrate the ability to minimize or avoid exposure to areas that would present the highest hazards.

(Signature)_____ __/__/__ (Date)

_____

Evaluator Remarks

(Signature) _____ __/__/__(Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

The psychomotor competencies for Personal Protective Equipment (PPE) should be demonstrated during hands-on scenario or in a learning station environments using all appropriate PPE as provided by the employer.

3.1 PROTECTIVE MEASURES - GARMENT SELECTION

3.1.1 action and entry mission, the technician will demonstrate the ability to select the appropriate PPE ensemble Given at least 3 scenarios with both known and unknown hazardous materials with a defined plan of for the completion of that mission.

(Signature)_____ __/__/__ (Date)

3.1.2 Given at least 3 chemical garments provided by the employer, demonstrate the ability to determine garment fabric compatibility in accordance with manufacturer recommendations.

(Signature)_____ __/__/__ (Date)

3.1.3 Given an identified mission and ensemble as well as a selection of all the employer's provided personal protective equipment, the technician will select the items necessary to properly assemble a complete protective ensemble in accordance with the employer's emergency response plan. This shall include: all respiratory protective equipment, dermal protective equipment, accessory safety equipment, communications equipment and work tools.

(Signature)_____ __/__/__ (Date)

3.1.4 Having selected the appropriate respiratory protective equipment and chemical protective garment, the technician shall demonstrate the ability to properly perform a pre-donning safety check of the equipment. This shall include a visual inspection of the garment for at least three indicators of fabric degradation or for signs of physical damage.

(Signature) _____ __/__/__ (Date)

3.1.5 Given appropriate PPE as provided by the employer and in accordance with the employer's emergency response plan, the technician will I demonstrate the ability to donn, work-in and doff liquid splash protective garments and any other associated PPE.

(Signature) _____ __/__/__ (Date)

3.1.6 Given appropriate PPE as provided by the employer and in accordance with the employer's emergency response plan, the technician will demonstrate the ability to donn, work-in and doff vapor-protective garments and any other associated PPE.

(Signature) _____ __/__/__ (Date)

3.1.7 Given a situation in which the technician is operating in a simulated IDLH environment while wearing chemical protective clothing, the technician will demonstrate the ability to perform emergency procedures for: 1) garment breach, 2) disorientation and 5) partner emergency.

(Signature) _____ __/__/__ (Date)

COMPETENCY CHECKLIST

3.1 PROTECTIVE MEASURES - GARMENT SELECTION

3.1.8 Given an emergency situation, the technician will demonstrate the ability to communicate the emergency situation in accordance with employer's emergency response plan. This shall include verbal and non-verbal means (e.g. hand signals).

(Signature)_____ __/__/__ (Date)

3.1.9 While operating in chemical protective clothing within a simulated hazardous environment, the technician shall demonstrate the ability to take actions that would limit garment contamination to the extent feasible.

(Signature)_____ __/__/__ (Date)

Protective Garment Maintenance

3.1.10 Given a chemical protective garment during routine maintenance and testing, the technician will demonstrate the ability to thoroughly inspect the garment for signs of degradation and physical damage.

(Signature)_____ __/__/__ (Date)

3.1.11 Given a vapor protective garment provided by the employer and testing equipment recommended by the manufacturer, the technician will demonstrate the ability to perform a qualitative leak test on the garment in accordance with manufacturer instructions.

(Signature)_____ __/__/__ (Date)

3.1.12 Given a vapor protective garment similar to those provided by the manufacturer, the technician will demonstrate the ability to properly locate a garment leak and take appropriate maintenance / repair actions (which may include returning the garment to the manufacturer) in accordance with the employer's personal protective equipment plan.

(Signature)_____ __/__/__ (Date)

3.1.13 Given appropriate suit testing and maintenance log, the technician will demonstrate the ability to properly document a qualitative leak test and repairs.

(Signature)_____ __/__/__ (Date)

Evaluator Remarks

(Signature)_____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

3.2 PROTECTIVE MEASURES - CONTROL ZONES AND OPERATIONAL AREAS

A combination of simulated incidents and tabletop activities with supporting photographs or other media can be used to demonstrate these competencies.

3.2.1 Given a simulated hazardous materials incident and a completed hazard/risk assessment, the technician will demonstrate the ability to establish a visible control zone in accordance with the employer's emergency response plan.

(Signature) _____ __/__/__ (Date)

3.2.2 Given a hazardous materials incident scenario and a completed hazard/risk assessment, the technician will recommend appropriate isolation and protective action distances and communicate those recommendations to the appropriate supervisor.

(Signature) _____ __/__/__ (Date)

3.2.3 Given a simulated incident, the technician will demonstrate the ability to properly maintain control zones in accordance with the site safety plan and the employer's emergency response plan.

(Signature) _____ __/__/__ (Date)

_____

Evaluator Remarks

(Signature)_____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

A combination of simulated incidents and tabletop activities with supporting photographs or other media can be used to demonstrate these competencies.

3.3 PROTECTIVE MEASURES – DECONTAMINATION

3.3.1 The technician will demonstrate the ability to acquire information concerning proper decontamination procedures from at least three reference sources

(Signature) _____ __/__/__ (Date)

3.3.2 Given at least two hazardous materials incident scenarios and a completed hazard/risk assessment, the technician will demonstrate the ability to select an appropriate decontamination procedure and determine the equipment necessary to implement that procedure.

(Signature) _____ __/__/__ (Date)

3.3.3 The technician will demonstrate the ability to take actions necessary to minimize contamination of personnel and equipment during hot zone area operations.

(Signature) _____ __/__/__ (Date)

3.3.4 Given a simulated hazardous materials incident, demonstrate the ability to select an appropriate location for the establishment of a contamination reduction corridor.

(Signature) _____ __/__/__ (Date)

3.3.5 Given a simulated hazardous materials incident and while working as a member of a decontamination team, the technician will demonstrate the ability to setup the contamination reduction corridor necessary for the appropriate procedure.

(Signature) _____ __/__/__ (Date)

3.3.6 Given a simulated hazardous materials incident and while functioning as a member of the decontamination team, the technician will demonstrate the ability to perform decontamination on response personnel exiting the isolation area.

(Signature) _____ __/__/__ (Date)

3.3.7 The technician will demonstrate the ability to perform emergency decontamination procedures for both a contaminated responder and a nonambulatory victim of a hazardous materials incident in accordance with the employer's emergency response plan.

(Signature) _____ __/__/__ (Date)

3.3.8 Given a stable, non-ambulatory victim of a simulated hazardous materials incident, demonstrate the ability to properly perform gross and secondary decontamination procedures for this patient.

(Signature) _____ __/__/__ (Date)

COMPETENCY CHECKLIST

3.3 PROTECTIVE MEASURES – DECONTAMINATION

3.3.8 Given a stable, non-ambulatory victim of a simulated hazardous materials incident, demonstrate the ability to properly perform gross and secondary decontamination procedures for this patient.

(Signature) _____ __/__/__ (Date)

3.3.9 The technician will demonstrate the ability to minimize cross contamination and the extension contamination beyond the decontamination area by properly implementing: a) decontamination area security, b) personnel and equipment flow patterns and c) run-off, slop-over and over-spray minimization procedures.

(Signature) _____ __/__/__ (Date)

3.3.10 The technician will demonstrate an ability to control, contain and containerize excessive run-off materials generated during the decontamination process.

(Signature) _____ __/__/__ (Date)

3.3.11 The technician will demonstrate an understanding of the procedures to be used for the decontamination of non-expendable equipment in accordance with the employer's emergency response plan.

(Signature) _____ __/__/__ (Date)

3.3.12 The technician will demonstrate the ability to properly document the decontamination procedures taken during a simulated incident.

(Signature) _____ __/__/__ (Date)

_____

Evaluator Remarks

(Signature)_____ (__/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

A combination of simulated incidents and tabletop activities with necessary supporting media can be used to demonstrate action option competencies.

3.4 PROTECTIVE MEASURES – MEDICAL

3.4.1 Given a simulated or tabletop scenario, the technician will identify the proper EMS components necessary to managing responder health issues at the incident scene.

(Signature) _____ __/__/__ (Date)

3.4.2 Given a simulated hazardous material incident, the responder will describe the function of the Medical Group within the incident command structure in accordance with the employer's emergency response plan and operational procedures.

(Signature) _____ __/__/__ (Date)

3.4.3 Given a simulated incident or tabletop scenario and necessary meteorological condition information, the technician will demonstrate the ability to calculate the heat or cold stress index for operating personnel.

(Signature) _____ __/__/__ (Date)

3.4.4 Given a simulated hazardous materials incident and while operating in the roll of safety, EMS or rehab, the technician will identify the importance of appropriate rehabilitation efforts.

(Signature) _____ __/__/__ (Date)

3.4.5 The technician will identify the pre-entry medical considerations as outlined by the employer's emergency response plan and operational procedures.

(Signature) _____ __/__/__ (Date)

3.4.6 Given a simulated incident or tabletop scenario with an onsite emergency involving a significant exposure of an emergency responder, the technician will demonstrate an understanding of the necessary decontamination, emergency medical care and follow-up medical procedures as identified by the employer's emergency response plan.

(Signature) _____ __/__/__ (Date)

3.4.7 Given a simulated onsite medical emergency involving either a responder or victim, the technician will demonstrate the ability to provide appropriate emergency medical aid to the level of care identified by the employer's emergency response plan.

(Signature) _____ __/__/__ (Date)

_____

Evaluator Remarks

(Signature) _____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

A combination of simulated incidents and tabletop activities with necessary supporting media can be used to demonstrate action option competencies.

4.1 ACTION OPTIONS – INCIDENT SAFETY

4.1.1 Given a simulated transportation and fixed facility incident, identify potential strategic control strategies for the incident.

(Signature)_____ __/__/__ (Date)

4.1.2 Given simulated incidents in transport and fixed facilities and while serving in a safety role, participate in a planning session that identifies possible intervention/non-intervention, defensive and offensive action options.

(Signature)_____ __/__/__ (Date)

4.1.3 Given a simulated transportation or fixed facility incident and while serving as "HazMat Group Safety", develop a site specific safety plan in accordance with the employer's emergency response plan. The plan shall identify all foreseeable incident hazards and recommendations for feasible corrective actions.

(Signature) _____ __/__/__ (Date)

4.1.4 The technician, given a simulated hazardous materials incident (both table top and field simulation), will demonstrate the ability to develop an incident safety plan that is consistent with the employer's emergency response plan, operational procedures and information gained during the hazard/risk assessment phase of the incident.

(Signature)_____ __/__/__(Date)

4.1.5 Given a simulated hazardous materials incident and while serving as "HazMat Group Safety", the technician will communicate to the incident commander or the overall incident safety officer the safety considerations for inclusion in the overall incident plan of action.

(Signature) _____ __/__/__ (Date)

4.1.6 Given a simulated hazardous materials incident and while serving as "HazMat Group Safety", demonstrate the ability provide an onsite safety briefing.

(Signature_____ __/__/__ (Date)

4.1.7 Given a simulated hazardous materials incident and while serving as "HazMat Group Safety", the technician will identify those pre-entry activities that must take place to insure responder safety.

(Signature)_____ __/__/__(Date)

4.1.8 The technician, serving as "HazMat Group Safety" during a simulated incident, will demonstrate the ability to monitor the incident for operations that are consistent with the plan of action and the incident safety plan.

(Signature)_____ __/__/__ (Date)

4.1.9 The technician, while serving as "HazMat Group Safety" will demonstrate the ability to appropriately suspend, alter or terminate operations as necessary due to unsafe conditions or practices and to notify command of any such actions.

(Signature)_____ __/__/__ (Date)

4.1.10 Given a simulated hazardous materials incident and while serving as "HazMat Group Safety", the technician will insure that an appropriate hazard communication briefing is provided to all potentially exposed responders prior to leaving the scene.

(Signature)_____ __/__/__(Date)

(Signature)_____ (Date) __/__/__

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

Action option competencies should be assessed during field evolutions involving simulated hazardous materials emergencies.

4.2 ACTION OPTIONS – SPILL CONTROL

4.2.1 Given an incident involving a flowing liquid spill, demonstrate the ability to perform an assessment of the spill to the extent necessary to develop a spill control plan.

(Signature) _____ __/__/__ (Date)

4.2.2 Given a simulated hazardous materials incident involving a release of materials from both bulk and non-bulk containers, demonstrate the ability to develop a spill control plan and identify which spill control activities are defensive in nature and which spill control measures would be considered offensive in nature.

(Signature) _____ __/__/__ (Date)

4.2.3 Given a simulated hazardous materials incident involving a release from bulk and non-bulk containers, demonstrate the ability to properly select the necessary tools, equipment and personnel to perform defensive and offensive spill control activities.

(Signature) _____ __/__/__ (Date)

4.2.4 Given a simulated hazardous materials incident involving a spill, demonstrate the ability to supervise an operational level team in the performance of defensive spill control measures.

(Signature) _____ __/__/__ (Date)

4.2.5 Given a simulated hazardous materials incident, a spill control plan and proper PPE, demonstrate the ability to perform offensive spill control procedures where direct contact with the product would be anticipated.

(Signature) _____ __/__/__ (Date)

4.2.6 Demonstrate the ability to perform the following spill control measures:

a) Dam, dike, divert and retain a liquid/surface and liquid/water spill.
b) Properly apply a curtain boom and oiliophilic boom to a liquid/water spill.
c) Construct an underflow damn and overflow dam.
d) Blanket a liquid or solid/surface spill.
e) Ventilate and disperse or enter into an aqueous solution a gas/air spill.

(Signature) _____ __/__/__ (Date)

4.2.7 Given a simulated spill and spill control materials provided by the employer, demonstrate the ability to properly apply those materials in a manner consistent with both manufacturer recommendations and the employer's response plan.

(Signature) _____ __/__/__ (Date)

Evaluator Remarks

(Signature) _____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

Action option competencies should be assessed during field evolutions involving simulated hazardous materials emergencies.

4.3 ACTION OPTIONS – LEAK CONTROL

4.3.1 Given an incident involving leaks from both bulk and non-bulk containers develop a leak control plan to include appropriate safety precautions for leak control personnel.

(Signature) _____ __/__/__ (Date)

4.3.2 Given a simulated hazardous materials incident involving a leak(s) from bulk and non-bulk containers, demonstrate the ability to properly select the necessary tools, materials and equipment to perform offensive leak control activities.

(Signature) _____ __/__/__ (Date)

4.3.3 Given a pressure vessel, select the appropriate tools and equipment and demonstrate the ability to perform control activities for leaks from:

a) Open valves, missing or loose plugs
b) Fusible plug (metal and threads).
c) Side wall of container
d) Valve blowout, gland, inlet threads and seat
e) Valve stem assembly blowout

(Signature)_____ __/__/__ (Date)

4.3.4 Given a leaking 55 gallon drum, demonstrate the ability to control the following types of leaks:

a) Bung or chime leak
b) Forklift and nail punctures

(Signature) _____ __/__/__ (Date)

4.3.5 Given a leaking 55 gallon drum, demonstrate the ability to safely perform the following over-packs:

a) Rolling slide-in
b) Slide-in
c) Slip-over

(Signature) _____ __/__/__ (Date)

4.3.6 Given a leak from the dome of a MC306/DOT406, demonstrate the ability to properly apply a dome clamp.

(Signature) _____ __/__/__ (Date)

4.3.7 Demonstrate the ability to properly stabilize, bond and ground a container prior to operations or product transfer.

(Signature) _____ __/__/__ (Date)

COMPETENCY CHECKLIST

4.3 ACTION OPTIONS – LEAK CONTROL

4.3.8 Identify common methods for product transfers involving MC306/DOT406, MC307/DOT407, MC312/DOT412, MC331 and MC338 cargo tanks.

(Signature) _____ __/__/__ (Date)

4.3.9 Demonstrate the ability to properly use any product transfer equipment provided by the employer in accordance with the employers emergency response plan and the manufacturer's recommendations.

Signature) _____ __/__/__ (Date)

4.3.10 Demonstrate the ability to control each of the following leak types:

a) Dome cover leak
b) Irregular shaped hole
c) Puncture
d) Split or tear

(Signature) _____ __/__/__ (Date)

4.3.11 Demonstrate an understanding of and the ability to apply the safety precautions necessary for product transfer operations.

(Signature)_____ __/__/__ (Date)

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Evaluator Remarks

(Signature)_____ __/__/__ (Date)

COMPETENCY CHECKLIST

Technician: _____ Date: _____/_____/_____

Action option competencies should be assessed during field evolutions involving simulated hazardous materials emergencies.

5.1 INCIDENT TERMINATION – TERMINATION AND DOCUMENTATION

5.1.1 Given various simulated or actual incidents, participate in an on-scene incident debriefing and incident critique.

(Signature) _____ __/__/__ (Date)

5.1.2 During participation in the debriefing and critique, provide information concerning operational observations and activities taken at the incident.

(Signature) _____ __/__/__ (Date)

5.1.3 Demonstrate the ability to properly complete incident documentation reports as required by the employer's emergency response plan and operational procedures.

(Signature) _____ __/__/__ (Date)

5.1.4 Demonstrate the ability to properly complete post incident exposure documentation as required by the employer's emergency response plan.

(Signature) _____ __/__/__ (Date)

5.1.5 Demonstrate the ability to properly document equipment and PPE use in accordance with manufacturer recommendations and the employer's emergency response plan.

(Signature) _____ __/__/__ (Date)

_____

Evaluator Remarks

(Signature)_____ __/__/__ (Date)