

MWC Procedure and Policy Manual (PPM) - inactive versions

Tab 100 Background, Notes and Prior Policies

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Tab 100 (Evaluation Procedure) (2019)

Title: Evaluation Procedure - Overall Approach; Purpose and Use of Information
Adopted January 15, 2019

Evaluation of program delivery and participant achievements is necessary to collect data to chart compliance with regulatory and other overall needs of participants and to identify when this does not occur so that remediation can be designed and implemented. In addition, adequate staffing and infrastructure must be in place at each training center; this is monitored through review of participant feedback, periodic listing of space/equipment/supplies and instructor evaluations (documentation of qualifications, tracking annual updates of knowledge/skills, annual evaluation). Annually data on practices at each training center regarding policies and procedures are collected and evaluated through a self-audit. Through scaled item responses and open-ended comments, all Kirkpatrick Models levels of learning are addressed.

Each of these aspects of MWC evaluation is described below, by source: types of information collected, rationale for collection, use(s).

Source: Participant Feedback – all programs

Types of information collected

Instructor ratings (4-pt scale, strongly agree strongly disagree, Does Not Apply--DNA)

- Described what I was going to learn
- Presented information clearly
- Answered my questions well
- Gave me feedback on activities
- Used time well
- Treated me with respect
- Was knowledgeable and informed
- Updated me on new information

Rationale

Provides feedback on presentation style, use of activities, conduct, perceived knowledge

Uses

- Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concerns, plan and document remediation.
- Summarized for NIEHS in Progress Report and Annual Report
- May be covariates in data analysis

Overall rating of instructor (5-pt scale, very good very poor)

Rationale

Provides summary of participant evaluation of instructor

Uses

Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concerns, plan and document remediation.

Reported to NIEHS in Progress Report and Annual Report

Reported to Advisory Board

May be covariates in data analysis

Course rating (4-pt scale, strongly agree strongly disagree, Does Not Apply--DNA)

Was interesting

Was hands-on/interactive

Was held in a comfortable environment

Was appropriate for my job

Taught me skills I will use on my job

Made me feel that I can do my job better

Made me want to work more safely

Rationale

Provides feedback on perception of relevance, usefulness and use of adult education methods.

Provides Kirkpatrick Level 1 assessment.

Uses

Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concerns, plan and document remediation.

‘Interesting’, ‘interactive’, ‘appropriate’ are Level 1 Kirkpatrick Model outcomes (Reactions).

Summarized for NIEHS in Progress Report and Annual Report

May be covariates in data analysis

Overall rating of the course (5-pt scale, very good very poor)

Rationale

Provides summary of participant evaluation of instructor

Uses

Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concerns, plan and document remediation.

Reported to NIEHS in Progress Report and Annual Report

Reported to Advisory Board

May be covariates in data analysis

Key outcomes are rated (4-pt scale, strongly agree strongly disagree, Does Not Apply--DNA)

Three or four outcomes are program-specific

Use resources to find information --included for all programs

Rationale

Provides feedback on program-specific outcomes as central goals; including using/finding information is an over-arching goal of all adult-focused training.

Uses

Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concerns, plan and document remediation.

May be covariates in data analysis

Open-ended items

Explain any strongly disagree, very poor or DNA response on scaled items

The most important thing I learned and will use from this course was...

The course would be more useful to me if...

What other comments would you like to make about the instructor(s) or course?

Rationale

Provides opportunity for participant input 'in their own words'

Items selected to identify reasons for low ratings, identify unmet needs of participants, most valued content.

Uses

Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concerns, plan and document remediation, identify possible changes or topics for new programming.

Identified uses provides data on what actions participants plan to take based on training.

Source: Participant Feedback – refresher programs only

Types of information collected

Duration since initial training (<2 years, 2-5 years, 5-10 years, >10 years)

Rationale

Provides estimate of how many refresher programs have been completed.

Uses

Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concern regarding completeness of data, plan and document remediation.

May be covariate in data analysis.

Since my last training, I have (4-pt scale, routinely not at all)

Used references and resources to get information about work hazards

Used a skill or procedure learned in training

Planned my work better to minimize health and safety hazards

Discussed health and safety practices with my coworkers

Used health and safety equipment more effectively

Made decisions so that I work more safely

Rationale

Provides feedback on key actions during the past year.

Uses

Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concern regarding completeness of data.

May be covariate in data analysis.

What currently might stand in the way of work safety at your workplace...(4-pt scale, strongly agree strongly disagree)

I have enough time to work safely

Management/supervisor resists changes to health and safety practices

Co-workers resist changes to health and safety practices

I have the right resources (equipment, technology, information) to work safely

The training just does not apply to my workplace

Rationale

Provides participants opportunity to rate safety culture and relevance of training.

Uses

Provided verbatim in program-specific report reviewed by Program Director and Central Administration to identify any concern regarding completeness of data, plan and document remediation.

May be covariate in data analysis

Can evaluate internal consistency (see course item: was appropriate for my job)

Open-ended items

In the past year, how have you applied training at your work or in your community?

What keeps you from using your training at work or in your community?

Rationale

Provides feedback on uses of training and barriers to use.

Uses

Provided verbatim in program-specific report reviewed by Program Director and Central Administration to identify any concern regarding completeness of data, plan and document remediation.

Reported uses are impacts of training and are categorized by Kirkpatrick Model Learning Levels of 2 (Learning), 3 (Behavior) or 4 (Results). These are reported to NIEHS in the Progress Report and Annual Report

Impacts may be used in marketing

Barriers provide opportunity for barrier-reduction training

Identifying barriers informs programming needs.

Source: Participant Feedback – site refresher programs only

Types of information collected

Site work related actions

In the past 12 months, Identify conduct of 12 specific site-related tasks and one ‘other’
(yes/no)

Employer name/city/town where any identified activity conducted

Rationale

Basis of funding is in Superfund to meet the national needs for workers who can do site remediation safely.

Uses

Document activities of participants in relation to site work.

Reported to NIEHS in Progress Report and Annual Report.

Evaluate consistency between activities and use of PPE

Collect employer information for follow up to obtain listing of sites where participants worked

Source: Space/equipment/supplies

Types of information collected

Course rating item—all programs

Was held in a comfortable environment

Open-ended comments provide opportunity to address equipment/supplies—all programs

The course would be more useful to me if....

What other comments would you like to make about the instructor(s) or course?

Rationale

Standardized rating of training environment

Open-ended is opportunity for participant input ‘in their own words’

Uses

Summarized in program-specific report reviewed by Program Director and Central Administration to identify any concerns, plan and document remediation

Space drawing and equipment/supplies listing

Drawing of training space(s)
Listing of training-related equipment and supplies

Rationale

Successful training requires adequate space and equipment/supplies

Uses

Document facilities at any new training center
Competitive renewal

Source: Instructor Qualifications

Types of information collected

Documentation of qualifications

Relevant work experience

Number of years
First/Last job titles
Brief description of most recent job responsibilities
Academic training—institution, degree/dates
Non-degree training—program title, sponsor, duration
Certificates/certifications—title, awarded by, date

Rationale

Trainer education and skill/experience documentation

Uses

Document hiring practices consistent with institution and Minimum Criteria
Preparation of Biosketch for Competitive Renewal

Tracking of annual skill/knowledge updating

Annual refresher/professional update training added to biosketch

Rationale

Annual updates improve knowledge and skills of trainers

Uses

Document annually (prevents omitting applicable training) in less-frequent reporting
Competitive renewal

Annual evaluation

Elements rated by observer (yes/no, with comments)

Were objectives stated clearly?
Were objectives implemented?
Intro created an atmosphere of 'need to know'
Presentation was well organized
Stayed within time limits
Created an atmosphere that encouraged learning
Connected with participants
Made good use of leading questions
Clarified statements and answers
Summarized module

Instructor feedback

Thinking back on the presentation...
What aspects went very well?
What aspects did not go as well as you would have like?
What resources would have helped?
Are they available to you?
Did any exchanges in the presentation make you think: Gee, what do I say now?
What actions/activities would help you in the future if this happens?
Are there training or support materials that you feel would improve the content of this part of the training?

Rationale

Both the observer and the trainer have input to evaluation process

Uses

Document review
As needed, identify actions to be taken at any of several levels

Source: Self-audit

Types of information collected

Items for the annual self-audit are identified from a 'tickler file' maintained by program administration supplemented by items that address upcoming NIEHS initiatives or concerns. The tickler file usually includes instances where one or more training center had a question or concern regarding implementation of a policy or use of a training exercise/program.

Rationale

Processes and procedures adopted by the group are to be followed

Provide needed input to NIEHS information needs

Uses

Identify any compliance concerns and remediate

Provide documentation to NIEHS in Progress Report and Annual Report

Show activity in Competitive Renewal

Provide input to NIEHS

**Tab 100 (Quality Control Procedure)
(2019)**

Title: Quality Control Procedure
Adopted January 15, 2019

2019—text from 2014 application formally adopted as a Procedure. Text not included at this time

Tab 100 (Tab 1)
Attendance at Annual Trainer Meeting
(1989)

Title: Attendance at Annual Trainer Meeting
Adopted June 12, 1989

As part of the Project Coordinator's report, it was moved and adopted that one trainer from each center must attend the Annual Trainer Meeting. Six months advance notice will be given in scheduling the event.

**Tab 100 (Tab 2)
Certificate of Training
(1989, 1999)**

Title: Certificate of Training

Adopted 1989; Amended September 15, 1999

Adopted 1989 - Not available

Amended September 15, 1999

In order to assure that the trainees in a 40-hour site worker program receives the required site-specific training, the Midwest Consortium institutes the following:

1. The certificate will include space for signature of the employer following the 3-day, site-specific training
2. Each trainee will receive a letter from the training center director for presentation to his/her employer, describing the requirements for the on-site training and alerting the employer to the need to sign the certificate upon completion.

Tab 100 (Tab 3)
Copyright
(1989, 1989, 1990)

Title: Copyright of Midwest Consortium Materials

Adopted March 1, 1989; Amended June 12, 1989; Amended June 11, 1990

Adopted 1989

Policy

- 1.) All existing materials should be copyrighted and registered in the name of the University of Cincinnati. As new materials are developed or existing materials are substantially revised, they would be immediately copyrighted and registered.
- 2.) All members would be granted a royalty-free license to reproduce all materials.
- 3.) All Consortium members would be authorized to grant permission to other non-profit entities (i.e. fire departments, universities) to reproduce the materials or to provide the materials directly to them at cost. U.C. will need a note for the files to document transmitted.
- 4.) In accordance with PHS policy, the Federal Government would be granted a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use Consortium materials.

This policy shall become effective March 1, 1989 unless Steering Committee members oppose the policy or request that it be held for discussion at the April meeting.

In response to the need to prevent the unauthorized use of our training materials, the possibility of copyrighting training and evaluation materials was pursued by Central Administration. In consultation with U.C. Legal staff regarding University and PHS policy, it was determined that Consortium materials may be copyrighted immediately. Because the Midwest Consortium is not a legal entity nor a registered name, the University of Cincinnati may be the best choice to hold the copyright.

To copyright the materials, the copyright symbol "c" followed by University of Cincinnati and the year of publication can be inserted on the cover page of manuals or evaluation forms. Additional legal protection is offered by registering the materials with the Library of Congress. The fee per item is \$10. The U.C. copyright office can handle this at no additional charge to the Consortium.

As required by the NIEHS grant, the Federal Government would be granted a royalty-free, nonexclusive, and unequivocal license to reproduce, publish or otherwise use consortium materials. In addition, we would permit the Federal Government to authorize others to do so for Federal Government purposes.

Amended 1989

The Policy was amended to have the consortium name registered in each state then use the Consortium as the holder of the Copyright.

Amended 1990

1. All existing materials shall be copyrighted and registered in the name of the Midwest Consortium for Hazardous Waste Worker Training. As new materials are developed or existing materials are substantially revised, they shall be immediately copyrighted and registered.
2. All Consortium members are granted a royalty-free license to reproduce all materials.
3. In accordance with PHS policy, the federal government is granted a royalty-free, nonexclusive and irrevocable license to reproduce, publish or otherwise use Consortium materials.
4. Permission to reproduce materials from other training programs or evaluation materials may be granted by the Consortium to other NIEHS grantees on a case-by-case basis. All requestors will be required to attribute the work to the Consortium.
5. The Principal Investigator of the Midwest Consortium is the sole person authorized by the Consortium to grant permission to reproduce materials. Consortium program directors will be consulted, as appropriate. The Steering Committee will be kept informed of all requests and actions.

Tab 100 (Tab 4)
Fee Policy
(1988, 1990, 1994)

Title: Fees charged for Midwest Consortium training program delivery
Adopted March 1988; Amended October 1990; Amended October 1991; Amended June
1994

MIDWEST CONSORTIUM FOR HAZARDOUS WASTE WORKERS TRAINING

Draft Fee Policy for Consortium Members

It is recognized that if Consortium members are to move their training programs toward self sufficiency (that is to operate eventually without the subsidy of Federal funds) then fees need to be charged. Further there is a need to have somewhat uniform fees among Consortium members so constituencies within states can be served without being distracted by what may appear to be "bargain basement" offerings in neighboring states. Therefore it is suggested the following policy be adopted:

Fees for training be set in a range between \$15 to \$18.75 per student contact hour. This translates to a fee ranging from \$600 to \$750 for a 40 hour program. This represents only instructional and teaching material costs. Such student consumables as transportation to simulated dump sites, box lunches and refreshment breaks would be extra.

It is recognized that not all participants can afford fees at the above rate. Each Consortium member has the option to institute a waiver or a reduction of the above fees. Should this occur it is important that any policy concerning such waivers or reductions be in writing before such practices are implemented. In addition group discounts to specific employers, government agencies or unions can be arranged but this should be in accordance to a previously stated policy. Each Consortium member may work out their own policy on this matter. The policy should be on file with the Central Administration at the University of Cincinnati and be available to other Consortium members.

Adopted March, 1988.

Amended 1990—Not Available

Amended 1994

The following are maximum fees which are charged by a training center for a program, by duration:

40-hour	\$925
24-hour	600
8-hour	180 (no change)

Tab 100 (Tab 5)
Marketing
(1988 (est.), 1989)

Title: Marketing

Adopted 1988; Re-affirmed January 1989

Adopted 1988 (est.)—Not available

Note: The policy did include a stipulation that a request for training in another WMC state would be referred to the appropriate Program Director. The contacted Program Director could provide the training only if the Program Director closer to the training need did not have the capacity to provide the program.

This aspect of the policy is verified in early Self-Audit survey instruments.

Re-affirmed 1989

1. Consortium-wide marketing should promote only Consortium Training programs, developed and approved by the Consortium Curriculum Committee. Other training programs offered by the training centers should not be formally promoted.
2. The training programs would be marketed only to the appropriate target audiences (e.g., 8-hour Supervisor should not be advertised as an introductory program).
3. Reference to Consortium requirements for medical releases and waivers of liability should be included in promotional materials.
4. Materials should reflect the uncertain nature of pending OSHA Certification requirements for training.
5. Consortium-wide marketing will support the existing policy regarding referrals (i.e., union members are referred back to their union if it is an NIEHS grantee; out-of-state applicants are referred to Midwest Consortium or other NIEHS grantee, as appropriate).
6. To facilitate consistency between institutional and Consortium marketing efforts, pre-publication or review of institutional materials is encouraged.

Tab 100 (Tab 6)
Medical Fitness
(1989, 1989, 1990)

Title: Medical Fitness

Adopted June 1989; Amended 1989; Amended October 17, 1990

Adopted 1989

Level A letter

Dear Doctor:

Your patient has enrolled in a training program for hazardous waste workers. The training may include full 'dress-out' in personal protective equipment (PPE), including a respirator. Medical clearance is required prior to training because of the remote possibility of an untoward health effect.

Full PPE involves wearing an air tight and water tight fully encapsulating protective suit which weighs up to 25 lbs. The self-contained breathing apparatus (SCBA) may weigh up to 35 lbs. and be carried by shoulder straps on the back. Trainees may be required to wear full PPE for up to ½ hour at a time and perform tasks such as maneuvering 55 gallon drums or shoveling simulated contaminated dirt. This may take place in heat or cold, indoors or outdoors.

Health risks include heat stress and demands on the cardio-pulmonary systems. The work of breathing is increased, with increased inspiratory and expiratory resistance, increased dead space and changes in minute ventilation. There is increased cardiac demand. Heat stress is induced by the clothing itself, and inspired air in respirators may become heated. Other effects are reduced visual fields and voice clarity. Claustrophobia may be a problem. Trainees will receive on-site information about the signs and symptoms of heat stress.

Obvious medical exclusions for use of PPE and respirators include: uncontrolled hypertension, heart attack in the last six months, angina pectoris, aortic stenosis, history of spontaneous pneumothorax, moderate or severe pulmonary disease, obesity and poor conditioning.

Please administer the attached brief history and physical, review the results with the trainee, and mail the medical clearance statement to the training program in the enclosed, self-addressed envelope. Laboratory studies (e.g., pulmonary function, cardiogram, exercise testing) are not required unless you feel they are indicated.

Thank you for your cooperation.

Midwest Consortium for Hazardous Waste Worker Training

MWC PPMTab 10020

Medical Fitness

MEDICAL EVALUATION FOR THE HAZARDOUS WASTE TRAINING PROGRAM

HISTORY OF:

Uncontrolled hypertension	Yes	No
Angina pectoris	Yes	No
Myocardial infarction	Yes	No
Aortic stenosis	Yes	No
Other cardiac disease	Yes	No
Pneumothorax	Yes	No
Asthma	Yes	No
Chronic respiratory disease	Yes	No
Phobias in confined spaces	Yes	No

PHYSICAL EXAMINATION

Height _____ Weight _____

BP: Systolic _____ Diastolic _____

Pulse _____ Respirations: _____

Heart: Rate
Rhythm
Murmurs
Other

Lungs:

Comments:

MEDICAL CLEARANCE FOR HAZARDOUS WASTE TRAINING PROGRAM

I have evaluated _____ and find him/her medically fit to participate in full "dress-out" using personal protective equipment including a respirator in the hazardous waste training program.

Date _____

Signature _____

Name _____

Address _____

Telephone _____

Amended 1989

Hold Harmless Agreement to use with Municipal Fire Departments and other Governmental Agencies

Level B 'Dear Dr.' letter

Level C 'Dear Dr.' letter

Hold Harmless Agreement

_____ (Name of Agency) agrees to indemnify, defend and hold harmless the Midwest Consortium for Hazardous Waste Worker Training, and _____ (Institution), each institution comprising the Midwest Consortium for Hazardous Waste Worker Training, their staff, officers, agents, and employees from any and all liability arising out of any injury, medical conditions or adverse health effects experienced by any employee or agent of _____ (Name of Agency) sent for

training. In addition, _____ (Name of Agency) certifies that its employees and agents are in a physical condition that will allow them to safely wear a self-contained breathing apparatus and Level A training suit.

(Agency)

(Signature and Title)

(Date)

Level B letter

Dear Doctor:

Your patient has enrolled in a training program for hazardous waste workers. The training may include “dress out” in personal protective equipment (PPE), including a respirator. Medical clearance is required prior to training because of the remote possibility of an untoward health effect.

The training PPE involves wearing a chemical splash suit and a self-contained breathing apparatus (SCBA), which may weigh up to 35 lbs. and is carried by shoulder straps on the back. Trainees may be required to wear PPE for up to ½ hour at a time and perform tasks such as maneuvering 55-gallon drums or shoveling simulated contaminated dirt. This may take place in heat or cold, indoors or outdoors.

Health risks include heat stress and demands on the cardio-pulmonary systems. The work of breathing is increased, with increased inspiratory and expiratory resistance, increased dead space and changes in minute ventilation. There is increased cardiac demand. Heat stress is induced by the clothing itself, and inspired air in respirators may become heated. Other effects are reduced visual fields and voice clarity. Claustrophobia may be a problem. Trainees will receive on-site information about the signs and symptoms of heat stress.

Obvious medical exclusions for use of PPE and respirators include: uncontrolled hypertension, heart attack in the last 6 months, angina pectoris, aortic stenosis, history of

spontaneous pneumothorax, moderate or severe pulmonary disease, obesity and poor conditioning.

Please administer the attached brief history and physical, review the results with the trainee, and mail the medical clearance statement to the training program in the enclosed, self-addressed envelope. Laboratory studies (e.g., pulmonary function, cardiogram, exercise testing) are not required unless you feel they are indicated.

Thank you very much for your cooperation.

Midwest Consortium for Hazardous Waste Worker Training

Level C letter

Dear Doctor:

Your patient has enrolled in a training program for hazardous waste workers. The training may include "dress out" in personal protective equipment (PPE), including a respirator. Medical clearance is required prior to training because of the remote possibility of an untoward health effect.

The training PPE involves wearing a chemical splash suit and a tight-fitting full-face or half-mask air purifying respirator. Trainees may be required to wear PPE for up to ½ hour at a time and perform tasks such as maneuvering 55-gallon drums or shoveling simulated contaminated dirt. This may take place in heat or cold, indoors or outdoors.

Health risks include heat stress and demands on the cardio-pulmonary systems. The work of breathing is increased, with increased inspiratory and expiratory resistance, increased dead space and changes in minute ventilation. There is increased cardiac demand. Heat stress is induced by the clothing itself, and inspired air in respirators may become heated. Other effects are reduced visual fields and voice clarity. Claustrophobia may be a problem. Trainees will receive on-site information about the signs and symptoms of heat stress.

MWC PPMTab 10024

Obvious medical exclusions for use of PPE and respirators include: uncontrolled hypertension, heart attack in the last 6 months, angina pectoris, aortic stenosis, history of spontaneous pneumothorax, moderate or severe pulmonary disease, obesity and poor conditioning.

Please administer the attached brief history and physical, review the results with the trainee, and mail the medical clearance statement to the training program in the enclosed, self-addressed envelope. Laboratory studies (e.g., pulmonary function, cardiogram, exercise testing) are not required unless you feel they are indicated.

Thank you very much for your cooperation.

Midwest Consortium for Hazardous Waste Worker Training

Amended 1990

Note. The 1990 amendment added one sentence to the previous physician signature page: "I understand that this does not substitute for full medical clearance for Hazardous Waste Worker activities".

MEDICAL CLEARANCE FOR HAZARDOUS WASTE TRAINING PROGRAM

I have evaluated _____ and find him/her to be Medically fit to participate in full 'dressout' using personal protective equipment including a respirator in the hazardous waste training program.

I understand that this does not substitute for full medical clearance for Hazardous Waste Worker activities.

Date: _____ Signature: _____

Name: _____

Address: _____

Telephone: () _____ - _____

Tab 100 (Tab 7)
Minimum Training Record
(1989, 2014)

Title: Trainee Records
Adopted June 12, 1989; Revised April 22, 2014

Adopted 1989

At a minimum, the following records will be maintained for a training file:

- Exam
- Waiver
- Medical release
- Class list
- Certificate with conditions or list of trainees and conditions for each, if any

Revised 2014

At a minimum, the following records will be maintained for a training file:

- Exam
- Waiver
- Medical release
- Class list
- Certificate with conditions or list of trainees and conditions for each, if any

Training records are maintained for a minimum of 5 years or as required by the institution, whichever is longer.

Tab 100 (Tab 8)
Monthly Activity Report
(1989, 1993, 2001, 2006, 2007, 2014, 2016, 2017)

Title: Monthly Report

Adopted April 1989; Revised October 1993; Revised June 2001; Revised January 2006;
Revised January 2007; Revised 2014; Revised 2016; Revised 2017

Adopted April 24, 1989

Midwest Consortium for Hazardous Waste Worker Training

Instructions for Completion of Monthly Activity Report

The activity Report form has been modified to reflect proposed Performance Evaluation Guidelines and discussions at the January meetings. Please complete one form for each month, beginning January 1989. The report should reflect Consortium-related activities of each Training Center.

The request for approximate number of hours expended has raised much concern. Project Coordinators should estimate the effort within an order of magnitude. The attitude of Central Administration is that the Coordinator should set aside no more than two hours at the end of the month and fill in the blanks; this “big chunks” effort should come to mind quickly.

The following specific instructions are offered to (hopefully) clear-up confusion. As time allows or during telephone conversations for other reasons, please give input on the new format and this supplement.

Specific Instructions

I. Training Delivery

This section should reflect activities related to the delivery of Consortium training programs. Section A should specify the course name; delivery dates; name of the contract firm or department, if appropriate; and the number of trainees completing the program. The “comments” may include any difficulties encountered, aberrations from the program or other information.

Section B affords the Training Center Personnel an opportunity to report training-preparation activities. The report may specify the activity if it is inclusive of all training programs or the course if it is several activities related to the same course. In the latter case, it should not be necessary to relate specific activities.

MWC PPMTab 10027

Section C is a report on individual or group trainer development activities. I could include Consortium-sponsored T-T-T programs; external programs, such as EPA or NIOSH programs; sponsored by the institution.

Section D covers marketing and outreach activities. The latter is intended to cover the handling of information requests related to hazardous waste. Categories within this section might include telephone contacts, mail appeals, plant visits, etc.

Section E is divided into two sections. The first permits the Training Center personnel to report on programs which may have been cancelled and comment on the reason for cancellation. The second section is to report new or revised training dates. If it is a revision, the original program should be noted in the comment section. Once a program is reported in this section, it is not necessary to report it again unless there is a change or when it is given or cancelled. It is important to specify the firm or department for the contract programs. (Please note that a marked up copy of the previous monthly may be an efficient way to report, here.)

II. Curriculum Activities

Section A permits the Training Center staff to report on Curriculum Revision or Development activities. Timelines, reports, or other materials can be submitted as addenda to the report if they have not been submitted previously.

Section B is to report on activities related specifically to the delivery of a Consortium Pilot Program. The report should reflect only those activities over and above those for the usual training delivery. Activities would include de-briefings with evaluation preparation of comments, and review of pilot reports, etc.

III. Other Consortium Activities

This section could include attendance at committee meetings, activities undertaken related to committees and task force assignments, and participation for activities as a representative of the Consortium, except any activities reported previously in Section I or II.

IV. General Comments

This permits the Project Coordinator an opportunity to report on general successes or difficulties. This may include comments or personnel or the institution. It provides an opportunity to note status with regard to the work plan.

Comments on this form are welcomed and should be directed to Barbara at Central Administration.

Midwest Consortium for Hazardous Waste Worker Training
Training Center Activity Report

Monthly Report for _____ (month/year)
 Institution _____
 Submitted by _____
 Date _____

Instructions:

This report is to be completed by the Project Coordinator or Director and submitted to Central Administration by the 10th day of the month following the report period.

I. TRAINING DELIVERY

A. Training Courses Offered:

	<u>Course Name* and Dates</u>	<u># Trainees Completing Program</u>	<u>Contract Program? Y or N</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____

*If contract program, note name of firm or department.

Comments:

B. Training Time:

	<u>Instructor</u>	<u># Hours</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

C. Preparation Activities

<u>Activity or Course</u>	<u>Personnel</u>	<u># Hours Involved</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Comments:

D. Marketing and Outreach Activities:

<u>Activity</u>	<u>Persons Involved</u>	<u># Hours</u>

Comments:

E. Revised Training Dates

1. Cancellations

<u>Dates</u>	<u>Course</u>

2. New or Revised Dates

<u>Dates</u>	<u>Course</u>	<u>Location**</u>	<u>Trainees</u>	<u>Contract Course (Y or N)</u>

*If revision, note course change in comment section.

**Note name of firm or department if it is a contract program.

Comments:

II. Curriculum Activities

A. Development or Revision Activities

<u>Curriculum</u>	<u>Activity</u>	<u>Persons Involved</u>	<u># Hours Involved</u>

Comments:

B. Pilot Program Activities (in excess of usual training requirements):

<u>Curriculum</u>	<u>Activity</u>	<u>Persons Involved</u>	<u># Hours Involved</u>

Comments:

III. Other Consortium Activities

<u>Activity</u>	<u>Persons Involved</u>	<u># Hours</u>

Comments:

General Comments:

Revised 1993—Not available

Revised 2001—Not available

Revised 2006—Not available

Revised 2007

Midwest Consortium for Hazardous Waste Worker Training

Monthly Report for _____
Institution _____
Submitted by _____
Date _____

Instructions: This report is to be completed by the Project Coordinator or Director and submitted to Central Administration by the 10th day of the month following the report period.

A. Training Course Offered

<u>Dates</u>	<u>Course #</u> <u>Trainees</u>	<u>Contract</u> <u>** (yes/no)</u>	<u>Street address, City, State & Zip</u> <u>Code</u>	<u>ATT</u> <u>Used*</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Comments:

*Enter here any use of ATT. This includes only distance learning, required access/use of Internet virtual reality simulations, CD, CD-R, and DVD. (Does not include PowerPoint)

**If contract program, note name of firm or department, city and state.

B. New or Revised Training Dates

<u>Dates</u>	<u>Course #</u> <u>Trainees</u>	<u>Contract</u> <u>Course**</u> <u>(yes/no)</u>	<u>Location</u>	<u>ATT</u> <u>Used*</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Comments:

C. Previous 3AW Training

1. Did any of the above programs result from previous 3 or 4-hour classes? (Put a star by the program above)

YES NO

2. Did any of the employers/groups trained above obtain other (non-Hazwoper) training from you?

YES NO

*Enter here any use of ATT. This includes only distance learning, required access/use of Internet virtual reality simulations, CD, CD-R, and DVD. (Does not include PowerPoint)

**If contract program, note name of firm or department, city and state.

Revised 2014

Midwest Consortium for Hazardous Waste Worker Training

Monthly Report for _____ (month/year)
 Institution _____
 Submitted by _____
 Date _____

Instructions: This report is to be completed by the Project Coordinator or Director and submitted to Central Administration by the 10th day of the month following the report period.

D. Training Course Offered

<u>Dates</u>	<u>Course # Trainees</u>	<u>Contract Course** (yes/no)</u>	<u>Location</u>	<u>ATT Used*</u>

Comments:

E. New or Revised Training Dates

<u>Dates</u>	<u>Course # Trainees</u>	<u>Contract Course** (yes/no)</u>	<u>Location</u>	<u>ATT Used*</u>

Comments:

F. Previous 3AW Training

3. Did any of the above programs result from previous 3 or 4-hour classes? (Put a star by the program above)

YES NO

4. Did any of the employers/groups trained above obtain other (non-Hazwoper) training from you?

YES NO

*Enter here any use of ATT. This includes only distance learning, required access/use of Internet virtual reality simulations, CD, CD-R, and DVD. (Does not include PowerPoint)

**If contract program, note name of firm or department, city and state.

Revised 2016—Not available

Revised 2017

Midwest Consortium for Hazardous Waste Worker Training

Monthly Report for _____
Institution _____
Submitted by _____
Date _____

Instructions: This report is to be completed by the Project Coordinator or Director and submitted to Central Administration by the 10th day of the month following the report period.

A. Training Course Offered

<u>Dates</u>	<u>Course #</u> <u>Trainees</u>	<u>Contract **</u> <u>(yes/no)</u>	<u>Street address, City, State & Zip</u> <u>Code</u>	<u>ATT Used*</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Comments:

*Enter here any use of ATT. This includes only distance learning, required access/use of Internet virtual reality simulations, CD, CD-R, and DVD. (Does not include PowerPoint)

**If contract program, note name of firm or department, city and state.

Revised 2020

Midwest Consortium for Hazardous Waste Worker Training

Monthly Report for _____

Institution _____

Submitted by _____

Date _____

Instructions: This report is to be completed by the Project Coordinator or Director and submitted to Central Administration by the 10th day of the month following the report period.

Training Course Offered

<u>Date</u>	<u>Course #</u>	<u>Contract Course**</u>	<u>(yes/no) Location, Street, City, State & Zip</u>	<u>Blended Learning</u>
<u>s</u>	<u>Trainees</u>	<u>Code</u>		<u>(BL)*</u>
				<u>Online only (OLO)*</u>

Comments:

*Enter OLO if material was delivered online only, with no interaction during the program

*Enter BL if material was delivered online and required interaction with facilitator for blended learning approach.

**If contract program, note name of firm or department, city and state.

Revised 2021

Report Month/Year	Center	Date Submitted	Submitted by
-------------------	--------	----------------	--------------

Instructions: This report is to be completed by the Project Coordinator or Director and submitted to Central Administration by the 10th day of the month following the report period.

KEY – Delivery Method

- 1 – In-person only (classroom-based instructor-led training; synchronous)
- 2 – Synchronous online only (virtual instructor-led training; requiring the instructor and students to be present at scheduled times)
- 3 – Asynchronous online only (self-paced training; students and instructors are not required to be online or in person at the same time for instruction)
- 4 – Synchronous online and in-person combination (blended learning at 2 different times or split classroom at the same time)
- 5 – Asynchronous online and in-person combination (blended learning or flipped classroom – part of the class is self-paced without instructor, part is in-person)
- 6 – Other

KEY – Supplemental Funding

2019 Disaster Act
Carryover
Coronavirus (COVID-19 SARS-CoV-2)
NONE

Date(s)	Course #	Number of Students	Number of hours	Contract Course? Yes or leave blank	Address/City/State/Zip (if contract course, note name of company or department, city & state)	Delivery Method	Supplemental Funds Used What type or leave blank	Justification size under \$5000 (reason for this size; must re-justify if more than 5000; must re-justify if had sufficient instructors)
04/01/21	40HR	3			1234 Snowman Trail St Paul MN 55101	1		Students cannot be moved to another section

KEY – Delivery Method

- 1 – In-person only (classroom-based instructor-led training; synchronous)
- 2 – Synchronous online only (virtual instructor-led training; requiring the instructor and students to be present at scheduled times)
- 3 – Asynchronous online only (self-paced training; students and instructors are not required to be online or in person at the same time for instruction)
- 4 – Synchronous online and in-person combination (blended learning at 2 different times or split classroom at the same time)
- 5 – Asynchronous online and in-person combination (blended learning or flipped classroom – part of the class is self-paced without instructor, part is in-person)
- 6 – Other

KEY – Supplemental Funding

- 2019 Disaster Act
- Carryover
- Coronavirus (COVID-19 SARS-CoV-2)
- NONE



MWC Monthly Data
Form Current Revise

**Tab 100 (Tab 9)
Equipment Labeling
(1989)**

Title: Equipment Labeling
Adopted December 15, 1989

Adopted 1989

The NIEHS has initiated financial audits at the facilities of some of the Hazardous Waste grant recipients. The contract auditors are very thorough in looking for institutional tags on all items purchased with grant dollars if the price exceeds \$500 (officially classified as equipment).

Tab 100 (Tab 10)
Refresher/Supervisor Eligibility
(1989)

Title: Refresher/Supervisor Eligibility
Adopted June 12, 1989

Persons attending a refresher training program conducted by the Midwest Consortium for Hazardous Waste Worker Training shall provide one of the following as part of the registration process:

1. Documentation of completion of initial training (this may be a certificate or letter from the training group or the employer).
2. Written statement from the employer of experience and/or training equivalent to an initial training program.
3. Personal, written documentation of experience and/or training equivalent in content to an initial program.

Failing to produce 1, 2 or 3, the person shall be advised to enroll in an initial training program.

NOTE: For persons who have completed initial Consortium training and are returning to the same institution for refresher training, the documentation process can be done internally.

Tab 100 (Tab 11)
Steering Committee Voting Rules
(1989, 2000)

Title: Voting rules
Adopted April 5, 1989; Amended December 2000

Adopted 1989—Not available

Note: Restricted voting to equipment-based training centers only.

Amended 2000

1. The ultimate responsibility and accountability for carrying out this grant rest with the University of Cincinnati (Central Administration). All matters dealing with the funding agency (the NIEHS) and other external agencies rest with the Central Administration. To fulfill the grant's purposes, the Central Administration must subcontract to participating institutions key aspects of the grant including training, evaluation and other services.

To facilitate the operation of this subcontracting arrangement a Steering Committee is established. The Steering Committee is composed of directors or heads of each participating institution. The chairs of three standing committees, Evaluation, Curriculum and Futures will each serve *ex officio* on the Steering Committee. The University of Cincinnati fiscal officer will also serve *ex officio*.

The Steering Committee will formulate policies and recommend procedures. The Steering Committee will deal with such issues as internal resource allocation, inclusion or exclusion of participating institutions, curriculum and evaluation. The Steering Committee will be permanently chaired by the Project's Principal Investigator at the University of Cincinnati.

2. For purposes of formal votes the director or head of each participating institution may cast ballots. Should a member be unable to attend a called meeting, a staff member from that institution may be designated the representative for that institution. In this event, the member must name the designee in a written notice to the Steering Committee chair at least 48 hours prior to any scheduled meeting. The designee may participate fully in the meeting. There will be no proxy voting.

3. Each institution will have one vote on all matters. All matters put to a vote must receive a majority. The University of Cincinnati has 1 vote to be used only to change the voting outcome.

4. The rules were adopted at the April 1989 meeting of the Steering Committee and take effect immediately upon adoption.

5. The voting system will be reviewed one year after being implemented.

**Tab 100 (Tab 12)
Release Form
(approx.1987, 1988)**

Title: Release from Liability Form
Adopted approximately 1987; Amended January 1988

Adopted 1987—Not available

Amended 1988

In consideration of the opportunity to participate in the Hazardous Waste Worker Training Program, I, for myself, my heirs, assigns, administrators and executors, waive, relinquish and surrender any claim or cause of action I or they may have against the Midwest Consortium for Hazardous Waste Worker Training, any of its member organizations, and any person, agent, officer employee of them or acting on their behalf or on behalf of any one of them arising out of such training.

Signed _____

Date _____

Tab 100 (Tab 13)
Non-Contract Trainer Policy
(1990, 1996)

Title: Non-contract Trainers
Adopted April 3, 1990; Amended March 1, 1996

Adopted 1990

Purpose:

To ensure quality control of “non-contract” trainers providing Consortium-sponsored training. A non-contract trainer is an individual employed by a government agency within the six-state Consortium region whose agency applies to the respective Midwest Consortium Training Center in that state to provide training to its employees who meet and maintain the criteria listed below.

Definition:

A non-contract trainer is an individual employed by a government agency, whose agency applies to the Midwest Consortium Training Center to provide training within the six states to its employees who meet the criteria and maintain the criteria listed below.

Restrictions:

Training pursuant to this policy shall be restricted to the delivery of Awareness and Operations-level training for state and municipal government employees.

Criteria:

1. “Non-contract” trainer credentials will be carefully examined by the Consortium Training Center personnel to determine if they are qualified. Academic degrees, trainer experience, and subject matter knowledge control will be considered.
2. “Non-contract” trainers will attend at least one Consortium presentation of the curriculum to be instructed.
3. “Non-contract” instructors will receive trainer training from the Consortium Training Center for which they will be providing training.
4. “Non-contract” instructors will deliver one or more training programs with an experienced Training Center instructor before independently provide training.
5. “Non-contract” trainers will receive annual retraining to meet the requirements of 1910.120 in addition to a review of adult education techniques. The annual refresher requirement may be fulfilled by attending the Consortium’s Annual Trainer Meeting.
6. “Non-contract” trainers are required to present all the topics, modules, labs, and exercises included in the student manuals and instruction guides. Tailoring of

- Consortium curricula is permitted with prior review and approval by the staff of the sponsoring Consortium Training Center.
7. Consortium evaluation instruments will be used by all “non-contract” trainers. Completed evaluation instruments will be submitted by “non-contract” instructors to the Training Center for review, recording, and submission to the Consortium evaluation institution.
 8. The Consortium and the Training Center name will be prominent on all training materials.
 9. The Consortium and the Training Center will be featured as the primary sponsors of the training programs delivered by the “non-contract” trainers.
 10. Quality control for each “non-contract” trainer performance will be ensured by at least annual conducting a site visit to monitor the program sponsored by the training institution, including an annual site review.

Amended 1996

The non-contract trainer policy is amended to include the Emergency Response Refresher (ERR) program.

**Tab 100 (Tab 14)
Data Access
(1991, 2019)**

Title: Access to MWC data held by a training center
Adopted January 9, 1991

Adopted 1991

Each training institution maintains a file on trainees who have participated in one or more Midwest Consortium programs. These files include biographical and training performance information. Unlike data on the central computer at the University of Kentucky, training institution data allows for the identification of individual trainees. This document presents a proposal for a data access policy that meets the needs of legitimate requesters and the rights to privacy of the individual trainees.

It seems clear that each training institution should comply with its parent institution's student/personnel records policy.

The Privacy Act of 1974 (Public Law 93-579) includes several safeguards that may go beyond existing institutional policy:

1. Trainees have a right to know how the information you hold is used.
2. Trainees have a right to access their own files and to correct, amend or request deletion of information that is inaccurate, irrelevant or outdated.
3. Information obtained for one purpose cannot be used for other purposes without the concerned individual's consent.
4. Medical records should not be released since that would constitute an unwarranted invasion of personal privacy.

Training institutions will need to develop additional policies or interpret existing Institutional policies to accommodate special kinds of requests. What trainee information should be made available to an employer from a contract training program? Individual data? Group data? Who 'passed'? Open ended comments? How should a training institution respond to a request by a potential employer for names of trained individuals? How should a training institution respond to requests from a researcher for names of trained individuals for the purposes of soliciting their participation in a research project? (Suggest that clearance from the Institutional Review Board should accompany any such request.) These considerations have been integrated into a brief 5-point data access policy statement which should provide adequate decision flexibility for each training institution.

Policy

1. Training institutions should comply with their parent institution's policy governing student records.
2. Training institutions not operating under the aegis of a parent institution should adopt the University of Cincinnati's policy governing student records.
3. Training Institutions should be aware of the provisions of the 1974 Privacy Act (Public Law 93-579) and operate in accordance with them.
4. Requests for information shall be considered only if they are made in writing. Responses to request also shall be in writing. Central Administration should be kept current about such requests for and decisions about dissemination of trainee information.
5. Requests by researchers should be accompanied by clearance for the project by the researcher's Institutional Review Board.

Amended 2019

Background

Each training institution maintains information on trainees who have participated in one or more Midwest Consortium programs. These files include biographical and training performance information. Unlike data on the central computer where evaluation data are stored, training institution data allows for the identification of individual trainees. This document presents a proposal for a data access policy that meets the needs of legitimate requesters and the rights to privacy of the individual trainees.

It seems clear that each training institution should be in compliance with its parent institution's student/personnel records policy.

The Privacy Act of 1974 (Public Law 93-579) includes several safeguards that may go beyond existing institutional policy:

1. Trainees have a right to know how the information you hold is used.
2. Trainees have a right to access their own files and to correct, amend or request deletion of information that is inaccurate, irrelevant or outdated.
3. Information obtained for one purpose cannot be used for other purposes without the concerned individual's consent.
4. Medical records should not be released since that would constitute an unwarranted invasion of personal privacy.

Training institutions will need to develop additional policies or interpret existing Institutional policies to accommodate special kinds of requests. What trainee information should be made available to and employer from a contract training program? Individual data? Group data? Who 'passed'? Open ended comments? How should a training institution respond to a request by a potential employer for names of trained individuals? How should a training institution respond to requests from a researcher for names of trained individuals for the purposes of soliciting their participation in a research project? (Suggest that clearance from the Institutional Review Board should accompany any such request.) These considerations have been integrated into a brief 5-point data access policy statement which should provide adequate decision flexibility for each training institution.

Policy

1. Training institutions should comply with their parent institution's policy governing student records.
2. Training institutions not operating under the aegis of a parent institution should adopt the institutional policy governing student records at the institution of the MWC Principal Investigator.
3. Training Institutions should be aware of the provisions of the 1974 Privacy Act (Public Law 93-579) and operate in accordance with them.
4. Requests for information shall be considered only if they are made in writing. Responses to request also shall be in writing. Central Administration should be kept current about such requests for and decisions about dissemination of trainee information.
5. Requests by researchers should be accompanied by clearance for the project by the appropriate Institutional Review Board(s).

Tab 100 (Tab 15)
MWC Annual Instructor Evaluation
(1993, 2008)

Title: Annual Instructor Evaluation Form
 Adopted January 1993, Amended January 10, 2008

Adopted 1993

Annual Instructor Evaluation

Instructor's name:
 Module:
 Date:

In addition to checking yes or no on the following specifics the observer is encouraged to add any comments he or she feels would be helpful to the overall process.	Yes	No	Reviewed & Discussed	Plan made to remediate
Were objectives stated clearly? Comments:				
Were objectives implemented? Comments:				
The introduction created an atmosphere of "need to know". Comments:				
Presentation was well organized. Comments:				
Stayed within the time allotted. Comments:				

In addition to checking yes or no on the following specifics the observer is encouraged to add any comments he or she feels would be helpful to the overall process.	Yes	No	Reviewed & Discussed	Plan made to remediate
Created an atmosphere that encouraged learning. Comments:				
Connected with the participants. Comments				
Made good use of leading questions. Comments:				
Clarified statements and answers. Comments:				
Summarized module: Comments:				

Additional Comments:

Amended 2008

Annual Instructor Evaluation

Instructor's name:

Module:

Date:

In addition to checking yes or no on the following specifics the observer is encouraged to add any comments he or she feels would be helpful to the overall process.	Yes	No	Reviewed & Discussed	Plan made to remediate
Were objectives stated clearly? Comments:				
Were objectives implemented? Comments:				
The introduction created an atmosphere of "need to know". Comments:				
Presentation was well organized. Comments:				
Stayed within the time allotted. Comments:				

In addition to checking yes or no on the following specifics the observer is encouraged to add any comments he or she feels would be helpful to the overall process.	Yes	No	Reviewed & Discussed	Plan made to remediate
Created an atmosphere that encouraged learning. Comments:				
Connected with the participants. Comments				
Made good use of leading questions. Comments:				
Clarified statements and answers. Comments:				
Summarized module: Comments:				

Additional Comments:

Instructor Feedback

Name:

Material Covered:

A. Thinking back on the presentation...

1. What aspect(s) went very well?
2. What aspect(s) did not go as well as you would have liked?

What resources would help in these aspect(s)?

Are they available to you?

3. Did any exchanges in the presentation make you think: Gee what do I say now?

What actions/activities would help you in the future if this happens?

B. Are there other training or support materials that you feel would improve the content of this part of the training?

Tab 100 (Tab 16)
Successful Completion
(1992, 1995, 2002, 2003, 2004, 2005, 2007, 2012, 2014, 2016,
2017, 2018, 2019, 2019, 2020, 2021, 2022, 2023)

Title: Successful Completion
Adopted 1992; amended in each year shown

Adopted 1992

SUCCESSFUL COMPLETION
DRAFT DEFINITION 1/92

The term "successful completion", as used in the OSHA Hazardous Waste Operations and Emergency Response rule (29 CFR 1910.120), the proposed OSHA Accreditation Standard (29 CFR 1910.121) and the NIEHS "Minimum Criteria for Worker Health and Safety Training for Hazardous Waste Operations and Emergency Response" (December 1991) shall mean:

1. that participants in each Consortium initial training course must obtain a passing score of 72 percent on the written and performance examinations, combined. Such passing score shall be comprised of 40 percent representing the score on the written examination (post-test) and 60 percent representing the score on the performance exercises specified in each course.
2. any participant failing to achieve a score of 60 percent on a written examination will be required to attend remedial training for purposes of reviewing and retaking the examination.
3. all initial training programs delivered shall include, at a minimum, at least one performance exercise in each of the following areas: Respiratory Protection, Personal Protective Equipment, Hazard Recognition and Work Practices.
4. a passing score of 80 percent is required to be achieved by participants on each performance exercise include in any course.
5. any participant failing to achieve a score of 80 percent on any performance exercise will be required to attend remedial training for purposes of reviewing and repeating performance of the exercise.

Amended 1995—lost

Amended—2002 (June)

Successful completion for each program is defined below.

Program	Requirement
40H	Attendance, 70% written items
8HR	Attendance, 70% written items & NIOSH Pocket Guide
8SU	Attendance, 70% written items
3AW	Attendance
40T	Attendance, 70% written items
8AI	Attendance
8AM	Attendance
IER	Attendance, 70% written items
TSD	Attendance, 70% written items
8TR	Attendance, 70% written items
ERR (Performance)	Attendance, 70% ERG Exercise, and Performance Checklist
ERR (Scenario)	Attendance, ERG Exercise
REL	Attendance
IMS	Attendance, 70% written items
ISA	Attendance
ETT	Attendance, Conduct-a-drill, Examine Results
PBT	Attendance
TUR	Attendance

Amended—2003 (November)

Successful completion for each program is defined below.

Program	Requirement
40H	Attendance, 70% written items
8HR – Scenarios, Heat Stress	Attendance, 70% written items & NIOSH Pocket Guide
8HR – Performance	Attendance, Activities Performance Skills Checklists, Simulation Performance Skills Checklists
8SU	Attendance, 70% written items
3AW	Attendance
40T	Attendance, 70% written items
8AI	Attendance
8AM	Attendance
IER	Attendance, 70% written items
TSD	Attendance, 70% written items
8TR	Attendance, 70% written items
ERR (Performance)	Attendance, 70% ERG Exercise, and Performance Checklist
ERR (Scenario)	Attendance, ERG Exercise
REL	Attendance
IMS	Attendance, 70% written items
ISA	Attendance
ETT	Attendance, Conduct-a-drill, Examine Results
PBT	Attendance
TUR	Attendance
SEC	Attendance

Amended—2004 lost

Amended--2005 (March)

Successful completion for each program is defined below.

Program	Requirement
40H	Attendance, 70% written items
8HR (Scenarios, Heat Stress)	Attendance, 70% written items & NIOSH Pocket Guide
8HR (Performance)	Attendance, Activities Performance Skills Checklists, Simulation Performance Skills Checklists
8-HR (WMD Modules)	Attendance, 100% Performance Checklists
8SU	Attendance, 70% written items
3AW	Attendance
40T	Attendance, 70% written items
8AI	Attendance
8AM	Attendance
IER	Attendance, 70% written items
TSD	Attendance, 70% written items
8TR	Attendance, 70% written items
ERR (Performance)	Attendance, 70% ERG Exercise, and Performance Checklist
ERR (Scenario)	Attendance, ERG Exercise
ERR (WMD Modules)	Attendance, Performance, 100% Performance Checklists
REL	Attendance
IMS	Attendance, 70% written items
ISA	Attendance
ETT	Attendance, Conduct-a-drill, Examine Results
PBT	Attendance
TUR	Attendance
SEC	Attendance and active participation in all exercises
PPE	Attendance; 100% on all Checklists

Amended—2007 (July)

Successful completion for each program is defined below.

Program	Requirement
40H	Attendance, 70% written items
8HR (Scenarios, Heat Stress)	Attendance, 70% written items & NIOSH Pocket Guide
8HR (Performance)	Attendance, Activities Performance Skills Checklists, Simulation Performance Skills Checklists
8-HR (WMD Modules)	Attendance, 100% Performance Checklists
8SU	Attendance, 70% written items
3AW	Attendance
40T	Attendance, 70% written items
8AI	Attendance
8AM	Attendance
IER	Attendance, 70% written items
TSD	Attendance, 70% written items
8TR	Attendance, 70% written items
ERR (Performance)	Attendance, 70% ERG Exercise, and Performance Checklist
ERR (Scenario)	Attendance, ERG Exercise
ERR (WMD Modules)	Attendance, Performance, 100% Performance Checklists
REL	Attendance
IMS	Attendance, 70% written items
ISA	Attendance
ETT	Attendance, Conduct-a-drill, Examine Results
PBT	Attendance
TUR	Attendance
SEC	Attendance and active participation in all exercises
PPE	Attendance; 100% on all Checklists
4FB	Attendance and active participation in exercise
MET	Attendance; Activities Performance Skills Checklists, Simulation Performance Skills Checklists
MLD	Attendance; Activities Performance Checklists, End-of chapter Questions, and Simulation Performance Skills Checklists

Amended—2012 (October) - Successful completion for each program is defined below.

Program	Requirement
40H	Attendance, 70% written items
8HR (Scenarios, Technology Fact Sheets)	Attendance, 70% written items & NIOSH Pocket Guide
8HR (Performance)	Attendance, Activities Performance Skills Checklists, Simulation Performance Skills Checklists
8-HR (WMD Modules)	Attendance, 100% Performance Checklists
8SU	Attendance, 70% written items
3AW	Attendance
40T	Attendance, 70% written items
8AI	Attendance
8AM	Attendance
IER	Attendance, 70% written items
TSD	Attendance, 70% written items
8TR	Attendance, 70% written items
ERR (Performance)	Attendance, 70% ERG Exercise, and Performance Checklist
ERR (Scenario)	Attendance, ERG Exercise
ERR (WMD Modules)	Attendance, Performance, 100% Performance Checklists
REL	Attendance
IMS	Attendance, 70% written items
ISA	Attendance
ETT	Attendance, Conduct-a-drill, Examine Results
PBT	Attendance
TUR	Attendance
HOS	Attendance, Duties and Activities Activity, Hazard Assessment Activity PPE Activity, Termination Activity
SEC	Attendance and active participation in all exercises
PPE	Attendance; 100% on all Checklists
4FB	Attendance and active participation in exercise
MET	Attendance; Activities Performance Skills Checklists, Simulation Performance Skills Checklists
MLD	Attendance; Activities Performance Checklists, End-of chapter Questions, and Simulation Performance Skills Checklists
CSR	Attendance, Required Activities
8CS	Attendance, 100% on Performance Checklists

Amended—2014 (February)

Successful completion for each program is defined below.

Program	Requirement
40H	Attendance, 70% written items
8HR (Scenarios, Technology Fact Sheets)	Attendance, 70% written items & NIOSH Pocket Guide
8HR (Performance)	Attendance, Activities Performance Skills Checklists, Simulation Performance Skills Checklists, 70% on Hazardous Material Fact Sheet
8-HR (WMD Modules)	Attendance, 100% Performance Checklists (minimum 15 items)
8HR (Modules, any format)	Attendance, 100% Performance Checklists, >=70% on written items
8SU	Attendance, 70% written items
3AW	Attendance
40T	Attendance, 70% written items
8AI	Attendance
8AM	Attendance
IER	Attendance, 70% written items
TSD	Attendance, 70% written items
8TR	Attendance, 70% written items
8TR (Modules, any format)	Attendance, 100% Performance Checklists, >=70% on written items
ERR (Performance)	Attendance, 70% ERG Exercise, and Performance Checklist
ERR (WMD Modules)	Attendance, Performance, 100% Performance Checklists (minimum 15 items)
ERR (Modules, any format)	Attendance, 100% Performance Checklists, >=70% on written items
REL	Attendance
IMS	Attendance, 70% written items
ISA	Attendance
ETT	Attendance, Conduct-a-drill, Examine Results
PBT	Attendance
TUR	Attendance
HOS	Attendance, Duties and Activities Activity, Hazard Assessment Activity PPE Activity, Termination Activity
SEC	Attendance and active participation in all exercises
PPE	Attendance; 100% on all Checklists

Program	Requirement
4FB	Attendance and active participation in exercise
MET	Attendance; Activities Performance Skills Checklists, Simulation Performance Skills Checklists
MLD	Attendance; Activities Performance Checklists, End-of chapter Questions, and Simulation Performance Skills Checklists
CSR	Attendance, Required Activities
8CS	Attendance, 100% on Performance Checklists
WEA	Attendance, Required Activities
HCS	Attendance, completion of five activities (definitions, labels, pictograms, SDS)
EXP	Attendance, 100% on all Checklists

Amended—2016

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
40H	Attendance, 70% written items
8HR (Scenarios, Technology Fact Sheets)	Attendance, 70% written items & NIOSH Pocket Guide
8HR (Performance)	Attendance, Activities Performance Skills Checklists, Simulation Performance Skills Checklists, 70% on Hazardous Material Fact Sheet
8-HR (WMD Modules)	Attendance, 100% Performance Checklists (minimum 15 items)
8HR (Modules, any format)	Attendance, 100% Performance Checklists, >=70% on written items
8SU	Attendance, 70% written items
3AW	Attendance
40T	Attendance, 70% written items
8AI	Attendance
8AM	Attendance
IER	Attendance, 70% written items
TSD	Attendance, 70% written items
8TR	Attendance, 70% written items
8TR (Modules, any format)	Attendance, 100% Performance Checklists, >=70% on written items
ERR (Performance)	Attendance, 70% ERG Exercise, and Performance Checklist
ERR (WMD Modules)	Attendance, Performance, 100% Performance Checklists (minimum 15 items)

Program	Requirement
ERR (Modules, any format)	Attendance, 100% Performance Checklists, >=70% on written items
REL	Attendance
IMS	Attendance, 70% written items
ISA	Attendance
ETT	Attendance, Conduct-a-drill, Examine Results
PBT	Attendance
TUR	Attendance
HOS	Attendance, Duties and Activities Activity, Hazard Assessment Activity PPE Activity, Termination Activity
SEC	Attendance and active participation in all exercises
PPE	Attendance; 100% on all Checklists
4FB	Attendance and active participation in exercise
MET	Attendance; Activities Performance Skills Checklists, Simulation Performance Skills Checklists
MLD	Attendance; Activities Performance Checklists, End-of chapter Questions, and Simulation Performance Skills Checklists
CSR	Attendance, Required Activities
8CS	Attendance, 100% on Performance Checklists
WEA	Attendance, Required Activities
HCS	Attendance, completion of five activities (definitions, labels, pictograms, SDS)
EXP	Attendance, 100% on all Checklists

NOTE: For each program presented at the training center, the director will develop and implement a plan regarding remediation when ‘successful completion’ is not achieved.

Some examples of actions that might be included in a program-by-program center policy follow: missed class time can be made up by reviewing material and discussing content with facilitator; no action will be taken and no certificate given; facilitator will verbally present items in a test to participants who have difficulty reading English; facilitator and team will allow up to three attempts at skill demonstration, with suggestions made after each unsuccessful attempt.

Amended—2017 January lost

Note: this was a reissue of remediation guidance, addition of ERG app Facilitator Guide.

Amended—2018

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
40H	Attendance, min 70% written items, 100% on all Performance Checklists
8HR (Technology Fact Sheets)	Attendance, min 70% NIOSH Pocket Guide Exercise Performance Measure, 100% on all Performance Checklists
8HR (Performance)	Attendance, 100% on all Performance Checklists, min 70% on Hazardous Material Fact Sheet
8-HR (WMD Modules)	Attendance, 100% on all Performance Checklists
8HR (Modules, any format)	Attendance, 100% Performance Checklists, min 70% any Performance Measure in module(s) used
8SU	Attendance, min 70% written items, active participation in all activities
3AW	Attendance
40T	Attendance, min 70% written items, 100% on all Performance Checklists
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
IER	Attendance, min 70% written items, 100% on all Performance Checklists
TSD	Attendance, min 70% written items, active participation in all activities
8TR	Attendance, min 70% written items, 100% on all Performance Checklists
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
ERR (Performance)	Attendance, min 70% ERG Exercise, 100% on all Performance Checklists
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, 70% any Performance Measure in module(s) used
REL	Attendance
ICS	Attendance, min 70% written items, active participation in all activities
ISA	Attendance
ETT	Attendance, Conduct-a-Drill, Examine Results
PBT	Attendance
TUR	Attendance
HOS	Attendance, 100% on all Performance Checklists
SEC	Attendance, 100% on all Performance Checklists
PPE	Attendance; 100% on all Performance Checklists
4FB	Attendance, active participation in exercise

Program	Requirement
MET	Attendance, 100% on Performance Checklists
MLD	Attendance, 100% on Performance Checklists
CSR	Attendance, 100% on all Performance Checklists
8CS	Attendance, 100% on all Performance Checklists
WEA	Attendance, active participation in all activities
HCS	Attendance, active participation in all activities
EXP	Attendance, 100% on all Performance Checklists
SEC-F	Attendance, 100% on all Performance Checklists
VOL	Attendance
PRP	Attendance

Amended—2019 (January)

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
40H	Attendance, min 70% written items, 100% on all Performance Checklists
8HR (Technology Fact Sheets)	Attendance, min 70% NIOSH Pocket Guide Exercise Performance Measure, 100% on all Performance Checklists
8HR (Performance)	Attendance, 100% on all Performance Checklists, min 70% on Hazardous Material Fact Sheet
8-HR (WMD Modules)	Attendance, 100% on all Performance Checklists
8HR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
8SU	Attendance, min 70% written items, active participation in all activities
3AW	Attendance (for outline program approved topics see Policy Tab 22a)
40T	Attendance, min 70% written items, 100% on all Performance Checklists
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
IER	Attendance, min 70% written items, 100% on all Performance Checklists
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used; ERG exercise required
ERR (Performance)	Attendance, min 70% ERG Exercise, 100% on all Performance Checklists
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
REL	Attendance

Program	Requirement
ICS	Attendance, min 70% written items, active participation in all activities
ISA	Attendance
ETT	Attendance, Conduct-a-Drill, Examine Results
PBT	Attendance
TUR	Attendance
HOS	Attendance, 100% on all Performance Checklists
SEC	Attendance, 100% on all Performance Checklists
PPE	Attendance, 100% on all Performance Checklists
4FB	Attendance, active participation in exercise
MET	Attendance, 100% on all Performance Checklists
MLD	Attendance, 100% on all Performance Checklists
CSR	Attendance, 100% on all Performance Checklists
8CS	Attendance, 100% on all Performance Checklists
WEA	Attendance, active participation in all activities
HCS	Attendance, active participation in all activities
EXP	Attendance, 100% on all Performance Checklists
SEC-F	Attendance, 100% on all Performance Checklists
VOL	Attendance
PRP	Attendance

Each Training Center director will maintain a policy to be implemented when successful completion cannot be documented. This may include remediation, 'attendance certificate' or other methods shown in the policy and known to all trainers.

Amended as shown to reflect new programs or requirements, most recently June 24, 2019

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
40H	Attendance, min 70% written items, 100% on all Performance Checklists
8HR (Technology Fact Sheets)	Attendance, min 70% NIOSH Pocket Guide Exercise Performance Measure, 100% on all Performance Checklists
8HR (Performance)	Attendance, 100% on all Performance Checklists, min 70% on Hazardous Material Fact Sheet
8-HR (WMD Modules)	Attendance, 100% on all Performance Checklists

Program	Requirement
8HR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
8SU	Attendance, min 70% written items, active participation in all activities
3AW	Attendance (for outline program approved topics see Policy Tab 22a)
40T	Attendance, min 70% written items, 100% on all Performance Checklists
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
IER	Attendance, min 70% written items, 100% on all Performance Checklists
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used; ERG exercise required
ERR (Performance)	Attendance, min 70% ERG Exercise, 100% on all Performance Checklists
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
REL	Attendance
ICS	Attendance, min 70% written items, active participation in all activities
ISA	Attendance
ETT	Attendance, Conduct a Drill, Examine Results
PBT	Attendance
TUR	Attendance
HOS	Attendance, 100% on all Performance Checklists
SEC	Attendance, 100% on all Performance Checklists
PPE	Attendance, 100% on all Performance Checklists
4FB	Attendance, active participation in exercise
MET	Attendance, 100% on all Performance Checklists
MLD	Attendance, 100% on all Performance Checklists
CSR	Attendance, 100% on all Performance Checklists
8CS	Attendance, 100% on all Performance Checklists
WEA	Attendance, active participation in all activities
HCS	Attendance, active participation in all activities
EXP	Attendance, 100% on all Performance Checklists
SEC-F	Attendance, 100% on all Performance Checklists
VOL	Attendance

Program	Requirement
PRP	Attendance
AMN	Attendance, min 70% post-test, 100% on all Performance Checklists

Each Training Center director will maintain a policy to be implemented when successful completion cannot be documented. This may include remediation, ‘attendance certificate’ or other methods shown in the policy and known to all trainers.

Amended July 2020 (amended programs in bold)

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
40H	Attendance, min 70% written items, 100% on all Performance Checklists
8HR (Technology Fact Sheets)	Attendance, min 70% NIOSH Pocket Guide Exercise Performance Measure, 100% on all Performance Checklists
8HR (Performance)	Attendance, 100% on all Performance Checklists, min 70% on Hazardous Material Fact Sheet
8-HR (WMD Modules)	Attendance, 100% on all Performance Checklists
8HR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
8SU	Attendance, min 70% written items, active participation in all activities
3AW	Attendance (for outline program approved topics see Policy Tab 22a)
40T	Attendance, min 70% written items, 100% on all Performance Checklists
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
IER	Attendance, min 70% written items, 100% on all Performance Checklists
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used; ERG exercise required
ERR (Performance)	Attendance, min 70% ERG Exercise, 100% on all Performance Checklists
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
REL	Attendance
ICS	Attendance, min 70% written items, active participation in all activities
ISA	Attendance
ETT	Attendance, Conduct a Drill, Examine Results
PBT	Attendance
TUR	Attendance

Program	Requirement
HOS	Attendance, 100% on all Performance Checklists
SEC	Attendance, 100% on all Performance Checklists
PPE	Attendance, 100% on all Performance Checklists
4FB	Attendance, active participation in exercise
MET	Attendance, 100% on all Performance Checklists
MLD	Attendance, 100% on all Performance Checklists
CSR	Attendance, 100% on all Performance Checklists
8CS	Attendance, 100% on all Performance Checklists
WEA	Attendance, active participation in all activities
HCS	Attendance, active participation in all activities
EXP	Attendance, 100% on all Performance Checklists
SEC-F	Attendance, 100% on all Performance Checklists
VOL	Attendance
PRP	Attendance
AMN	Attendance, min 70% post-test, 100% on all Performance Checklists
DRL	Attendance, 100% on all Performance Checklists
TBL	Attendance, 100% on all Performance Checklists

Each Training Center director will maintain a policy to be implemented when successful completion cannot be documented. This may include remediation, ‘attendance certificate’ or other methods shown in the policy and known to all trainers.

Amended August 12, 2021 (amended program in bold)

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
3AW	Attendance (for outline program approved topics see Policy Tab 22a)
4FB	Attendance, active participation in exercise
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
8CS	Attendance, 100% on all Performance Checklists
8HR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used

Program	Requirement
8HR (Performance)	Attendance, 100% on all Performance Checklists, min 70% on Hazardous Material Fact Sheet
8HR (Technology Fact Sheets)	Attendance, min 70% NIOSH Pocket Guide Exercise Performance Measure, 100% on all Performance Checklists
8HR (WMD Modules)	Attendance, 100% on all Performance Checklists
8HR-P	Attendance, min 70% on Hazardous material fact sheets; 100% on Performance Checklists
8SU	Attendance, min 70% written items, active participation in all activities
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used; ERG exercise required
40H	Attendance, min 70% written items, 100% on all Performance Checklists
40T	Attendance, min 70% written items, 100% on all Performance Checklists
AMN	Attendance, min 70% post-test, 100% on all Performance Checklists
CSR	Attendance, 100% on all Performance Checklists
CVC	Attendance
CVD	Attendance, 100% on Response Drill Checklist
DRL	Attendance, 100% on all Performance Checklists
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
ERR (Performance)	Attendance, min 70% ERG Exercise, 100% on all Performance Checklists
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR-P	Attendance, min 70% on Hazardous materials fact sheet, 100% on all performance Checklists
ETT	Attendance, Conduct a Drill, Examine Results
EXP	Attendance, 100% on all Performance Checklists
FCP	Attendance
HCS	Attendance, active participation in all activities
HOS	Attendance, 100% on all Performance Checklists
ICS	Attendance, min 70% written items, active participation in all activities
IER	Attendance, min 70% written items, 100% on all Performance Checklists
ISA	Attendance
MET	Attendance, 100% on all Performance Checklists
MLD	Attendance, 100% on all Performance Checklists
PBT	Attendance

Program	Requirement
PPE	Attendance, 100% on all Performance Checklists
PRP	Attendance
REL	Attendance
SEC	Attendance, 100% on all Performance Checklists
SEC-F	Attendance, 100% on all Performance Checklists
TBL	Attendance, 100% on all Performance Checklists
TUR	Attendance
VOL	Attendance
WEA	Attendance, active participation in all activities

Each Training Center director will maintain a policy to be implemented when successful completion cannot be documented. This may include remediation, 'attendance certificate' or other methods shown in the policy and known to all trainers.

Amended September 15, 2022 (amended program in **bold**)

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
3AW	Attendance (for outline program approved topics see Policy Tab 22a)
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
8CS	Attendance, 100% on all Performance Checklists
8HR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
8HR-P	Attendance, min 70% on Hazardous material fact sheets; 100% on Performance Checklists
8SU	Attendance, min 70% written items, active participation in all activities
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used; ERG exercise required
40H	Attendance, min 70% written items, 100% on all Performance Checklists
40T	Attendance, min 70% written items, 100% on all Performance Checklists
AMN	Attendance, min 70% post-test, 100% on all Performance Checklists
CSR	Attendance, 100% on all Performance Checklists
CVC	Attendance
CVD	Attendance, 100% on Response Drill Checklist
DRL	Attendance, 100% on all Performance Checklists

Program	Requirement
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR-P	Attendance, min 70% on Hazardous materials fact sheet, 100% on all performance Checklists
ETT	Attendance, Conduct a Drill, Examine Results
EXP	Attendance, 100% on all Performance Checklists
FCP	Attendance
HCS	Attendance, active participation in all activities
HOS	Attendance, 100% on all Performance Checklists
ICS	Attendance, min 70% written items, active participation in all activities
IER	Attendance, min 70% written items, 100% on all Performance Checklists
ISA	Attendance
MLD	Attendance, 100% on all Performance Checklists
OAC	Attendance
OEC	Attendance, 100% on Skills Checklist
PBT	Attendance
PPE	Attendance, 100% on all Performance Checklists
PRP	Attendance
REL	Attendance
SEC-F	Attendance, 100% on all Performance Checklists
TBL	Attendance, 100% on all Performance Checklists
TSD	Attendance, min 70% written items, active participation in all activities
TUR	Attendance
VOL	Attendance
WEA	Attendance, active participation in all activities

Each Training Center director will maintain a policy to be implemented when successful completion cannot be documented. This may include remediation, 'attendance certificate' or other methods shown in the policy and known to all trainers.

Amended November 15, 2023 (amended program in **bold**)
Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
3AW	Attendance (for outline program approved topics see Policy Tab 22a)
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
8CS	Attendance, 100% on all Performance Checklists
8HR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
8HR-P	Attendance, min 70% on Hazardous material fact sheets; 100% on Performance Checklists
8SU	Attendance, min 70% written items, active participation in all activities
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used; ERG exercise required
40H	Attendance, min 70% written items, 100% on all Performance Checklists
40T	Attendance, min 70% written items, 100% on all Performance Checklists
AMN	Attendance, min 70% post-test, 100% on all Performance Checklists
CSR	Attendance, 100% on all Performance Checklists
CVC	Attendance
CVD	Attendance, 100% on Response Drill Checklist
DRL	Attendance, 100% on all Performance Checklists
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR-P	Attendance, min 70% on Hazardous materials fact sheet, 100% on all performance Checklists
ETT	Attendance, Conduct a Drill, Examine Results
EXP	Attendance, 100% on all Performance Checklists
FCP	Attendance
HCS	Attendance, active participation in all activities
HOS	Attendance, 100% on all Performance Checklists
ICS	Attendance, min 70% written items, active participation in all activities
IER	Attendance, min 70% written items, 100% on all Performance Checklists
ISA	Attendance
MLD	Attendance, 100% on all Performance Checklists
OAC	Attendance
OEC	Attendance, 100% on Skills Checklist

Program	Requirement
PBT	Attendance
PPE	Attendance, 100% on all Performance Checklists
PRP	Attendance
PSR	Attendance, 100% on Performance Checklists
REL	Attendance
SEC-F	Attendance, 100% on all Performance Checklists
TBL	Attendance, 100% on all Performance Checklists
TSD	Attendance, min 70% written items, active participation in all activities
TUR	Attendance
VOL	Attendance
WEA	Attendance, active participation in all activities

Each Training Center director will maintain a policy to be implemented when successful completion cannot be documented. This may include remediation, ‘attendance certificate’ or other methods shown in the policy and known to all trainers.

Amended May 23, 2023 (amended program in bold)

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
3AW	Attendance (for outline program approved topics see Policy Tab 22a)
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
8CS	Attendance, 100% on all Performance Checklists
8HR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
8HR-P	Attendance, min 70% on Hazardous material fact sheets; 100% on Performance Checklists
8SU	On 2/15/23 a decision was made to remove this course. Attendance, min 70% written items, active participation in all activities
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used; ERG exercise required
40H	Attendance, min 70% written items, 100% on all Performance Checklists
40T	Attendance, min 70% written items, 100% on all Performance Checklists
AMN	Attendance, min 70% post-test, 100% on all Performance Checklists
CSR	Attendance, 100% on all Performance Checklists

Program	Requirement
CVC	Attendance
CVD	Attendance, 100% on Response Drill Checklist
DRL	Attendance, 100% on all Performance Checklists
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR-P	Attendance, min 70% on Hazardous materials fact sheet, 100% on all performance Checklists
ETT	Attendance, Conduct a Drill, Examine Results
EXP	Attendance, 100% on all Performance Checklists
FCP	Attendance
HCS	Attendance, active participation in all activities
HOS	Attendance, 100% on all Performance Checklists
ICS	Attendance, min 70% written items, active participation in all activities
IER	Attendance, min 70% written items, 100% on all Performance Checklists
ISA	Attendance
MLD	Attendance, 100% on all Performance Checklists
OAC	Attendance
OEC	Attendance, 100% on Skills Checklist
PBT	Attendance
PPE	Attendance, 100% on all Performance Checklists
PRP	Attendance
PSR	Attendance, 100% on Performance Checklists
REL	Attendance
SEC-F	Attendance, 100% on all Performance Checklists
TBL	Attendance, 100% on all Performance Checklists
TSD	Attendance, min 70% written items, active participation in all activities
TUR	Attendance
VOL	Attendance
WEA	Attendance, active participation in all activities

Each Training Center director will maintain a policy to be implemented when successful completion cannot be documented. This may include remediation, 'attendance certificate' or other methods shown in the policy and known to all trainers.

Amended May 23, 2023 (amended program in **bold**)

Successful completion for each program is defined below (**see also note at end**):

Program	Requirement
3AW	Attendance (for outline program approved topics see Policy Tab 22a)
8AI	Attendance, active participation in all activities
8AM	Attendance, active participation in all activities
8CS	Attendance, 100% on all Performance Checklists
8HR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
8HR-P	Attendance, min 70% on Hazardous material fact sheets; 100% on Performance Checklists
8TR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used; ERG exercise required
40H	Attendance, min 70% written items, 100% on all Performance Checklists
40T	Attendance, min 70% written items, 100% on all Performance Checklists
AMN	Attendance, min 70% post-test, 100% on all Performance Checklists
CSR	Attendance, 100% on all Performance Checklists
CVC	Attendance
CVD	Attendance, 100% on Response Drill Checklist
DRL	Attendance, 100% on all Performance Checklists
ERR (Modules, any format)	Attendance, 100% on all Performance Checklists, min 70% any Performance Measure in module(s) used
ERR (WMD Modules)	Attendance, 100% on all Performance Checklists
ERR-P	Attendance, min 70% on Hazardous materials fact sheet, 100% on all performance Checklists
ETT	Attendance, Conduct a Drill, Examine Results
EXP	Attendance, 100% on all Performance Checklists
FCP	Attendance
HCS	Attendance for the entire program, participation in exercises.
HOS	Attendance, 100% on all Performance Checklists
ICS	Attendance, min 70% written items, active participation in all activities

Program	Requirement
IER	Attendance, min 70% written items, 100% on all Performance Checklists
ISA	Attendance
MLD	Attendance, 100% on all Performance Checklists
OAC	Attendance
OEC	Attendance, 100% on Skills Checklist
PBT	Attendance
PPE	Attendance, 100% on all Performance Checklists
PRP	Attendance
PSR	Attendance, 100% on Performance Checklists
REL	Attendance, Satisfactorily submitted the Reporting What You See Exercise via Google Forms, attended the live 2-hour training
SEC-F	Attendance, 100% on all Performance Checklists
REL-H	Attendance, satisfactorily submitted the Reporting What You See Exercise via Google Forms, attended the live 2-hour training
TBL	Attendance, 100% on all Performance Checklists
TSD	Attendance, min 70% written items, active participation in all activities
TUR	Attendance
VOL	Attendance
WEA	Attendance, active participation in all activities

Each Training Center director will maintain a policy to be implemented when successful completion cannot be documented. This may include remediation, ‘attendance certificate’ or other methods shown in the policy and known to all trainers.

Tab 100 (Tab 17)
Refresher Language for Certificates
(1992, 1992)

Title: Refresher Program certificate language
Adopted March 31, 1992; Amended September 1, 1992

Adopted 1992—Not available

Amended 1992

For Site Worker and TSDf worker certificates:

Documentation of refresher training must be on file with the employer by insert month/year here.

For ER certificates:

Refresher training documentation or an updated statement of employee competency must be on file with the employer by insert month/year here.

Tab 100 (Tab 18)
Minimum Criteria Policy
(1993, 2001, 2002, 2006)

Title: Minimum Criteria Policy

Adopted 1993; Amended 2001; Amended 2002; Adopted 2006; Adopted 2018

Adopted 1993—Not available

Amended 2001—Not available

Amended 2002—Not available

Note. Included compliance with ANSI/ASSE Z490,1-2001

Adopted 2006 (new update from NIEHS)—Not available

NOTE: This draft has been updated to include changes shown in the final document, January 2006. (draft available in Word; not final)

DRAFT WORKSHOP REPORT

Minimum Health and Safety Training Criteria: Guidance for Hazardous Waste Operations and Emergency Response (HAZWOPER) and All- Hazards Disaster Prevention, Preparedness, and Response.

Based upon

**NIEHS/WETP
National Technical Workshop
March 30-April 1, 2005**

**National Clearinghouse for Worker Safety and Health Training
Operated by MDB, Inc.
1250 Connecticut Avenue, Washington, DC 20036
202.331.0060**

May 18, 2005

Foreword

This document is based upon a National Technical Workshop sponsored by the National Institute of Environmental Health Sciences, Worker Education and Training Program (WETP) conducted on March 30-April 1, 2005 in Los Angeles, CA. It was the third such training quality workshop conducted by the program since its creation in 1987; the initial workshop, conducted in 1990, produced the “Minimum Criteria for Worker Health and Safety Training for Hazardous Waste Operations and Emergency Response” followed by the “Interpretive Guidance” to the Minimum Criteria conducted in 1994. The initial “Minimum Criteria” served as the basis for the non-mandatory Appendix E to the OSHA Hazardous Waste Operations and Emergency Response standard at 29 CFR 1910.120.

This third workshop was conducted to update the “Minimum Criteria” guidance, which has served as the primary quality control foundation for the Worker Education and Training Program for the past 18 years. During that period, however, there have been significant advances in the development and application of advanced training technologies and substantial recent attention to “all-hazards” preparedness training for the emergency response community since 9/11 and the creation of the Department of Homeland Security.

The workshop was attended by over 110 participants from the WETP, the WETP grantees, and others invited from the public and private sectors. The workshop process included an opening plenary session with two expert panels, six breakout sessions on topical areas from the preliminary draft straw man document, and a closing plenary of reports and discussions of findings and recommendations from each breakout session. A draft workshop report was prepared following the workshop and sent to all participants for review and comment. Based upon the comments received, this final workshop report was prepared and issued.

This guidance document is intended to serve as the quality control basis for the training grants awarded by the Worker Education and Training Program beginning in FY 2006.

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1. INTRODUCTION

Worker safety and health training saves lives. This has been the experience of the Worker Education and Training Program of the National Institute of Environmental Health Sciences, which has trained over a million workers since its beginning in 1987. Its mandate came through the Superfund Amendments and Reauthorization Act of 1986, which also required OSHA to promulgate health and safety standards to protect and train workers engaged in hazardous waste operations. OSHA promulgated a final standard in March 1990 at 29 CFR 1910.120. The Act also established and funded a grants program for the training and education of workers engaged in work covered by that OSHA standard. The intent of the training grants program was to develop and deliver the highest quality training programs geared to the adult learner.

The initial quality control for the program was developed through a participatory national technical workshop in 1990 and issued by the Program in 1991. This original “Minimum Criteria” was updated in 1994 as the “Interpretive Guidance” to the “Minimum Criteria.” The 1994 guidance has served as the quality control basis for the WETP training grants program to the present time. There have been many developments in training since the inception of the grants program in 1987. Advances in training technologies and the emergence of all-hazards preparedness training in the emergency response sector since the terrorist attacks of 9/11 are two specific examples. The Program has, over the years, conducted a number of national technical workshops, such as “Advanced Training Technologies” conducted in 1999, for the purpose of developing additional guidance for the training grants program.

This guidance document, which has been similarly developed through a national technical workshop process, essentially updates the original “Minimum Criteria” to include advances in adult education in the hazardous waste operations and emergency response sector, particularly advanced training technologies application and integration, requirements for additional training programs to support HAZWOPER work, and post-9/11 all-hazards preparedness training including that for skilled support personnel as identified in HSPD#8.

This guidance emphasizes the principles of adult education (Section 8), establishes minimum criteria for designing training programs (Section 9), establishes quality control requirements for training programs (Section 10), and provides generic guidelines for training curriculum (Section 11). The latter addresses the three primary sectors established in the HAZWOPER standard: hazardous waste operations [29 CFR 1910.120 (b)-(o)], RCRA Treatment, Storage, and Disposal (TSD) operations [29 CFR 1910.120(p)], and emergency response operations [29 CFR 1910.120(q)]. In addition, training grant program awardees are required to annually conduct quality control audits and certify that their programs comply with this guidance.

Guiding Principles

The following are broad, overarching principles that frame the more detailed guidance in this document.

1. 29 CFR 1910.120 provides the needed framework for protecting hazardous waste workers and emergency responders. It is the most proactive OSHA standard for protecting workers who respond to disasters, both natural and manmade. In the latter category, OSHA has indicated that terrorist acts involving chemical, biological, radiological, and nuclear weapons would be covered by the standard. Acts involving explosive agents may also be covered, depending on the types of exposures generated by the

acts.

2. This guidance is primarily intended for organizations that provide hazardous waste worker and emergency response training under grants from NIEHS, but may likewise prove valuable to any organization that provides similar occupational health and safety training.
3. This document draws upon and references other guidance materials that provide excellent recommendations for training the intended target populations. Of particular note are the National Fire Protection Association guidelines and the FEMA "Guidelines for Haz Mat/WMD Response, Planning and Prevention Training: Guidance for Hazardous Materials Emergency Preparedness (HMEP) April 2003 Edition. The FEMA guidance has been fully adopted by reference in this document.
4. Whenever there is doubt about the appropriate category of training, the more comprehensive and protective should be applied.
5. Peer-to-peer training with hands-on activities is the most effective model for worker training. This guidance recommends that hands-on training should fill at least one-third of the training program hours.
6. Computer-based training methods can greatly augment the effectiveness and reduce the cost of hazardous waste worker training, but should not be the sole form of training when workers' health and safety are at risk especially with respect to skills training.
7. Proven adult-learning techniques should be the core of all worker training.
8. Worker safety and health training must be preceded by a needs analysis to ensure the appropriate knowledge, skills and attitudes are being transmitted. The training must be followed by a proper evaluation to document the knowledge, skills or attitudes were acceptably transmitted and that the worker possesses the necessary abilities to perform the tasks.
9. Post-disaster training must be tailored to the specific hazards presented by each disaster and should be revised as often as significant new hazard information becomes available or the stage of the disaster changes.

Note: MWC concurs with these principles. We obtained NIEHS supplemental funding for WMD training material development that continues to be used in refresher programs.

10. The original 1991 Minimum Criteria guidance was the basis of the OSHA non-mandatory appendix on training in the 1910.120 standard (Appendix E, Training Curriculum Guidelines). This update of the Minimum Criteria maintains most of the original recommendations; changes are intended to make the original material more clear, relevant, or protective of workers.

2. PURPOSE

The purpose of this document is to establish minimum health and safety training criteria for programs and providers to meet the training requirements established in:

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- the Hazardous Waste Operations and Emergency Response standard (29 CFR 1910.120);
- 1910.120-supporting training; and
- All hazard prevention, preparedness and response training as defined in the National Response Plan dated December 2004.

In addition, further purposes are to seamlessly integrate new training technologies and techniques, provide guidance with respect to annual refresher training, and emphasize the importance of all training programs being based upon the Principles of Adult Education.

3. SCOPE

These criteria apply to training providers offering training to all training populations established within 29 CFR 1910.120(e), (p)(7) and (8) (iii), and .120(q)(4),(5),(6),(7), and (8). They likewise apply to all 1910.120-supporting training programs and all-hazards prevention, preparedness, and response training offered by those training providers based upon the requirement that “initial” training has been successfully completed in accordance with .120 (e), (p), or (q).

4. APPLICATION

These criteria are applicable to all NIEHS/WETP training grant awardees for all 29 CFR 1910.120 based training, 1910.120-supporting training, and all-hazards prevention, preparedness, and response training for which the Awardee is funded by the NIEHS/WETP.

These criteria are recommended to all other training organizations providing 29 CFR 1910.120 based training as a guide.

5. ORGANIZATION

This document is organized in the following manner:

1. Worker Training Principles and Characteristics of Excellence with which all training providers should adhere is presented at the outset in Section 8.
2. Minimum training program design criteria, training program quality control, and curriculum guidelines are provided in Sections 9, 10, and 11 respectively, which apply to the initial and refresher training requirements within the HAZWOPER standard at 1910.120 (e), (p), and (q).
3. Annex A provides guidance specific to all 1910.120-supporting training programs. Sections 9 and 10 are applicable to these programs as well. Such training programs,

however, shall for purposes of this guidance not be considered as part of the initial HAZWOPER training programs but as separate training programs.

4. All-hazards training programs exclusively focus on the emergency response [29 CFR 1910.120-(q)] sector and may be integrated into both full time and collateral duty emergency responder training or provided as additional separate training modules or courses subsequent to initial training. Sections 9 and 10 apply to these training programs.
5. Annex C provides (in CD format) the “Guidelines for Haz Mat/WMD Response, Planning, and Prevention Training” developed by FEMA and dated April 2003, which is adopted by reference.
6. Annex D provides planners and evaluators with a checklist of adult education principles.

6. DEFINITIONS

The following definitions are applicable to this document.

1910.120-supporting training- specific hazards at an individual site covered by the HAZWOPER regulation for which additional specialized training is required, usually by an OSHA standard. Examples include asbestos, lead, confined spaces, mold, blood-borne pathogens, and process safety management. (See Annex A.)

“All-hazards”- includes, for purposes of understanding the recently released National Response Plan (NRP), a broad range of hazardous incidents for purposes of declaration of a “nationally significant event” that triggers the NRP. Commonly referred to as Weapons of Mass Destruction (WMD), this category also encompasses a broader range of hazards in the new NRP including major natural disasters, chemical, biological, radiological, and explosive incidents. The applicability of the HAZWOPER regulation to natural disasters and explosive events is determined by OSHA, which has previously confirmed that HAZWOPER applies to chemical, biological, and nuclear incidents.

Certificate- A written document stating the successful completion of a training course by a specific individual which is signed by the training provider of the course.

Certification- A written document stating that a training program, curriculum, instructor, or course meets a specified written requirement which is signed by an authorized certifying authority.

Competent- possessing the skills, knowledge, abilities, experience, and judgment required to perform assigned tasks or activities satisfactorily and safely, as determined by the employer and the training provider with respect to determination of successful completion of the applicable training course.

Core training-Initial off-site training as established in 29 CFR 1910.120 (e), (p), and (q).

Demonstration- showing and demonstrating the actual use of equipment or procedures.

Enabling objective- subordinate learning objectives that support attainment of the overall course objectives. An enabling objective addresses a single topic. There may be more than one enabling objective within a course module.

Hands-on training- training in a simulated work environment under the supervision of trained and experienced instructor(s) that permits each trainee to have experience performing tasks, making decisions, and/or using equipment appropriate to the job assignment for which training is being conducted.

Initial training- initial off-site training required by the HAZWOPER standard at 29 CFR 1910.120 (e), (p), and (q).

Learning objective- detailed written statements of the goal that is to be achieved through the attainment of a desired knowledge, skill, or ability that can be measured, demonstrated, or observed.

Lecture- an interactive discourse with a class, led by an instructor who is immediately available to address questions and engage in interactive discussion.

May- term used in the document to indicate something is permissible.

On-site training- the initial actual field experience of individuals having recently successfully completed the initial off-site training course. Supervision by a HAZWOPER trained and experienced supervisor is required and the duration of such on-site training varies in accordance with the HAZWOPER training category. On-site training is the responsibility of the employer.

Peer reviewed- reviewed by individuals with the relevant knowledge, experience, and education/training appropriate to the materials being reviewed.

Pre-entry briefing-site-specific briefing required prior to entry and commencement of work at any site covered by the HAZWOPER standard. This is the responsibility of the employer.

Proficient- meeting a stated level of achievement

Proficiency assessment- the method or methods used to determine that a trainee has acquired the stated level of achievement in knowledge, skills, and/or abilities specified in the training course learning objectives, which may be assessed through written or skills performance methods.

Refresher training- an annual training program for those who have successfully completed the initial off-site training program specific to their HAZWOPER training category or who have been so certified by their employer in accordance with the HAZWOPER regulatory requirements.

Shall- term used in the document to indicate something is mandatory.

Should- term used to indicate something is recommended.

Site-specific training- job site specific training, often referred to as a “pre-entry briefing,” to acquaint workers new to a job site covered by the HAZWOPER regulation with the site control plan, site hazards, control zones, protective measures required, and the emergency response plan. Site-specific training is the responsibility of the employer.

Skills assessment-the method or methods used to determine that a trainee has mastered the stated level of achievement in skills specified in the training course learning objectives.

Skills demonstration-actual performance of skill(s) specified in the training objectives in the presence of a qualified instructor using appropriate skills demonstration equipment, facilities, or drill environments.

Technology-enhanced training methods- often referred to as advanced training technologies such as web-based and other computer-based learning methodologies. It is assumed that training programs and instructional staff will utilize and effectively integrate whatever technologies are appropriate to achieve the course learning objectives in a manner that assures training effectiveness and learning retention.

Terminal objective- The training objectives specific to the instructional goals of the course. Individual course modules may have a terminal objective that includes multiple requirements supported by enabling objectives that address a single competency requirement.

Trainee/Instructor ratio- the number of trainees per instructor in a learning activity. The required minimum ratios are specified in Table I in section 9.3.6 of this document.

Training Director- The individual responsible for the overall management of all aspects of a training program. In the NIEHS/WETP grants program, this is synonymous with “Principle Investigator.”

Training day- eight contact hours. The eight contact hours are for training activities only and do not include breaks or lunch periods. Periodic brief breaks during the instruction are acceptable to ensure an effective learning environment.

Training hour- sixty actual training contact minutes.

Training hours- the number of training hours devoted to lecture, learning activities, small group work sessions, demonstrations, evaluations, and/or hands-on exercises. Where integrated technology-enhanced single student techniques are utilized the training director shall determine and document the applicable training hours pertaining to such learning activities.

Training program- A written document by a training provider that addresses all of the requirements established in section 9 of this document.

Training provider- Any organization providing a training program, which within this document is an NIEHS/WETP training grant awardee.

7. ACRONYMS

ADDIE	Analysis, Design, Development, Implementation, and Evaluation.
ANSI	American National Standards Institute.
CFR	Code of Federal Regulations.
DHS	Department of Homeland Security.
DOE	Department of Energy.
FEMA	Federal Emergency Management Agency.
HAZMAT	Hazardous Materials.
HAZWOPER	Hazardous waste Operations and Emergency Response standard at 29 CFR 1910.120.
ODP	Office of Domestic Preparedness.
OSHA	Occupational safety and Health Administration.
NFPA	National Fire Protection Association.
NIEHS	National Institute of Environmental Health Sciences.
NIOSH	National Institute for Occupational Safety and Health.
NRP	National Response Plan. DHS, December 2004.
PPE	Personal Protective Equipment.
PSM	Process Safety Management (OSHA standard at 29 CFR 1910.119).
RCRA/TSD	Resource Conservation and Recovery Act/Treatment Storage and Disposal.
RW I	Radiation Worker I (Level 1 training course established by DOE standard)
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RW II	Radiation Worker II (Level 2 training course established by DOE standard)
SARA	Superfund Amendment and Reauthorization Act of 1986.
SMART	Specific, Measurable, Action-oriented, Relevant, and Timely
TSCA	Toxic Substances Control Act.
UTL	Universal Task List (DHS)
WETP	Worker Education and Training Program.
WMD	Weapons of Mass Destruction.

8. WORKER TRAINING PRINCIPLES AND CHARACTERISTICS OF EXCELLENCE

The criteria detailed in this document are intended to provide guidance that will assure that the training programs delivered are of excellent quality and provide the best possible basis for working in hazardous environments in a safe and healthful manner. The criteria should also help workers participate in reducing the hazards that create such environments. It is essential in meeting these criteria that the training provider recognize and embrace the following characteristics of excellence and principles of adult education.

8.1 Characteristics of Excellence

The best training programs embody the following characteristics, which should be required of every program offered under these criteria. The programs are:

1. Accurate;
2. Credible;
3. Comprehensive;
4. Clear; and
5. Practical.

8.1.1 Accuracy

Accuracy can be ensured by requiring that the training materials be prepared and reviewed by qualified individuals, updated on a periodic basis, and applied by appropriately qualified and experienced individuals employing appropriate training techniques and methods.

8.1.2 Credibility

Employing educational methods appropriate to adult learners is particularly important for the high-hazard work environment. Credibility is enhanced when instructional staff is experienced in applying the knowledge and skills that they are teaching, establishing a “peer” relationship with the trainee. Excellent programs often include “reality check” learning activities that give trainees the continuing opportunity to measure the relevance of the instructional materials against their own personal experiences.

8.1.3 Comprehensive

Minimally acceptable training programs must cover everything required for someone to work safely in the industry, a requirement that is particularly critical with respect to working with hazardous materials. Providing inadequate information or failing to assure that the trainee has mastered the minimum necessary knowledge and skills can be dangerous to that trainee. Any training under the HAZWOPER standard must be comprehensive rather than simply meeting the minimum training hour duration specified in the standard. For that reason, the criteria are presented in considerable detail in this guidance, recognizing that the fundamental training objective is to achieve acceptable knowledge and skills among trainees already skilled in their trade without any regard for the training duration.

8.1.4 Clarity

Training programs must not only be accurate, believable, and comprehensive, they must also be clear. If the material is understandable only by someone with a college education, then the program will fail many workers. Training materials should be written in the language and grammar of everyday speech for the training target audience. Further, training material developers should measure readability levels to assure that the training materials are appropriate for their training target audience. They should accommodate a range of different literacy levels and learning styles as discussed in the following Principles of Adult Education.

8.1.5 Practicality

Training programs should present information, ideas, and skills that students see as directly useful in their working lives.

8.2 Principles of Adult Education applicable to HAZWOPER

The vast majority of HAZWOPER students are adults who already possess the knowledge, skills, and abilities to work in their current occupations such as fire fighters, emergency medical support personnel, rail workers, construction workers, chemical process operators, and utility workers. The objective of HAZWOPER training is to provide the additional knowledge, skills, and abilities to permit these workers to safely perform their trade in high-hazard environments. Achieving this requires basing instructional materials, techniques, staff, and setting upon sound and proven principles of adult education that are tailored to the specific target audience. The following are the basic principles of adult education applied to HAZWOPER and related

Adults learn best by doing. Knowledge alone is insufficient in the HAZWOPER environment. Workers must also be competent and proficient in the unique skills that are required in such work. Hands-on training, exercises, and proficiency assessment are essential.

The training environment must be conducive to learning. HAZWOPER training has two distinct learning environments: the initial off-site training and on-site supervised training. The off-site training must provide the knowledge required to perform the work in the HAZWOPER environment and verify the satisfactory attainment of the related skills. On-site supervised training is intended to verify that the student has gained the necessary knowledge and skills and can safely apply them in the actual workplace.

New skills should be based upon current skills. The new skills required by a fire fighter, ironworker, or laborer for them to safely perform their work in a HAZMAT incident or hazardous waste cleanup operation must be constructed on the individual's current occupational skills. Heavy equipment operators, for example, should already be qualified to operate their equipment before receiving training to operate the equipment under the unique circumstances of the hazardous waste cleanup site. This approach greatly facilitates learning, peer interaction, and retention as well.

Adults learn from a variety of learning activities including role playing, case studies, audio-visual discussions, discovery exercises, planning exercises, group discussions, lecture-discussions, report-back sessions, drills and exercises, computer use, web site access, computer simulations, and blended approaches utilizing integrated instructional technologies.

Adult learners need direct experience to apply new skills in the work environment. This principle is the underpinning of the need for the hands-on component of skills training. Scores on a knowledge test are not a satisfactory indication that new skills can be effectively and safely applied in the work setting.

Adults need frequent non-judgmental feedback. Adult learners need to know how they are doing in a manner that is not judgmental. Training must respect students existing knowledge, skill, experiences, and circumstances. Opportunities must be provided for constructive feedback to each student in the training course.

Small group activities are important to adult learners. This approach provides an opportunity for individual learners to share and discuss what they have learned with their peer students as adult learners benefit from the experiences of other participants.

Adult learners respond better when they have the opportunity to learn from their peers. The WETP has recognized the critical importance of peer instructors since the inception of the program, and continues to do so.

Adult learning must be reinforced. The knowledge and skills learned for work in the HAZWOPER environment must be retained if such are to be of value to the student. This is the primary purpose of refresher training, which must include critical skills aspects. Site-specific training and periodic drills also serve as reinforcement mechanisms as newly learned knowledge and skills are applied in an actual or simulated work environment.

Note: MWC utilizes hands-on methodology throughout, regardless of program.

Learning methods must consider the learner's technological fluency. Not all adult learners are comfortable or necessarily fluent in the effective use and application of technology-enhanced training tools, such as computer-based or web-based methods. The students' comfort level and fluency with technology must be considered before choosing technology-enhanced instructional methods and also during curriculum design.

Adult education is empowering. The knowledge, skills, and experiences adults gain in education programs should facilitate their becoming and remaining active participants in determining and improving the conditions under which they work and live.

Note: MWC concurs. Technology exercises can be conducted as small group activities, strengthening skills of all; no proficiency assessment requires computer use

ANNEX D provides a Checklist for Planners and Evaluators of the principles of adult education.

9. MINIMUM TRAINING PROGRAM DESIGN CRITERIA

9.1 Introduction

The following minimum general criteria apply to all providers of initial and annual refresher training required by the 29 CFR 1910.120 regulations (HAZWOPER), the 29 CFR 1910.120-supporting training programs detailed in Annex A, and all-hazards (termed WMD by WETP) supplemental training programs. The minimum initial and refresher HAZWOPER training curriculum guidelines are addressed in Section 11 of this document.

9.2 Assumptions

The HAZWOPER regulation requires initial off-site training and demonstration of the required minimum competencies in each of three primary categories of work covered by the regulation: hazardous waste cleanup operations, RCRA/TSD, and emergency response. The hazardous waste cleanup operations section of the standard also requires initial on-site supervised training after completion of the initial off-site training program. This is the responsibility of the employer and is not addressed in this guidance.

The required annual refresher training is included in this section and in the Minimum Training Curriculum Guidelines (Section 11) based upon the assumption that if initial training programs are provided, refresher training will be as well. Refresher training may be provided off-site or on-site. Given this assumption, this document recognizes that there are exceptions where training providers may not be the same for the delivery of the various training elements, i.e., 1910.120 core, refresher, 120-supporting, and all-hazards training.

This document does not provide guidance for craft, trade, job classification, or task training. This document is based upon the assumption that all trainees possess the knowledge, skills, and abilities specific to their individual craft or trade prior to entering a HAZWOPER training program. Further, under no circumstances should a worker be allowed to engage in work covered by the HAZWOPER regulation unless he or she has successfully completed the applicable HAZWOPER training and is in possession of the necessary skills and abilities to perform the work assigned. Training programs that also provide trade or craft training must ensure that this training is successfully completed before the worker begins the applicable HAZWOPER course. Under no circumstances shall such training be conducted concurrent with HAZWOPER training or counted toward the required minimum HAZWOPER training hour requirements.

This guidance recognizes that additional standard-specific training may be required for operations covered by the HAZWOPER standard where additional hazards may be present, such as confined spaces. Annex A covers 1910.120-supporting training. The need for all-hazards training has emerged as a result of the 9/11 terrorist attacks, the creation of the National Response Plan, and the issuance of several supplemental training awards by the NIEHS/WETP. Any training provider offering training in these additional 1910.120-supporting and all-hazards training categories must meet the applicable requirements established in this document in Sections 9 and 10.

Refresher training requirements in the HAZWOPER regulations vary to some degree among the three primary HAZWOPER categories. The assumption in this guidance is that written proficiency assessments are required in all annual refresher training and, in those courses where skills proficiency needs to be demonstrated, such shall be included.

Note: MWC believes proficiency assessments documented in these refreshers programs can replace written items.

The HAZWOPER regulations establish minimum initial training hours for the different work categories and minimum annual refresher training hours for some of these categories. The NIEHS/WETP awardees (and others such as OSHA and FEMA) have over a decade of experience in providing and evaluating these various training requirements. This experience has led to the conclusion that, for most target populations, the OSHA-required minimum training hours are not adequate to assure the necessary competencies. The objective of training, particularly in the high-hazard HAZWOPER environment, is the achievement of the necessary competencies and not simply completion of the minimum training hours required. OSHA-established minimum training hours must be met, but additional training hours may be required to achieve the needed competencies. This is particularly the case for the emergency response sector when all-hazards modules are added or integrated into the training courses. The following provides a summary of the range of training hours required among the WETP grantees and addressed in the FEMA document (Annex C) to meet the minimum competencies:

Table 1

Hazardous waste operations:

General site worker:	40-80 hours*
Other than General site worker worker:	24-36 hours*
Update Other than General site worker to General site worker:	16-24 hours*
Refresher, annual:	8 hours

RCRA/TSD:

Initial	24-40 hours*
Refresher, annual:	8 hours

Emergency Response:

Awareness level:	4-16 hours*
Operations level:	8-40 hours*
Technician level:	40-240 hours*
Refresher:	8 hours*

<u>Disaster Site Worker (OSHA 7600):</u>	16 hours
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*Upper end of range exceeds OSHA minimum.

Note: As a group, MWC offers all programs above except Other-than-General Site Worker and Disaster Site Worker; several members provide those courses as part of overall institutional service.

Finally, it is assumed that training providers and their instructional staff will utilize a range of training techniques and methods, including technology-enhanced, that are appropriate to meeting the course training objectives.

Note: Evaluation item in all programs includes feedback on “use resources to find information”; this increasingly includes electronic resources.

9.3 Core Criteria

A written Training Plan shall be prepared, implemented, maintained, and updated as necessary or an annual basis. It shall include the following elements at a minimum.

Note: A written plan is developed for a five-year period, and reviewed and updated annually to adjust for changing needs in the region.

9.3.1 Training Director

Each training program shall be under the direction of a Training Director who is responsible for the program. The Training Director must demonstrate the capacity for providing leadership, assuring productivity of appropriate worker health and safety training and education programs, and for managing the training programs including quality assurance and program evaluation. In addition, the Training Director shall have a minimum of two years of worker education experience. The Training Director is also responsible for several specific aspects of the training program, which are identified in the following sub-sections.

Note: Carol Rice continues as the Training Director, since 1987. Capabilities listed have been affirmed in site visits and reviews of applications, and by the External Advisory Board.

9.3.2 Training facility

Training facilities shall have available sufficient resources, equipment, and site locations to perform classroom and hands-on training in a setting conducive to effective learning for each specific course offered and shall have sufficient organization, qualified instructional staff, support staff, and services to conduct such training.

Note: The design and management of the training facility is the responsibility of the Program Director at each Training Center. Documentation of sufficient space, supplies and support services for the conduct of training is provided at five year intervals or at the time of any move of the Training Center during the five years.

Qualification of instructional staff is documented annually by the Program Director (See Policy File, Tab 15).

9.3.3 Instructional staff

Instructors shall be deemed competent by the Training Director to instruct specific courses on the basis of:

- documented relevant experience;
- successful completion of the courses in which they are intended to instruct;
- successful completion of a train-the-trainer program specific to the topics they will teach; and
- an annual evaluation of instructional competence by the training provider.

Note: Instructional staff are hired by the Program Director, consistent with institutional requirements and the MWC policy on qualifications (see Policy file, Tab 19). Qualifications for the program/topic to be facilitated by the trainer are documented at the Training Center. Annual recertification is conducted by the Program Director, as required by MWC Policy on Annual Instructor Evaluation, tab 15.

It is desirable that the same organization provide the courses and train-the-trainer program. To the extent possible, instructors should be experienced in the HAZWOPER category they intend to instruct and be peers of the trainees.

Instructors shall be required to maintain competency by:

- participating in continuing education or professional development programs;
- successfully completing annual instructor refresher training; and
- being re-certified by the Training Director subsequent to an annual review of instructional competency.

Note: Instructors document annual educational development participation. Annual refresher may be conducted as a group, or target a specific topic/skill, at the discretion of the Program Director and in consultation with the trainer. Annual recertification is documented for each trainer by the Program Director (see Policy Tab 15, Annual Instructor Evaluation).

The instructor annual refresher shall be devoted to applicable educational techniques, applicable training technologies, new or revised federal standards applicable to the courses being instructed, and hands-on training as appropriate. When new training methods including technologies are introduced into the training program, instructors shall be trained to effectively apply them prior to using them in the courses in which they are instructing.

Note: See directly above regarding content of annual refresher training. As needed, instructors are deemed competent by the Program Director to use any new equipment or technology.

The annual review of instructor competency shall include, at a minimum, observation by the Training Director or his or her designee of instructional delivery, review and discussion of observations with the instructor, and an analysis of the instructor performance based upon evaluations completed by trainees during the previous year.

Note: Annual recertification includes observation of each trainer by the Program Director or his/her designee (see Policy Tab 15, Annual Instructor Evaluation). Feedback on instructor performance is reviewed upon receipt of evaluation reports and subsequent review and feedback by the Training Director; any concern is addressed as soon as possible. The totality of evaluation feedback over the year is reviewed with the trainer by the Program Director.

Instructors providing instruction in the 1910.120-supporting training programs identified in Annex A and all-hazards training shall be certified competent to offer such instruction by the Training Director utilizing the preceding criteria as guidance. Where required by certain of these supporting training programs, such as asbestos or Construction Safety and Health (OSHA 10), the instructor shall be certified or authorized in accordance with the applicable requirements established by the certifying or authorizing authority.

Note: Not conducted as MWC program

9.3.4 Training course materials and content.

The Training Director shall ensure the review and approval of all course materials and other training aids, including but not limited to course syllabus for each course offered, trainee manuals, instructor manuals, audio-visual aids, enhanced technology methods, handouts, demonstration equipment, hands-on equipment and other such training materials prior to their initial use and as needed thereafter or at least annually. The Training Director shall document the review and approval process.

Note: All program-specific materials are reviewed annually and determinations made to prioritize any identified needed changes. This review includes suggestions made throughout the year by trainers and participants. Needs are presented by the Curriculum Lead to the Steering Committee annually prior to the joint meeting with External Advisory Board. Priorities are set and reviewed with the Board. The status, plan and progress are documented in the Progress and Final Reports to NIEHS.

The Training Director shall also ensure that all written, audio/visual, enhanced technology applications, and proficiency assessment instruments for each course are peer reviewed by technically competent external reviewers or by a standing advisory board established for that specific purpose. These reviewers shall possess relevant expertise and experience in the disciplines appropriate to the course subject. One or more of the reviewers shall be an experienced worker representing those to whom the training is directed.

Note: Reviewers are selected for each new item, based on the target population. The experienced worker is someone actively engaged in the skills or a trainer in the MWC who is/has documented experience and is likely to use the product. Proficiency instruments are finalized by the Evaluation Services Center that specializes in this activity.

Training courses shall be developed and updated as necessary to be consistent with the recognized principles of instructional design such as the ADDIE method (Analysis, Design, Development, Implementation, and Evaluation) as discussed in detail in the DOE Systematic Approach to Training manual (DOE-HDBK-1078-94), and addressed in ANSI Z-490.1-2001 (17). Learning objectives shall be developed that are realistic, meaningful, attainable, and measurable based upon guidance such as SMART (Specific, Measurable, Action-oriented, Relevant, and Timely).

Note: The MWC uses ADDIE and learning objectives are developed based on Bloom's Taxonomy.

Additional references that specifically consider the NIEHS/WETP training target audience can be found in the WETP workshop report "Guidelines for Training in Support of Workplace Safety and Health Programs", November 1998 and on the WETP web site (www.wetp.org) specific to the several bi-annual trainers exchange workshops. With respect to the seamless integration of new learning technologies, ODP's 2003 Blended Learning Approach (Reference 31) provides a detailed training delivery methods analysis tool (DMAT) that may be useful, which includes a comprehensive review of the ADDIE method. The methods used shall be fully documented by the Training Director.

Note: The process for all development and revision/update are tracked by the Training Director.

Particular attention should be devoted to the following with respect to course design and content:

- a. Characteristics of the training target audience.
- b. Target audience training needs.
- c. Course prerequisites, if any.
- d. Learning objectives, including learning objectives for each course module.
- e. Analysis and selection of delivery method appropriate to the training target audience and the learning objectives.
- f. Instructional materials including but not limited to an instructor's manual with lesson plans and learning objectives, a trainee manual, training aids, and learning technologies.
- g. Evaluation methods and criteria for satisfactory completion of the course.

9.3.5 Trainees

The program shall assure, to the extent possible, that the trainees recruited are capable of being employed in work involving hazardous waste operations and/or emergency response. If trainees are currently employed in a trade, craft, or specific job/task classification, the program shall assure, and document as appropriate, that they already possess the necessary skills of their trade, craft, or job/task classification. Trade, craft, or job/task classification trainees may be approved by the Training Director through a written justification based upon the requirement that the basic trade, craft, or job/task classification competencies have been or will be achieved prior to commencing HAZWOPER training.

Note: The majority (>=98%) of participants are employed at the time of training. Program Directors and their staff interact with employers and participants prior to training to assure that the program meets the requirements of the jobs being conducted.

The training program shall also have a written policy with respect to the necessary medical clearance for trainees to participate in the course and engage in the hands-on activities for those courses for which such is appropriate as determined and documented by the Training Director. No certifications of successful completion of the training shall be issued if the trainee is unable to complete specific course elements, such as dressed out hands-on or respirator wear.

Note: Any program that requires don/doff of SCBA and/or Level A suits requires ‘fitness for training’ clearance. See Policy File Tab 6, Medical Fitness. The MWC initiated fitness-for-training discussions in 1987 and established a policy for in 1988, leading among the NIEHS awardees.

Criteria for Successful Completion are enforced by the Program Director. (See Policy Manual, Tab 16.) Certificates are issued only upon meeting the criteria. Where exercise completion is not explicitly shown in the definition for some programs, ‘attendance’ is operationalized as ‘active participation’.

9.3.6 Instructor-trainee ratios

All classroom instruction shall not exceed 25 trainees per instructor. The ratio of students to instructors for hands-on activities are based upon protective ensemble levels as shown in Table 1. Ratios are also applicable to skills demonstration requirements to assure effective and timely attainment assessments, as well the safety of the trainees. No less than two instructors shall be present during any hands-on training activity that involves the wearing of personal protective or other equipment.

Table 2.

<u>Ensemble level</u>	<u>Ratio (Trainee/Instructor)</u>
C & D	10:1
A & B	5:1

Note: MWC Instructor Guides reference these ratios for equipment-based programs. Compliance is assured by the Program Director.

9.3.7 Proficiency Assessment

9.3.7.1 Initial training

Proficiency shall be evaluated and documented by the use of a written assessment and skills demonstration that are selected and developed by the training director and staff to evaluate whether the program achieves its stated objectives. The level of minimum achievement in the written assessment shall be specified in writing by the training director. One hundred percent mastery of the identified skills shall be required for satisfactory completion of the course. Should a trainee fail to achieve 100% mastery, remedial actions to assist the trainee to achieve 100% may be used, based upon approval and documentation by the Training Director.

Note: Certificates of successful completion of the program are issued only upon meeting the criteria. Remedial actions are provided for both skill and written assessments. These are documented by the Program Director, as appropriate. If there are restrictions (participant did not wear Level A), a certificate of attendance is issued, noting the restrictions to successful completion.

The written assessment instrument shall be a minimum of 50 questions relevant to the learning objectives of the course. The written assessment instrument may be administered through a written test or orally based upon the written test questions as deemed appropriate by the Training Director. The methods utilized shall be documented by the Training Director.

Note: A 50 item instrument is used in the Site Worker, TSD, and Technician programs. In other programs, shorter assessments are used. Specifics for each program are shown in Criteria for Successful Completion (See Policy Manual, Tab 16). This document covers all programs and has been agreed upon by the Steering Committee and reviewed by the Advisory Board. Successful Completion definitions are shown in materials sent to NIEHS for approval prior to implementation.

With respect to the performance assessment, the task chosen and the means to rate successful completion must be fully documented by the training director and shall be specific to the training course upon which it is based. The number of skills assessment tasks will, therefore, be based upon the skill requirements of the specific course.

Note: As part of program development, tasks are selected that match learning objectives. The specific tasks for each program are shown in the Instructor Guide; where selections are possible, the determination of which tasks best meet the needs of participants is determined by the Program Director. A timeline of when the program assessments are to be administered is part of the Evaluation packet for each program. See <http://www.uc.edu/evaluationservices/MWC/forms.html>

The proficiency assessment method, regardless of the approaches used, shall be justified, documented, peer reviewed, and approved by the Training Director using generally accepted procedures, which are identified. The test/performance measures must be reviewed and updated as necessary to reflect any changes in the curriculum and must be approved by the Training Director.

Note: The assessments are documented to be relevant to the learning objectives (which are documented to be relevant to the work) and are reviewed as part of the training materials by the procedures described above. At any revision/update, the impact on the assessments is evaluated and appropriate changes made. The Curriculum Lead and Training Director both approve final version.

Written assessments designed to meet the above requirements may be conducted using computer-based platforms. However, hands-on skills assessment must be conducted in the physical presence of a qualified instructor using appropriate skills demonstration equipment, facilities, or drill environments.

Note: All skill assessments are conducted in-person, with a qualified instructor.

9.3.7.2 Refresher training

Proficiency shall be assessed by the use of a written assessment and skills demonstration selected and developed by the Training Director to evaluate selected knowledge and individual skills appropriate to the HAZWOPER category in which the trainee has been trained including initial and refresher course curriculum as is appropriate. The level of minimum achievement necessary for proficiency shall be specified in writing by the Training Director.

There shall be a minimum of 15 questions in the written test and the skills test shall have tasks chosen and the means to rate successful completion shall be fully documented by the Training Director. The tasks chosen shall be appropriate for the HAZWOPER initial course in which the trainees are certified. Skill assessments shall be conducted in the presence of a qualified instructor. The refresher training proficiency assessments shall be justified, documented, and approved by the Training Director and be reviewed and updated as necessary to reflect changes in the core and refresher curriculum.

Note: The site refresher program using Technology Fact Sheets included a 12-item exam (consistent with the initial Minimum Criteria) and, when supplemented with the NIOSH Pocket Guide exercise, exceeds the 15-item requirement. The TSD refresher exam is compliant.

For the site and emergency response performance refresher scored programs, NIEHS approved the material with performance measures. For the site worker program, a series of checklists must be completed, including achieving 70% on the Hazardous Materials Fact Sheet. For emergency response, a score of 70% must be achieved on the ERG exercise.

For the emergency response refresher using Weapons of Mass Destruction modules, the Program Director constructs a program using model agendas; Hazard Recognition, Unified Command, Field Decon, Crime Scene Integrity, and Stress Management Awareness are options for the tailored program. Because of the

variable content, a written exam is not used. Checklists must include at least 15 items and be successfully completed (100%). See Policy File, Tab 16.

The refresher course proficiency assessments are not required to be peer reviewed and approved. However, when the initial training course curriculum upon which the refresher training is based is revised, peer reviewed and approved, consideration of the relevant subjects to be included in the refresher course shall be considered.

Note: This is implemented, as appropriate.

9.3.8 Course certificate

Written documentation shall be provided to each trainee who successfully completes the course of instruction based upon the Proficiency Assessment requirements in 9.3.7 and attendance for the duration of the course. This documentation shall include a signed certificate containing the following information, at a minimum:

- a. Name of the trainee.
- b. Course title indicating the HAZWOPER category to which the course applies.
- c. Course completion date.
- d. Statement that the trainee has successfully completed the course.
- e. Name and address of the training provider.
- f. Date that annual refresher training is required or statement that such is not required or an expiration date.
- g. List of the levels of personal protective equipment used by the trainee to complete the course.
- h. An individualized certificate number.

Note: Each of the above is required at the training program level. At least every two years, a copy of a certificate for a specified course is required to be sent to the Training Director to evaluate compliance.

An appropriate laminated wallet-sized or a durable and non-reproducible card with a photograph of the trainee and the above information may also be issued to the trainee by the training provider. Such a card shall include the training certificate number.

Note: Not a MWC requirement.

For HAZWOPER-supporting training programs or all-hazards training courses, certifications of successful completion of the course shall meet requirements for that course by the applicable regulatory entity. Where no such written certification is required, a certificate shall be issued by the training provider containing the appropriate information using the preceding certificate information listing as a guide.

Note: Not offered as a MWC program.

9.3.9 Record keeping

Student records

The training provider shall maintain records listing:

- the dates courses were presented,
- name and social security number (or other unique identifier) of each course trainee,
- a clear indication of which trainees successfully completed each course, and
- the number of the training certificate issued to the trainee cross-referenced by name, unique identifier, and date of course completion.

The training provider shall maintain records for all initial training, refresher training, 1910.120-supporting training, and all-hazards training for a minimum of five years after the last date that the trainee completed a course by the training provider or as otherwise required by state or federal regulations or requirements. Such records shall be provided to the participant, to an individual designated in writing by the trainee, and to a representative, if mandated by law

The training provider shall maintain records listing the dates courses were presented, names and social security numbers or other unique identifiers of course trainees, the names and unique identifiers of trainees successfully completing each course, and the number of the training certificate issued to the trainee by name, unique identifier, and date of course completion. Such records shall include initial training, refresher training, 1910.120-supporting training, and all-hazards training and shall be maintained for a minimum of five years after the last date that the trainee completed a course by the training provider or as otherwise required by state or federal regulations or requirements. Such records shall be provided to the participant and/or an individual designated in writing by the trainee and/or as mandated by law.

Note: Training records are outlined (Policy File, tab 7, Minimum Training Record). The training program assigns a unique identifier to each participant that is used on the evaluation forms. Retention is 5 years or the requirement of the institution, whichever is longer. Training centers provide participants or others authorized by the participant with training records, if requested.

Instructor records

The training provider shall maintain records for instructors that document:

- their qualifications,

- certifications received,
- annual instructor refresher courses taken,
- the professional development programs completed., and
- the annual certification of instructional

Note: This information is maintained by the Program Director in personnel files; See Policy Tab 15 Annual Trainer Evaluation and Tab 19 Trainer Qualifications.

9.3.10 Program quality control

The Training Director shall develop and maintain a written Quality Control and Evaluation Plan. At least annually, the Training Director shall conduct or cause to have conducted a program quality control audit based upon that plan, which shall be in writing. Program modifications to address identified deficiencies, new standards or regulations, or new training methods shall be documented, approved, and implemented. The audit and program modifications documents shall be maintained by the training provider. Program quality control audits shall encompass the criteria included in the next section “Training Program Quality Control Criteria.”

Note: Program quality is maintained through two documents: the Policies of the Midwest Consortium and the Annual Workplan. Each is evaluated as indicated here.

Policies: Annually a self-audit is prepared by the Training Director and completed by each Program Director. If identified, deficiencies must be addressed.

Completion (with remediation if needed) of the self-audit is a condition of renewal of a training center budget.

Workplan: Achievement of the goals are charted at mid-year and at months 8 and 12. Deficiencies are remediated or justified at each review. Ongoing deficiencies can jeopardize funding or lead to termination of membership.

The Training Director shall provide in a timely manner whatever information and documentation may be requested in the course of an NIEHS/WETP audit.

Note: The Training Director makes every effort to be responsive to all requests.

10. TRAINING PROGRAM QUALITY CONTROL CRITERIA

10.1 Introduction

The criteria that follow should be used as an audit checklist by training providers, training directors, and others, such as the NIEHS grantee peer review audit teams. The factors listed in this section for determining the quality and appropriateness of training are applicable to 1910.120 courses, 1910.120-supporting courses (Annex A), and all-hazards courses.

10.2 Training Plan

A written plan is critical for developing effective training. Whoever produces the training plan shall consider every step of the curriculum development process: the training program curriculum analysis, design, development, implementation, and evaluation process. The plan must also consider instructor training; training materials and aids (both instructor and trainee); and teaching methods. Auditors of the program should review the following:

- The written Training Plan;
- The title of the courses, the 1910.120 training category that each course addresses, duration of training, course content, and course schedules;
- Training and qualifications of the assigned instructional staff;
- Course syllabus;
- Course prerequisites;
- The training needs of the target audience (based upon a “needs assessment”);
- Course design including considerations of adult education principles, the characteristics of the target audience, instructional strategies and media, and the basis for the learning methods chosen particularly with respect to the integration of new instructional technologies and techniques;
- Learning objectives, for the course and for each module;
- Course development process including appropriate technical input, external review, evaluation, and documentation;
- The instructional methods, including demonstrations and hands-on activities;• Monitoring of student safety, progress, and performance during training;
- The assessment process, including pre-testing (if employed), written tests, and skills tests including acceptable levels of performance; and
- The evaluation process and implementation of the modifications required.

Note: These elements are included in the MWC participant and/or instructor guides, with the exception of documentation of the development process that is maintained by the Training Director.

10.3 Training Program Management

Adequacy and appropriateness of staff performance in delivering an effective training program should be considered including:

- The Training Director’s leadership in assuring quality of health and safety training.
- Competency of the staff to meet the demands of delivering high quality HAZWOPER, HAZWOPER-supporting, and all-hazards training.
- Clear lines of authority, responsibility, and accountability including clearly defined staff duties including the relationship of the training staff to the overall program.
- Appropriateness and adequacy of the training methods used by the instructors.
- Instructor competency in applying all instructional methods including newly introduced instructional technologies.

- Documented results of assessments of learning effectiveness and retention specific to the teaching methods utilized.
- Sufficiency of the time committed by the Training Director and staff to the training program.
- Instructor/trainee ratios by instructional method (classroom, hands-on, skills assessment, etc.).
- Availability and commitment to the training program of adequate human and equipment resources in the areas of health, safety, personal protective equipment, operational procedures, instructional technologies, and worker protection practices and procedures.
- Management controls including management of collaborators, consultants, and contractors.
- Adequacy of the organization and appropriateness of resources assigned to assure appropriate training.
- In the case of multiple-site training programs, adequacy of the management of the satellite centers, including back-up plan for off-site training.

Note: These aspects are managed by the Training Director or the Program Director.

10.4 Training Facilities and Resources

The adequacy and appropriateness of the facilities and resources for supporting the training program should be considered including:

- Space and equipment to conduct training.
- Facilities for hands-on training.
- In the case of multiple-site programs, equipment and facilities at the satellite centers.
- Equipment, technical support, and resources for enhanced technology training.

Note: The facilities are documented every five years, and upon new facilities for a training center.

10.5 Instructional Technologies and Integration

There has been a dramatic expansion in the use of new instructional technologies among the WETP awardees. The NIEHS/WETP “Hazwoper Training: Utilizing Advanced Training Technologies.” Workshop report (8) and the “Development of an Integrated WETP ATT Program: Final Report” (9) should be used as the initial basis for evaluation. The quality and effectiveness of training programs when utilizing such technologies should be considered including:

- What impact will new training technologies have on the achievement of learning objectives?
- What is the ability of the training target audience to effectively respond to and use such technologies?
- Does the application of new training technologies enhance the learning experience? How? Is it documented? Has retention been evaluated?
- Have training objectives been modified subsequent to the introduction of new training technologies? If so, what is the adequacy and appropriateness of the assessment of learning objectives attainment, enhanced

learning, and learning retention and have the results of such assessments been applied to the training program where appropriate?

- Where self-paced computer-based learning methods have been applied, what approaches have been used to assure the students attain the knowledge and skills specified in the course learning objectives?
- Where self-paced computer-based methods have been applied to skills objectives, how has the required skills proficiency assessment been conducted? How have applicable training hours for such methods been determined and applied?
- Has the training provider assigned the necessary personnel and support for a successful introduction of new training technologies?
- Has the training provider effectively and seamlessly integrated new training technologies?

Note: When used, the new technologies are incorporated into existing programming to enhance the learning process. Feedback in evaluation reports are scanned for any adverse impact on the program by the Training Director.

10.6 Quality Control Program Assessment

The written quality control and evaluation plan should consider the adequacy and appropriateness of:

- the advisory committee and/or outside reviewers to provide overall technical policy guidance;

Note: The Advisory Board provides overall guidance; as needed for program review additional outside personnel are asked to contribute. Credentials of each person are maintained by the Training Director

- the competency and role of the advisory committee and outside reviewers;

Note: Credentials are maintained by the Training Director

- the minutes or reports of the advisory committee or outside reviewers meetings or written recommendations;

Note: Minutes are kept of all meetings and steps to address written recommendation are tracked by the Training Director.

- instructor performance;

Note: Described above regarding instructor review, see Policy Tab 15 Annual Instructor Evaluation.

- course evaluations, including feedback, updating, and corrective action

Note: Described above in sections 9.3.3 Instructional Staff and 9.3.10 Program Quality Control.

- the disciplines and expertise being used within the quality control and evaluation program; and

Note: Quality control is overseen by the Training Director; evaluation is managed by the Evaluation Center staffed with professional evaluators.

- the role of trainee evaluations to provide feedback for training program improvement.

Note: Evaluation data are reviewed by the Training Director and the Program Directors; as appropriate, actions are taken. For items that impact the entire Consortium, discussion is held at the Steering Committee meeting, and any decisions documented in the minutes.

10.7 Annual Update

The Training Director should ensure there is an annual update to the written quality control and evaluation plan. The annual update provides an opportunity to consider how well the program has:

- included all applicable regulatory changes;
- implemented course updates that have occurred during the preceding year.
- integrated new training technologies;.
- integrated modules among HAZWOPER, HAZWOPER- supporting, and all-hazards training course; and.
- documented the course approvals that are the responsibility of the Training Director as specified in this document.

Note: In addition to the above, the annual update includes review of feedback from trainers and participants.

10.8 Trainees

Adequacy and appropriateness of the program for accepting trainees should be considered including:

- Assurance that the trainees already possess the necessary knowledge and skills of their trade, craft, or job classification including necessary documentation or that basic trade, craft, or job classification skills training has been satisfactorily completed prior to HAZWOPER training.
- Appropriateness of methods the program uses to ensure that recruits are capable of satisfactorily completing the course.
- Review and compliance with the medical clearance policy.
- Appropriateness and methods the program uses to ensure that recruits possess the necessary knowledge and skills to utilize new training technologies where such use may be required in a training course.

Note: Addressed in Section 9.3.5 Trainees. The MWC complies.

10.9 Instructional environment and administrative support

Adequacy and appropriateness of the program for accepting trainees should be considered including:

- assurance that the trainees already possess the necessary knowledge and skills of their trade, craft, or job classification including documentation that basic skills training has been satisfactorily completed prior to HAZWOPER training;
- methods the program uses to ensure that recruits are capable of satisfactorily completing the course;
- compliance with the medical clearance policy; and
- methods the program uses to ensure that recruits are able to use new training technologies, where required

Note: These factors are considered. Regarding new technologies, participants can work in small groups allowing learning by those who are not as comfortable with the technology or who may not have it available for routine use.

10.10 Program evaluation

Key questions for evaluating the quality and appropriateness of an overall training program should include the following:

- Are the program objectives clearly stated?
- Is there evidence that the program is accomplishing its objectives?
- Are appropriate facilities and staff available and committed to the program?
- Is there an appropriate mix of classroom, demonstration, and hands-on training?
- Where new training technologies have been integrated into the program, has the impact on and value to the program been assessed?
- Is the program providing quality worker health and safety training that fully meets the intent and requirements of the applicable regulations?
- What are the program's strengths?
- What are the program's weaknesses?
- What is recommended to improve the program?
- Are they instructing according to their training outlines?
- Is the evaluation tool current and appropriate for program content?
- Are the course materials current and the delivery methods relevant to the training target audience?
- Are the measures of program outcome adequate?

Note: These queries and others are used throughout the year, as appropriate, for continuous improvement.

11. GENERIC MINIMUM TRAINING CURRICULUM GUIDELINES

Note: The curriculum guidelines and 29CFR1910.120 non-mandatory Appendix A are reviewed when major revisions are undertaken for any program. The text is deleted here to decrease pages. See the most recent version of the Minimum Criteria at <http://tools.niehs.nih.gov/wetp/index.cfm> and Appendix A at https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9765.

12. CERTIFICATION

OSHA initially addressed accreditation or certification of training programs under 1910.120 with a Notice of Proposed Rulemaking in 1990. OSHA has never finalized that rule at 29 CFR 1910.121. Instead OSHA issued a non-mandatory training appendix to the standard (Appendix E), which was based in large part on the original NIEHS/WETP Minimum Criteria requirements for such training under the WETP grants program.

Accreditation or certification of some of the 1910.120-supporting training programs in Annex A of this draft document is already covered by existing requirements, such as AHERA for asbestos abatement activities. Many of the remaining programs are governed by requirements established in specific OSHA standards, but are not required to be accredited or certified, nor is it likely that they will be in the future.

Each training provider for which this guidance is applicable shall annually certify in writing that the training program meets the requirements established in this guidance specific to the HAZWOPER courses, 1910.120-supporting training courses, and all-hazards training courses offered. Where certification or accreditation is also required by another certifying/accrediting entity, such as for asbestos abatement, it shall be noted and a copy of the applicable certification/accreditation appended.

Note: MWC programs are not certified or accredited.

13. ANNEXES

HAZWOPER-trained workers may be required to have additional training due to particular hazards present on specific HAZWOPER sites. Typically, such additional training is associated with hazards that may be present for which specific regulations or standards require training. An example is radiation training associated with mixed waste remediation work. This guidance terms these training programs "1910.120-supporting training." They are presented in Annex A. Several such 1910.120-supporting programs are identified, as are the training requirements and certification/accreditation authorities for each where such currently exist. Under the scope of the NIEHS/WETP training grants program these 1910.120-supporting training programs are funded on the basis of the individual grants contract.

Annex B provides the technical workshop agenda and participants list, which served as the basis for this document.

Annex C provides the FEMA HAZ MAT/WMD response guidelines document, which serves as a central reference document to the Emergency response sections of this document under section 11.3 and 11.4. It is provided with paper versions of this document in CD format. The FEMA guidance is also available from the National Clearinghouse website at:
http://www.wetp.org/wetp/public/hasl_get_blob.cfm?ID=1465.

Annex D provides a checklist with respect to the Principles of Adult Education, which is referenced in section 8 of this document.

Note: Content of each Annex is deleted to conserve space. Complete text of each is shown at <http://tools.niehs.nih.gov/wetp/index.cfm>.

13.1 Annex A: 29 CFR 1910.120-supporting training programs

13.2 Annex B: Technical workshop agenda and participants.

13.3 Annex C: USFA/FEMA “Guidelines for Haz Mat/WMD Response, Planning, and Prevention Training.” April 2003 Edition. CD format

13.4 Annex D: The Principles of Adult Education: A Checklist for Planners and Evaluators.

14. References and Resources

1. “Minimum Criteria for Worker Health and Safety Training for Hazardous Waste Operations and Emergency Response.” NIEHS/WETP Technical Workshop on Training Quality. December 1991.
2. “Interpretive Guidance to the Minimum Criteria for Worker Health and Safety Training for Hazardous Waste Operations and Emergency Response.” NIEHS/WETP. Workshop Report. April 1994.
3. “Guidelines for Haz Mat/WMD Response, Planning, and Prevention.” Guidance for the Hazardous Materials Emergency Preparedness Grant Program. FEMA. April 2003 Edition.
4. “OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances.” OSHA. December 2004.
5. “Inspection Procedures for Hazardous Waste Operations and Emergency Response Standard, 29 CFR MWC PPMTab 100113

1910.120 and 1926.65, Paragraph (q): Emergency Response to Hazardous Substance Releases. CPL 02-02-059. OSHA. April 24, 1998.

6. "Technical Enforcement and Assistance Guidelines for Hazardous Waste Site and RCRA Corrective Action Clean-up Operations HAZWOPER 1910.120 (b)-(o) Directive." CPL 02-02-071. OSHA. November 11, 2003.

7. "Training Curriculum Guidelines-(Non-mandatory)." 29 CFR 1910.120 Appendix E. OSHA. August 12, 1994.

8. "Hazwoper Training: Utilizing Advanced Training Technologies." Report of the NIEHS/WETP National Technical Workshop "Computer and Internet-Based Learning Methods for Safety and Health Training." September 1999.

9. "Development of an Integrated WETP ATT Program: Final Report." NIEHS/WETP January 2001.

10. "Protecting Emergency Responders. Volume 3. Safety Management in Disaster and Terrorism Response." NIOSH Publication No. 2004-144.

11. "Emergency Response to Terrorism: Operations, A Safe Response for Public Safety Personnel." Department of Justice (DOJ), Office of Justice Programs (OJP), Office of Domestic Preparedness (ODP) and IAFF. September 2001.

12. "Learning from Disasters: Weapons of Mass Destruction Preparedness Through Worker Training." Report of a National Technical Workshop held April 25-26, 2002. NIEHS/WETP.

13. "Worker Training in a New Era: Responding to New Threats." Report of a Conference in Baltimore, MD. October 26-27, 2002. NIOSH Publication No. 2004-173.

14. NFPA 471 "Recommended Practice for Responding to Hazardous Materials Incidents, 2002 Edition.

15. NFPA 472 "Standard for Professional Competence of Responders to Hazardous Materials Incidents." 2002 Edition.

16. NFPA 473 "Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents." 2002 Edition.

17. ANSI Z490.1-2001. "American National Standard Criteria for Accepted Practices in Safety, Health, and Environmental Training." July 2001.

18. 29 Code of Federal Regulations Part 1910 Safety and Health Regulations for General Industry and Part 1926 Safety and Health Regulations for Construction.

19. "Guidelines for Training in Support of Workplace Safety and Health Programs." Guidance Document and Technical Workshop Report of Workshop held November 12-13, 1998. NIEHS/WETP.

20. "Disaster Site Worker Train-the-Trainer Course: Curriculum." Course 5600. OSHA.

21. "Disaster Site Worker Course: Curriculum." Course 7600. OSHA.
22. "Teaching Techniques for Labor Education." AFL-CIO and George Meany Center for Labor Studies. Revised 2002.
23. "Radiation Health and Safety Implementation Plan." Final Draft. EPA. April 30, 2004.
24. "Computer and Internet-Based Learning Methods for Safety and Health Training." Compendium of applicable resources and references. NIEHS/WETP National Clearinghouse. March 10, 1999.
25. "National Response Plan (NRP)." Department of Homeland Security. Includes Emergency Support Function (ESF) Annexes, Support Annexes (including Worker Safety and Health Support Annex), Incident Annexes, Applicable Executive Orders, and Applicable Presidential Directives (HSPD 1-10). December 2004.
26. "National Incident Management System (NIMS)." Initial System, Final draft, July 18, 2003 and NIMS Derived Compliance statements-Revised, DHS. June 23, 2004.
27. "Emergency Responder Guidelines." Office of Domestic Preparedness (ODP), Office of Justice Programs (OJP). August 1, 2002.
28. "Universal Task List." Office of Domestic Preparedness, DHS. July 30, 2004.
29. "Universal Task List Manual." Version 1.0. Draft. ODP/DHS. July 31, 2004.
30. "Guide for the Selection of Personal Protective Equipment for Emergency First Responders." National Institute of Justice Guide 102-00. Volume I. November 2002.
31. "ODP Blended Learning Approach." Version 1.0. ODP/DHS. November 27, 2003.
32. "Office of State and Local Government Coordination and Preparedness (SLGCP). Course Approval Process (Federally Funded and/or Developed Courses)." Draft. DHS. October 15, 2004.
33. Compendium of OSHA HAZWOPER standard interpretations from 1994-2004. Available from the National Clearinghouse via www.wetp.org.

Tab 19
Trainer Qualifications
(1994, 2019)

Title: Trainer Qualifications documentation
Adopted January 11, 1994; Amended January 15, 2019

Adopted 1994

Training Center Directors will maintain documentation of the qualifications of each trainer on the Trainer Qualification Form or its equivalent.

DOCUMENTATION OF TRAINER QUALIFICATIONS--CONSORTIUM PROGRAMS

Name _____

Hazwoper Subject Area(s)

Work Experience

Number of Years _____

Beginning Job Title

Last (or current) Job Title

Brief Description of Most Recent Job Responsibilities

Academic (Degree) Training Programs

Institution

Degree

From-To

Mo/yr

Non-Degree Programs
 Program Title, Sponsor, Duration

<u>Title</u>	<u>Sponsor</u>	<u>Duration</u>
_____	_____	_____ days
_____	_____	_____ days
_____	_____	_____ days
_____	_____	_____ days
_____	_____	_____ days

Attach resume, if available

Documentation of training

Date successfully completed course/module to be taught

Comment

Date successfully co-instructed with experienced mentor

Comment

Date successfully demonstrated adult education principle and adult learner-centered techniques

Comment

Tally since employment

annual program refresher (show date for each year employed)

annual professional development (show program and date)

annual evaluation (show date and outcome, evaluator)

date _____ certified competent yes no by _____

Amended 2019

Training Center Directors will maintain documentation of the qualifications of each trainer on the Trainer Qualification Form or its equivalent.

DOCUMENTATION OF TRAINER QUALIFICATIONS--CONSORTIUM PROGRAMS

Name _____

Hazwoper Subject Area(s) _____

Work Experience

Number of Years _____

Beginning Job Title _____

Last (or current) Job Title _____

Brief Description of Most Recent Job Responsibilities

Academic (Degree) Training Programs

<u>Institution</u>	<u>Degree</u>	<u>From-To</u>	<u>Mo/yr</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Non-Degree Programs

Program Title, Sponsor, Duration

<u>Title</u>	<u>Sponsor</u>	<u>Duration</u>
_____	_____	_____ days
_____	_____	_____ days
_____	_____	_____ days
_____	_____	_____ days
_____	_____	_____ days

Certifications/Certificates achieved

Certification/Certificate title	Awarded by	Date
---------------------------------	------------	------

Documentation of training

Date successfully completed course/module to be taught

Comment

Date successfully co-instructed with experienced mentor

Comment

Date successfully demonstrated adult education principle and adult learner-centered techniques

Comment

Tally since employment

annual program refresher (show date for each year employed)

annual professional development (show program and date)

annual evaluation (show date and outcome, evaluator)

date certified competent yes no by _____

Tab 100 (Tab 20)

**Simulation and Exercise Trainer Qualifications & Emergency Plans
(1988, 1995, 2019)**

Title: Qualifications for Trainers and Required Emergency Plan for Site Simulations
Adopted 1988; Amended April 1995; Revised January 15, 2019

Adopted 1988

The model Site Simulation plan in the 40-hour Site Worker program includes both trainer qualification and an emergency response plan for use during Simulation.

Trainers meeting these qualifications (at a minimum) must be involved in any simulation that requires Levels A or B dressout. An emergency response plan meeting these requirements (at a minimum) must also be in place. See appropriate program for addition guidance.

SITE SIMULATION EXERCISE

**Prepared and revised by: Site Simulation Subcommittee of
The 40 and 8 Hour Program Development Committee**

March 24, 1988

SITE SIMULATION EXERCISE

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SITE SIMULATION DEFINITION

The Site Simulation is a series of exercises designed to familiarize each program trainee with the proper protocols used at a hazardous waste site. At a simulated site, each trainee will don, doff and decontaminate respiratory and personal protective equipment. During the simulation, a site set up with the various work zones, pairs of trainees utilizing the Buddy System will participate in such tasks as segregating, over packing, handling, identifying and sampling drums, and decontaminating tools and equipment.

MINIMUM SIMULATED SITE SPECIFICATIONS

1. RUNNING WATER AVAILABLE FROM AN OUTSIDE SPIGOT OR AN AIR DRIVEN PUMP TO SUPPLY WATER (DECONTAMINATION EXERCISE POTABLE WATER TO PREVENT DEHYDRATION AMONG TRAINEES DURING SIMULATION)
2. TELEPHONE OR RADIO TO SUMMON EMERGENCY ASSISTANCE
3. ACCESS TO ADEQUATE RESTROOMS WITHIN 100 YARDS OF SITE
4. PHYSICAL SPACE (PARKING LOT OR FIELD, AT LEAST 150' X 100')
5. SHELTER (SUN/RAIN/BREAKS/BRIEFING, SEATING CAPACITY -30)
6. CONSIDER ALTERNATE SITE IN CASE OF BAD WEATHER/PREPARE CONTINGENCY PLAN
7. SITE SHOULD BE SITUATED SO AS TO MINIMIZE PUBLIC REACTION OR PREPARATIONS SHOULD BE MADE TO DEAL WITH THE PUBLIC
8. A SIGN SHOULD BE USED TO INDICATE THAT TRAINING IS OCCURRING/LOCAL AUTHORITIES (POLICE, FIRE, ETC) AND THE LOCAL MEDIA (PRINT, RADIO AND TELEVISION) SHOULD BE NOTIFIED OF THE EXERCISE/ALSO USE FOR PUBLICITY
9. IF NIGHT EXERCISES CONTEMPLATED, LIGHTING REQUIREMENTS NEED TO
10. CLOSE PROXIMITY TO CLASSROOM FACILITY IS PREFERABLE

ASSUMPTIONS

1. CLASS SIZE- 24 TRAINEES – MAXIMUM
2. MINIMUM REQUIRED EQUIPMENT
 - a. 8-10 SCBA UNITS W/ CASES AND AIRLINE CAPABILITY AND 8-14 SPARE TANKS RECHARGE CAPABILITY ON-SITE
 - b. 8 LEVEL A TRAINING OUTFITS (GLOVES, BOOTS, ETC.)
 - c. 1 LEVEL A SUIT (FOR DEMONSTRATION PURPOSES)
 - d. AIRLINE SYSTEM TO RUN 2 AIRLINE UNITS W/ EGRESS AND ACBA UNITS
 - e. 24 F/F ARP WITH CARTIDGES
 - f. 24 LEVEL B SUITS (HOODS, BOOTS, GLOVES) – DISPOSABLE – SARANEX
 - g. 24 LEVEL C SUITS (HOODS, BOOTS, GLOVES) – DISPOSABLE – TYVEK
 - h. PAPER TOWELS AND SPRAY DISINFECTANT
 - i. DE-FOGGING SOLUTION
 - j. VISQUEEN
 - k. 24 HARDHATS
 - l. 4 OVERPACKS
 - m. 4 DRUMS (55 GALLON – PLASTIC OR STEEL – NEW OR RECONDITIONED MINIMUM)
 - n. DRUM DOLLY
 - o. SPARKPROOF BUNG WRENCH AND WRENCH FOR OVERPACK
 - p. RADIO SYSTEM FOR USE W/ LEVEL A (OPTIONAL – BUT STRONGLY SUGGESTED)
 - q. DECOMINATION EQUIPMENT
 - i. 3 BABY POOLS
 - ii. 3-50' LENGTHS OF GARDEN HOSE
 - iii. 3-SPRAYER ATTACHMENTS FOR THE HOSES
 - iv. HUDSON SPRAYER
 - v. 2-LONG HANDLED BRUSHES

- vi. GARBAGE CAN
 - vii. 2-RINSE BUCKETS
 - r. AIR MONITORING EQUIPMENT (OPTIONAL FOR SITE SIMULATION)
 - i. 1-COLORMITRIC TUBE/PUMP
 - ii. 1- SAMPLING PUMP
 - iii. 1-LEL/O2 METER (CO, H2S)
 - s. FIRST AID KIT
 - t. DRINKING FLUIDS/SUPPLIES
 - u. 4-STOOLS OR SHORT STEP LADDERS FOR SUITING UP
 - v. BARRIER TAPE/STAKES/SAFETY CONES
 - w. MASKING AND DUCT TAPE
 - x. CLIPBOARDS
3. REQUIRED TRAINEE ATTIRE FOR SITE SIMULATION
- a. MUST WEAR STEEL TOE SHOES (FOR CLASSROOM DRUM HANDLING EXERCISE)
 - b. IF EYEGASSES ARE WORN- MUST WEAR. NO CONTACTS(2) CAN BE WORN WITH RESPIRATORY PROTECTION
 - c. WORK CLOTHES

- (1) Additional consideration should be given to equipment maintenance costs and to the cost of expendables used during the Site Simulation Exercise.
- (2) Consideration needs to be given to how those workers who wear glasses can be accommodated (special kits can be purchased for F/F masks).

TRAINEE TASKS AT SIMULATED SITE

1. PROPERLY DON/DOFF/DECONTAMINATE LEVEL A
2. PROPERLY DON/DOFF/DECONTAMINATE LEVEL B
3. PROPERLY DON/DOFF/DECONTAMINATE LEVEL C
4. WORK PRACTICES ACTIVITIES (1 REQUIRED):
 - a. OVERPACK (1)
 - b. SEGREGATE DRUMS
 - c. HANDLE.MOVE DRUMS
 - d. SAMPLE/IDENTIFY (LABELS ON) DRUMS
 - e. DECONTAMINATE TOOLS
5. OTHER REQUIREMENTS
 - a. 10 MINUTES IN SUIT- LEVEL A
 - b. WALK/MANEUBER IN SUITS – LEVEL A
 - c. USE MONITORING EQUIPMENT – OPTIONAL
 - d. IDENTIFY/READ DRUM MARKINGS
 - e. IMPLEMENT SITE SAFETY PLAN – OPTIONAL
 - f. EXERCISE STIMULI – OPTIONAL

(1) A 55 Gallon drum filled with water weighs approximately 500 lbs., thus consideration should be given to alternatives (however, drums should not be partially filled with water, fill partially with Vermiculite or sand)

SITE SIMULATION EXERCISE – ROTATION

8:00-9:00 AM Orientation to Site, Work Zones, Emergency Response Plan, Hand Signals, Exercise Tasks and Rotation. Demonstrate with group P suiting up before 9:00 a.m. and with group S observing.

I. Description of Site Simulation Exercise Tasks:

Task #1 While wearing Level A PPE, the trainees will perform one of the following activities:

- a. Place a drum in an overpack drum
- b. Segregate drums by identification of labels or markings (involves physical movement of the drums)
- c. Handle or otherwise move drums around
- d. Identify and sample a drum
- e. Decontaminate tools or other objects so they can be taken off-site

Task #2 Upon completing Task #1, each trainee will be given a break to cool off and rest.

Task #3 Trainees will don Level A PPE (SCBA unit and encapsulating suit). They will then establish and check communications by hand signals or by radio system with instructors and each other.

Task #4 In order to properly don the SCBA and Encapsulating suit, assistance is required. In this task, one group of trainees will help the other put on the equipment, cleaning facepieces, changing SCBA tanks and hooking up radios (if Used), air line in the suit, facepiece, and zipping up the suit. Additionally, this task will serve as a review of the proper donning sequence as the assisting group will be the next group to don the equipment.

Task #5 Due to the weight, stiffness and stress imposed by Level A PPE, the possibility of falling or otherwise needing assistance exists during Task#1 and, therefore, requires

evaluation. Task #5 will address both of these issues; and an unsuited person will be at the side of every suited person to evaluate them and if any problem arises, assist them.

Task #6 To complete the Site Simulation Exercise, Task #5 people will cover the decontamination of personnel leaving the site and the use of Level B and C PPE. Then this task (#6), trainees wearing Level B and C PPE will simulate the decontamination of personnel in Level A by spraying them down with water, scrubbing and assisting them in removal of their PPE.

II. Group Formation/Identification

2. If there are 24 trainees, the groups would be formed by assigning numbers 1-24 and dividing:

Group P- #'s 1 thru 4

Group Q- #'s 5 thru 8

Group R- #'s 9 thru 12

Group S- #'s 13 thru 16

Group T- #'s 17 thru 20

Group U- #'s 21 thru 24

There is a maximum of four people in each group (P through U).

3. If there are 12 or more trainees, assign each trainee a number and then divide the total by 6. If there are less than 12, the Exercise will have to be adjusted accordingly. If necessary, Tasks #2, 3 and 4 can be eliminated.
4. Once the groups are established, some means must be used so the instructor can easily identify the various groups. Suggested methods include:
 - a. Color-coded hard hats
 - b. Group letter on hard hats
 - c. Tyvek suit worn at all times with group letter attached or applied with a marker
 - d. Traffic or other vest with attached group letter

III. Site Simulation Layout

The Site Simulation Exercise site should be laid out in a logical and clear fashion (see attached Typical Site Simulation Lay Out). Each task station/area should be clearly marked.

Suggested methods for marking include:

- Signs or stakes
- Numbers on traffic cones
- Numbers on drums

IV. Conducting the Site Simulation Exercise

When the site is set up with the task stations/areas marked, groups established and identified, equipment readied and the Orientation compete, the Exercise is ready to begin. Begin the Exercise per the Site Simulation Rotation Schedule below.

Site Simulation Rotation Schedule

GROUP	P	Q	R	S	T	U
TIME						
09:00-09:25	1	6	3	4	5	2
09:25-09:50	2	5	1	3	4	6
09:50-10:15	6	4	2	1	3	5
10:15-10:40	5	3	6	2	1	4
10:40-11:05	4	1	5	6	2	3
11:05-11:30	3	2	4	5	6	1

NOTE: Half hour excess time to allow for any delays that may be encountered.)

As the groups begin to rotate, keep in mind the rotation is as follows:

- The group from decontamination (Task #6), rotates to Task #5, (accompanying the trainees doing Task #1).
- When the group completes the walk with the suited trainees (Task #5), they rotate to helping the next group suit-up (Task #4).
- When the group that completed helping suit-up trainees (Task #4), rotates to begin suiting-up (Task #3).
- The group that just completed activity in Level A PPE and going through decontamination (Task #1), now rotates to take a break (Task #2).
- After completing their break (Task #2), the group rotates to the decontamination task (Task #6).

In summary, the rotation is as follows:

Task #6- Decontamination

to

Task #5- Accompany suited trainees

to

Task #4- Assist with suit-up

to

Task #3- Suit-up Level A PPE

MWC PPM - inactiveTab 100129

to

Task #2- Break

to

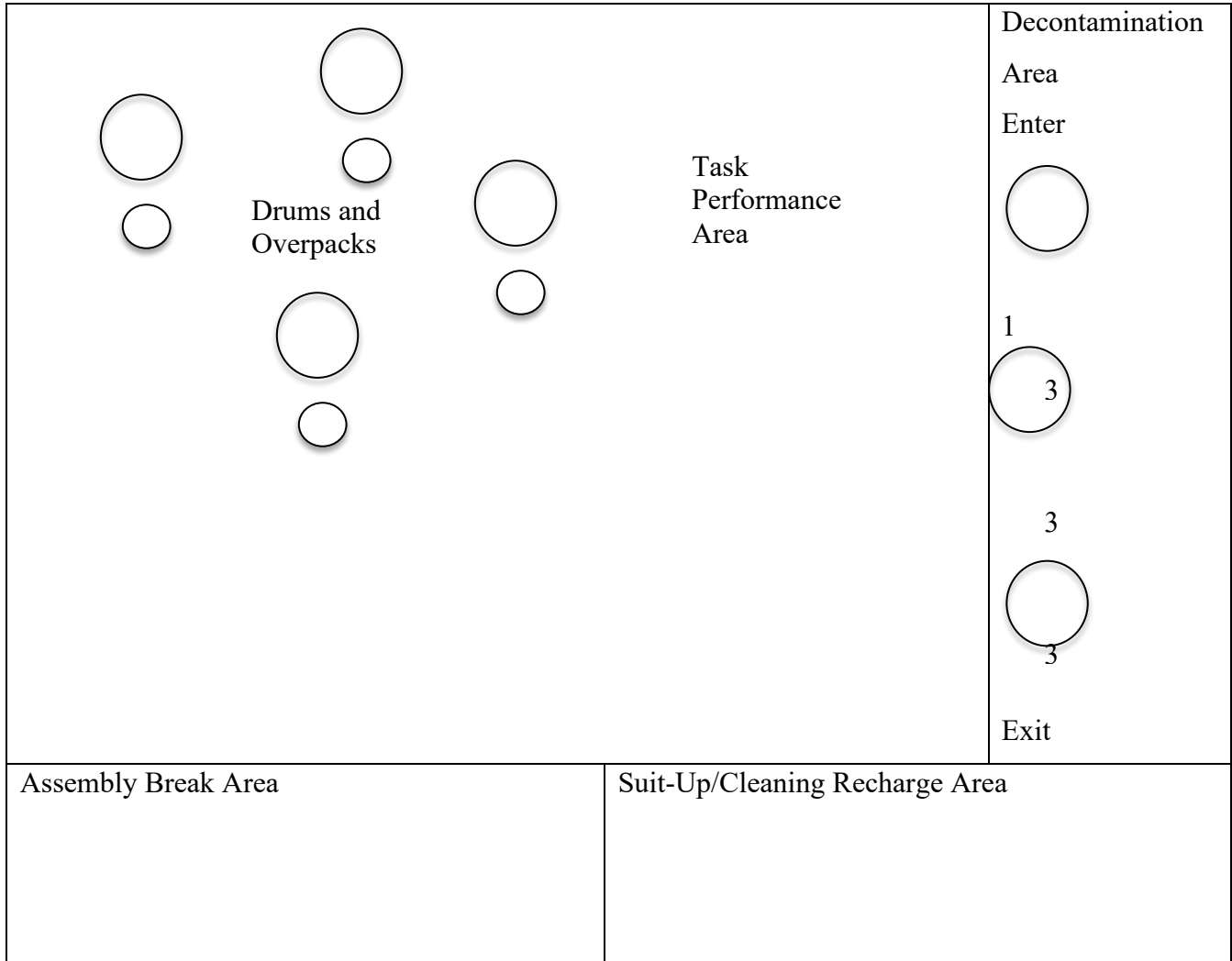
Task #1- Activity (one of five)

It must be noted that all trainees will not start at Task #6, but will start at one of the six tasks. At the completion of that task, each group of trainees will rotate to the next task per the Site Simulation Rotation Schedule.

V. Additional Safety Procedures

All Level A suits must be fitted with glove rings so that the trainee can retract hands back into the suit to operate SCBA, if required, or to wipe fog off the face shield. A towel, cloth or paper should be carried inside the Level A suit to wipe off the face shield if necessary.

TYPICAL Site Simulation Layout in Field or Parking Lot



Scale 1" = 15'

1. Water needed here
2. Breathing Air cylinders for airlines in decontamination area and recharging SCBA tanks
3. Wading Pools
- 4.

EXERCISE STIMULI (OPTIONAL)

MWC PPM - inactiveTab 100131

STIMULUS: Drum Inaccessibility

PROPER RESPONSE: Trainee finds safe alternate route to drum. If not safe alternative route is found, trainee abort mission.

RESOURCES REQUIRED: Materials necessary to block safe access to target drum. Additional drums, building materials, streams, trees, etc. can be used to block access.

STIMULUS: Incomplete Lab Pack

PROPER RESPONSE: Recognize and report findings to instructor

RESOURCES REQUIRED: Lab Pack

STIMULUS: Unlabeled or double labeled drums

PROPER RESPONSE: Recognize and report findings to instructor

RESOURCES REQUIRED: Mislabeled drums and or extra labels

STIMULUS: Open lid with smoke reaction visible or other evacuation stimulus

PROPER RESPONSE: Evacuation of area, alerting others

Smoke bombs, drum and matches

STIMULUS: Site security breach

PROPER RESPONSE: Suspend activities and alert intruder of necessity to leave the area

RESOURCES REQUIRED: Individual to act as if unaware of the dangers involved in being on site.

Boundaries clearly marked with boundary tape, fence, signs, etc.

STIMULUS: Bulge in drum

PROPER RESPONSE: Trainees do not attempt to open and sample drum, and report finding to instructor

RESOURCES REQUIRED: Bulged drum

STIMULUS: Wind direction

PROPER RESPONSE: Determine wind direction by observing wind or other weather instrument

RESOURCES REQUIRED: Wind sock, pole

APPENDIX A

QUALIFICATIONS FOR TRAINERS IN SITE SIMULATION

MWC PPM - inactiveTab 100132

4 or more instructors on the Site Simulation (1 Lead; 3 or more Helpers)

All personnel are medically certified for respiratory protection and unrestricted physical activity. At least one instructor certified in First Aid and CPR (If EMS on site this requirement can be waived). Specialized training in heat stress related illnesses are recommended. (NOTE: A slide program is available from the ACGIH.)

The lead trainer must have successfully completed formal, documented training or otherwise possess the skills; ability and knowledge gained through actual experience to recognize the use of and to anticipate the problems in the use of Levels A, B and C personal protective equipment.

Personal work experience in the use of Levels A, B and C protection is recommended. The lead trainer should have prior experience in training personnel in the use and decontamination of Levels A, B and C personal protective equipment. All trainers must have a working knowledge of the Emergency Response Plan.

APPENDIX B

EMERGENCY RESPONSE PLAN to use when conducting simulated site work

I. Introduction

- A. The Site Simulation Exercise is a complex, multi-part exercise which integrates much of the training of the 40 Hour General Site Worker Program into a hands-on simulation where attendees don and perform tasks in Levels A, B and C of respiratory personal protective equipment.
- B. As with any hands-on simulation or exercise there are numerous potential safety hazards (e.g. crushed by a falling drum, etc.). In order to ensure that instructors and attendees are aware of these potential hazards and how to react to them, the minimum safety requirements enumerated below must be implemented during every Site Simulation Exercise.

II. Safety Briefing

Before the Site Simulation Exercise is started all program attendees will receive a safety briefing that covers the contents of this plan. (May want to have students sign a document to acknowledge receipt of briefing.) If in-suit radios are not used, a clear set of hand signals must be established, verified and used during the Exercise.

III. Emergency Communications

- A. Emergency communications equipment (telephone or 2-way radio) will be present on the site.
- B. Communications equipment will be verified to be working before the Exercise begins.
- C. Emergency telephone numbers and directions to the site will be posted at each telephone on the site.
- D. Maps to the nearest treatment center should be posted in the event it is elected to transport a non-emergency case for treatment.

IV. Emergency Medical Treatment

- A. At least one instructor present on the site shall have completed at least the equivalent of the Red Cross Basic CPR course (8-hr).
- B. At least one instructor present shall have current certification in the Red Cross Basic CPR Course or its equivalent (8-hr).
- C. A standard First Aid Kit shall be available for use during the Site Simulation Exercise.
- D. Use of standby EMS crew is preferable (if available) instead of the above.

V. Site Access

- A. There shall be at least two entrance/exit points to the simulation site.
- B. If the Site Simulation Exercise is conducted in a public area, a sign shall be posted identifying it as a training simulation.

VI. Physical Hazards

- A. Heavy lifting and physical exertion will be required. Extra caution is required because of the additional stresses from PPE wear. Use of proper lifting technique is essential.
- B. The bulky, heavy PPE increases potential for falling because it restricts range of motion and changes center of gravity. The extra weight also increases the risk of injury from a

fall. These problems will be magnified if the simulation site is not on level ground. The need for caution and attention to balance and dexterity must be emphasized. Non-suited safety person must stay close to each suited person.

- C. Handling and moving drums is always hazardous but even more so in PPE. All instructors and course attendees on site are required to wear safety shoes. Extra care and attention is required to protect the hand from pinching or crushing injuries.

VII. Heat Stress

- A. Heat stress due to wearing heavy equipment and chemical protective suits must be a major concern in summer months and cannot be ignored even in cold weather.
- B. All attendees should be familiar with heat stress from classroom presentations and be able to recognize it.
- C. Adequate drinking water and electrolyte replacements (e.g. Gatorade) must always be available. At high heat stress levels up to 2 liters per hour of liquid may be required by each person to maintain body fluid levels.
- D. Air temperature and humidity should be monitored before suits are donned. This information is available from the National Weather Service or the local airport weather station.
- E. The lead instructor on site must monitor heat stress condition and adjust work/rest times and breaks to insure everyone drinks enough fluid.
- F. All instructors and attendees must insure they drink adequate liquids to avoid becoming heat casualty.
- G. Shaded break area is recommended.
- H. Cool weather may present opposite problem as suit is removed, person could chill from cold air hitting body.

VIII. Wearing Level A or B

- A. Wearing Level A or B protection presents additional hazards which rate attention:
 - a. Weight- The additional weight increases stress and affects mobility and balance.
 - b. Claustrophobia-Some people cannot handle being enclosed in a respirator or suit. They must be calmed and removed from the suit to restore normal breathing.

- c. Hyperventilation- The stress of suit or respirator causes some people to hyperventilate. They must be calmed and removed from the suit to restore normal breathing.
 - d. Breathing rate-Under stress the breathing rate increases and the SCBA tanks will empty faster than the rated time. This means less work can be accomplished.
 - e. Low Pressure Alarm-People wearing SCBAs should be reminded that the low-pressure alarm does not mean their air is gone, but there is 3 to 5 minutes remaining. This additional warning may help to prevent panic when someone's alarm sounds.
- B. While wearing Level A or B protection during the Site Simulation Exercise, each course attendee shall have a "buddy" within arms and length, who is not suited and can react to and assist in any emergencies.
- C. All SCBA facemasks will be cleaned/disinfected between users.
- D. All Level A training suits should be sprayed with a disinfectant and towel (paper) dried between users.

IX. Responsibilities

A. Instructors:

- a. Must ensure that all issues listed in this plan have been discussed in class prior to the site simulation exercise.
- b. Must ensure all participants are aware of the hazards, how to recognize and react to them.
- c. Must have at least three instructors present at all times during the Site Simulation Exercise. (Four would be preferable) One shall be designated as lead and have overall responsibility for the exercise.

B. Attendees:

- a. Be aware of the hazards covered in classroom training and the site safety briefing.
- b. Watch yourself and your fellow classmates to try to avoid the hazards.

X. Weather

- A. In the event of adverse or inclement weather the lead instructor must determine if the Exercise can be conducted without endangering the attendees substantially beyond the inherent risks of the Exercise under the best conditions. Weather conditions to be considered include, but are not limited to excessive heat or cold, rain, snow and limited visibility.
- B. Plans should exist for use of an alternate sheltered site to avoid disruption due to weather.

XI. Emergency Stop

- A. An emergency stop signal (e.g. hand-held air horns work well), separate and distinct from any signal used as a training stimulus will be used to terminate the exercise in the event of an emergency.
- B. All personnel on site must know the emergency stop signal.

Amended 1995

SITE SIMULATION EXERCISE

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SITE SIMULATION DEFINITION

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MINIMUM SIMULATED SITE SPECIFICATIONS

11. RUNNING WATER AVAILABLE FROM AN OUTSIDE SPIGOT OR AN AIR DRIVEN PUMP TO SUPPLY WATER (DECONTAMINATION EXERCISE POTABLE WATER TO PREVENT DEHYDRATION AMONG TRAINEES DURING SIMULATION)
12. TELEPHONE OR RADIO TO SUMMON EMERGENCY ASSISTANCE
13. ACCESS TO ADEQUATE RESTROOMS WITHIN 100 YARDS OF SITE
14. PHYSICAL SPACE (PARKING LOT OR FIELD, AT LEAST 150' X 100')
15. SHELTER (SUN/RAIN/BREAKS/BRIEFING, SEATING CAPACITY -30)
16. CONSIDER ALTERNATE SITE IN CASE OF BAD WEATHER/PREPARE CONTINGENCY PLAN
17. SITE SHOULD BE SITUATED SO AS TO MINIMIZE PUBLIC REACTION OR PREPARATIONS SHOULD BE MADE TO DEAL WITH THE PUBLIC
18. A SIGN SHOULD BE USED TO INDICATE THAT TRAINING IS OCCURRING/LOCAL AUTHORITIES (POLICE, FIRE, ETC) AND THE LOCAL MEDIA (PRINT, RADIO AND TELEVISION) SHOULD BE NOTIFIED OF THE EXERCISE/ALSO USE FOR PUBLICITY
19. IF NIGHT EXERCISES CONTEMPLATED, LIGHTING REQUIREMENTS NEED TO
20. CLOSE PROXIMITY TO CLASSROOM FACILITY IS PREFERABLE

ASSUMPTIONS

4. CLASS SIZE- 24 TRAINEES – MAXIMUM
5. MINIMUM REQUIRED EQUIPMENT
 - a. 8-10 SCBA UNITS W/ CASES AND AIRLINE CAPABILITY AND 8-14 SPARE TANKS RECHARGE CAPABILITY ON-SITE
 - b. 8 LEVEL A TRAINING OUTFITS (GLOVES, BOOTS, ETC.)
 - c. 1 LEVEL A SUIT (FOR DEMONSTRATION PURPOSES)
 - d. AIRLINE SYSTEM TO RUN 2 AIRLINE UNITS W/ EGRESS AND ACBA UNITS
 - e. 24 F/F ARP WITH CARTIDGES

- f. 24 LEVEL B SUITS (HOODS, BOOTS, GLOVES) – DISPOSABLE – SARANEX
- g. 24 LEVEL C SUITS (HOODS, BOOTS, GLOVES) – DISPOSABLE – TYVEK
- h. PAPER TOWELS AND SPRAY DISINFECTANT
- i. DE-FOGGING SOLUTION
- j. VISQUEEN
- k. 24 HARDHATS
- l. 4 OVERPACKS
- m. 4 DRUMS (55 GALLON – PLASTIC OR STEEL – NEW OR RECONDITIONED MINIMUM)
- n. DRUM DOLLY
- o. SPARKPROOF BUNG WRENCH AND WRENCH FOR OVERPACK
- p. RADIO SYSTEM FOR USE W/ LEVEL A (OPTIONAL – BUT STRONGLY SUGGESTED)
- q. DECOMINATION EQUIPMENT
 - i. 3 BABY POOLS
 - ii. 3-50' LENGTHS OF GARDEN HOSE
 - iii. 3-SPRAYER ATTACHMENTS FOR THE HOSES
 - iv. HUDSON SPRAYER
 - v. 2-LONG HANDLED BRUSHES
 - vi. GARBAGE CAN
 - vii. 2-RINSE BUCKETS
- r. AIR MONITORING EQUIPMENT (OPTIONAL FOR SITE SIMULATION)
 - i. 1-COLORMITRIC TUBE/PUMP
 - ii. 1- SAMPLING PUMP
 - iii. 1-LEL/O2 METER (CO, H2S)
- s. FIRST AID KIT
- t. DRINKING FLUIDS/SUPPLIES
- u. 4-STOOLS OR SHORT STEP LADDERS FOR SUITING UP
- v. BARRIER TAPE/STAKES/SAFETY CONES
- w. MASKING AND DUCT TAPE

- x. CLIPBOARDS
- 6. REQUIRED TRAINEE ATTIRE FOR SITE SIMULATION
 - a. MUST WEAR STEEL TOE SHOES (FOR CLASSROOM DRUM HANDLING EXERCISE)
 - b. IF EYEGASSES ARE WORN- MUST WEAR. NO CONTACTS(2) CAN BE WORN WITH RESPIRATORY PROTECTION
 - c. WORK CLOTHES

(3) Additional consideration should be given to equipment maintenance costs and to the cost of expendables used during the Site Simulation Exercise.

(4) Consideration needs to be given to how those workers who wear glasses can be accommodated (special kits can be purchased for F/F masks).

TRAINEE TASKS AT SIMULATED SITE

- 6. PROPERLY DON/DOFF/DECONTAMINATE LEVEL A
- 7. PROPERLY DON/DOFF/DECONTAMINATE LEVEL B
- 8. PROPERLY DON/DOFF/DECONTAMINATE LEVEL C
- 9. WORK PRACTICES ACTIVITIES (1 REQUIRED):
 - a. OVERPACK (1)
 - b. SEGREGATE DRUMS
 - c. HANDLE.MOVE DRUMS
 - d. SAMPLE/IDENTIFY (LABELS ON) DRUMS
 - e. DECONTAMINATE TOOLS
- 10. OTHER REQUIREMENTS
 - a. 10 MINUTES IN SUIT- LEVEL A
 - b. WALK/MANEUBER IN SUITS – LEVEL A
 - c. USE MONITORING EQUIPMENT – OPTIONAL
 - d. IDENTIFY/READ DRUM MARKINGS
 - e. IMPLEMENT SITE SAFETY PLAN – OPTIONAL
 - f. EXERCISE STIMULI – OPTIONAL

- (2) A 55 Gallon drum filled with water weighs approximately 500 lbs., thus consideration should be given to alternatives (however, drums should not be partially filled with water, fill partially with Vermiculite or sand)

SITE SIMULATION EXERCISE – ROTATION

8:00-9:00 AM Orientation to Site, Work Zones, Emergency Response Plan, Hand Signals, Exercise Tasks and Rotation. Demonstrate with group P suiting up before 9:00 a.m. and with group S observing.

I. Description of Site Simulation Exercise Tasks:

Task #1 While wearing Level A PPE, the trainees will perform one of the following activities:

- f. Place a drum in an overpack drum
- g. Segregate drums by identification of labels or markings (involves physical movement of the drums)
- h. Handle or otherwise move drums around
- i. Identify and sample a drum
- j. Decontaminate tools or other objects so they can be taken off-site

Task #2 Upon completing Task #1, each trainee will be given a break to cool off and rest.

Task #3 Trainees will don Level A PPE (SCBA unit and encapsulating suit). They will then establish and check communications by hand signals or by radio system with instructors and each other.

Task #4 In order to properly don the SCBA and Encapsulating suit, assistance is required. In this task, one group of trainees will help the other put on the equipment, cleaning facepieces, changing SCBA tanks and hooking up radios (if Used), air line in the suit, facepiece, and zipping

up the suit. Additionally, this task will serve as a review of the proper donning sequence as the assisting group will be the next group to don the equipment.

Task #5 Due to the weight, stiffness and stress imposed by Level A PPE, the possibility of falling or otherwise needing assistance exists during Task#1 and, therefore, requires evaluation. Task #5 will address both of these issues; and an unsuited person will be at the side of every suited person to evaluate them and if any problem arises, assist them.

Task #6 To complete the Site Simulation Exercise, Task #5 people will cover the decontamination of personnel leaving the site and the use of Level B and C PPE. Then this task (#6), trainees wearing Level B and C PPE will simulate the decontamination of personnel in Level A by spraying them down with water, scrubbing and assisting them in removal of their PPE.

II. Group Formation/Identification

5. If there are 24 trainees, the groups would be formed by assigning numbers 1-24 and dividing:

Group P- #'s 1 thru 4

Group Q- #'s 5 thru 8

Group R- #'s 9 thru 12

Group S- #'s 13 thru 16

Group T- #'s 17 thru 20

Group U- #'s 21 thru 24

There is a maximum of four people in each group (P through U).

6. If there are 12 or more trainees, assign each trainee a number and then divide the total by 6. If there are less than 12, the Exercise will have to be adjusted accordingly. If necessary, Tasks #2, 3 and 4 can be eliminated.
7. Once the groups are established, some means must be used so the instructor can easily identify the various groups. Suggested methods include:
 - a. Color-coded hard hats
 - b. Group letter on hard hats
 - c. Tyvek suit worn at all times with group letter attached or applied with a marker
 - d. Traffic or other vest with attached group letter

III. Site Simulation Layout

The Site Simulation Exercise site should be laid out in a logical and clear fashion (see attached Typical Site Simulation Lay Out). Each task station/area should be clearly marked.

Suggested methods for marking include:

- Signs or stakes
- Numbers on traffic cones
- Numbers on drums

IV. Conducting the Site Simulation Exercise

When the site is set up with the task stations/areas marked, groups established and identified, equipment readied and the Orientation compete, the Exercise is ready to begin. Begin the Exercise per the Site Simulation Rotation Schedule below.

Site Simulation Rotation Schedule

GROUP	P	Q	R	S	T	U
TIME						
09:00-09:25	1	6	3	4	5	2
09:25-09:50	2	5	1	3	4	6
09:50-10:15	6	4	2	1	3	5
10:15-10:40	5	3	6	2	1	4
10:40-11:05	4	1	5	6	2	3
11:05-11:30	3	2	4	5	6	1

NOTE: Half hour excess time to allow for any delays that may be encountered.)

As the groups begin to rotate, keep in mind the rotation is as follows:

- The group from decontamination (Task #6), rotates to Task #5, (accompanying the trainees doing Task #1).
- When the group completes the walk with the suited trainees (Task #5), they rotate to helping the next group suit-up (Task #4).
- When the group that completed helping suit-up trainees (Task #4), rotates to begin suiting-up (Task #3).
- The group that just completed activity in Level A PPE and going through decontamination (Task #1), now rotates to take a break (Task #2).
- After completing their break (Task #2), the group rotates to the decontamination task (Task #6).

In summary, the rotation is as follows:

Task #6- Decontamination

to

Task #5- Accompany suited trainees

to

Task #4- Assist with suit-up

to

Task #3- Suit-up Level A PPE

MWC PPM - inactiveTab 100145

to

Task #2- Break

to

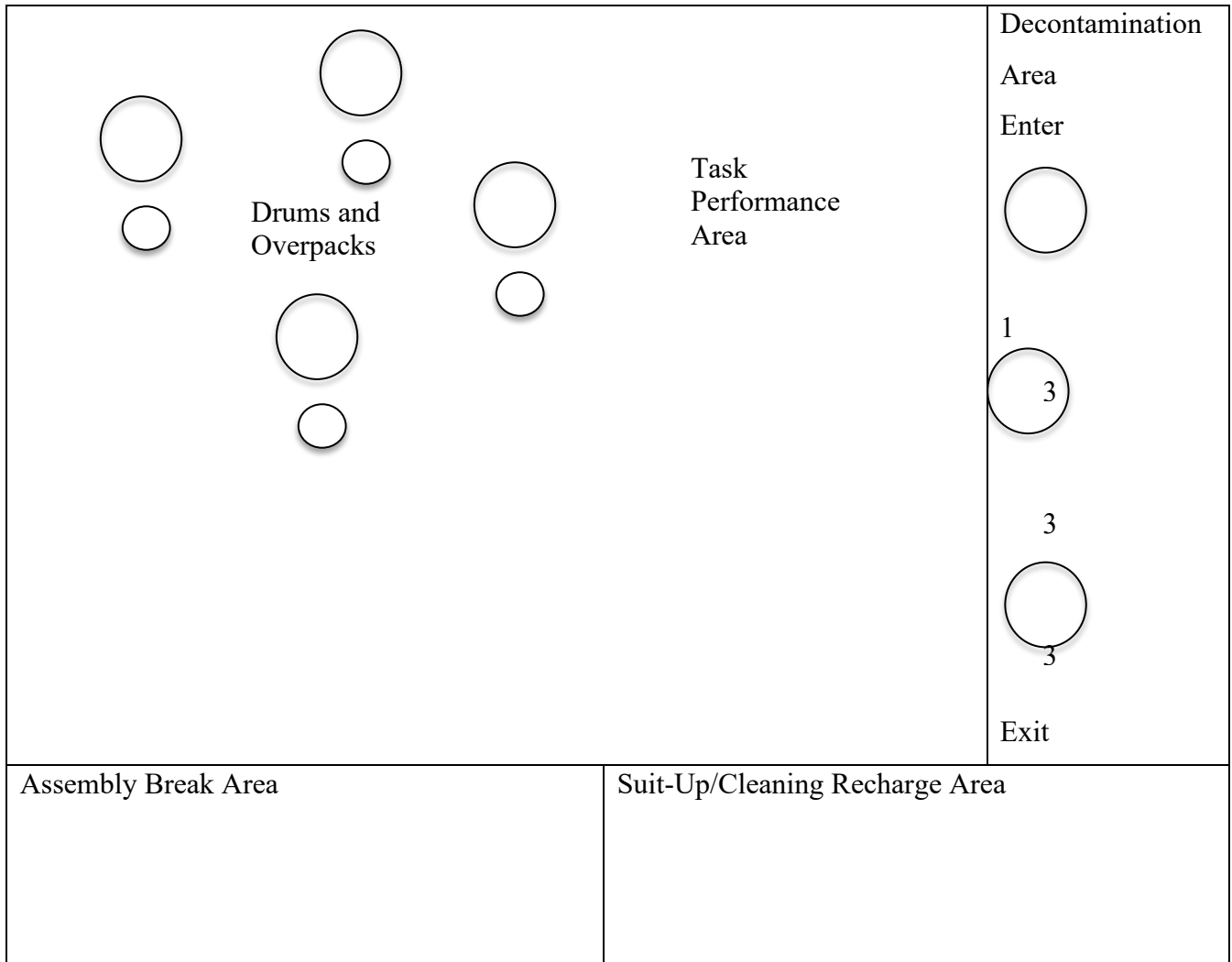
Task #1- Activity (one of five)

It must be noted that all trainees will not start at Task #6, but will start at one of the six tasks. At the completion of that task, each group of trainees will rotate to the next task per the Site Simulation Rotation Schedule.

V. Additional Safety Procedures

All Level A suits must be fitted with glove rings so that the trainee can retract hands back into the suit to operate SCBA, if required, or to wipe fog off the face shield. A towel, cloth or paper should be carried inside the Level A suit to wipe off the face shield if necessary.

TYPICAL Site Simulation Layout in Field or Parking Lot



Scale 1" = 15'

5. Water needed here
6. Breathing Air cylinders for airlines in decontamination area and recharging SCBA tanks
7. Wading Pools
- 8.

EXERCISE STIMULI (OPTIONAL)

STIMULIS: Drum Inaccessibility

MWC PPM - inactiveTab 100147

PROPER RESPONSE: Trainee finds safe alternate route to drum. If not safe alternative route is found, trainee abort mission.

RESOURCES REQUIRED: Materials necessary to block safe access to target drum. Additional drums, building materials, streams, trees, etc. can be used to block access.

STIMULUS: Incomplete Lab Pack

PROPER RESPONSE: Recognize and report findings to instructor

RESOURCES REQUIRED: Lab Pack

STIMULUS: Unlabeled or double labeled drums

PROPER RESPONSE: Recognize and report findings to instructor

RESOURCES REQUIRED: Mislabeled drums and or extra labels

STIMULUS: Open lid with smoke reaction visible or other evacuation stimulus

PROPER RESPONSE: Evacuation of area, alerting others

Smoke bombs, drum and matches

STIMULUS: Site security breach

PROPER RESPONSE: Suspend activities and alert intruder of necessity to leave the area

RESOURCES REQUIRED: Individual to act as if unaware of the dangers involved in being on site.

Boundaries clearly marked with boundary tape, fence, signs, etc.

STIMULUS: Bulge in drum

PROPER RESPONSE: Trainees do not attempt to open and sample drum, and report finding to instructor

RESOURCES REQUIRED: Bulged drum

STIMULUS: Wind direction

PROPER RESPONSE: Determine wind direction by observing wind or other weather instrument

RESOURCES REQUIRED: Wind sock, pole

APPENDIX A

QUALIFICATIONS FOR TRAINERS IN SITE SIMULATION

4 or more instructors on the Site Simulation (1 Lead; 3 or more Helpers)

MWC PPM - inactiveTab 100148

All personnel are medically certified for respiratory protection and unrestricted physical activity. At least one instructor certified in First Aid and CPR (If EMS on site this requirement can be waived). Specialized training in heat stress related illnesses are recommended. (NOTE: A slide program is available from the ACGIH.)

The lead trainer must have successfully completed formal, documented training or otherwise possess the skills; ability and knowledge gained through actual experience to recognize the use of and to anticipate the problems in the use of Levels A, B and C personal protective equipment.

Personal work experience in the use of Levels A, B and C protection is recommended. The lead trainer should have prior experience in training personnel in the use and decontamination of Levels A, B and C personal protective equipment. All trainers must have a working knowledge of the Emergency Response Plan.

APPENDIX B

EMERGENCY RESPONSE PLAN to use when conducting simulated site work

I. Introduction

- C. The Site Simulation Exercise is a complex, multi-part exercise which integrates much of the training of the 40 Hour General Site Worker Program into a hands-on simulation were attendees don and perform tasks in Levels A, B and C of respiratory personal protective equipment.
- D. As with any hands-on simulation or exercise there are numerous potential safety hazards (e.g. crushed by a falling drum, etc.). In order to ensure that instructors and attendees are aware of these potential hazards and how to react to them, the minimum safety requirements enumerated below must be implemented during every Site Simulation Exercise.

II. Safety Briefing

Before the Site Simulation Exercise is started all program attendees will receive a safety briefing that covers the contents of this plan. (May want to have students sign a document to acknowledge receipt of briefing.) If in-suit radios are not used, a clear set of hand signals must be established, verified and used during the Exercise.

III. Emergency Communications

- E. Emergency communications equipment (telephone or 2-way radio) will be present on the site.
- F. Communications equipment will be verified to be working before the Exercise begins.
- G. Emergency telephone numbers and directions to the site will be posted at each telephone on the site.
- H. Maps to the nearest treatment center should be posted in the event it is elected to transport a non-emergency case for treatment.

IV. Emergency Medical Treatment

- E. At least one instructor present on the site shall have completed at least the equivalent of the Red Cross Basic CPR course (8-hr).
- F. At least one instructor present shall have current certification in the Red Cross Basic CPR Course or its equivalent (8-hr).
- G. A standard First Aid Kit shall be available for use during the Site Simulation Exercise.
- H. Use of standby EMS crew is preferable (if available) instead of the above.

V. Site Access

- C. There shall be at least two entrance/exit points to the simulation site.
- D. If the Site Simulation Exercise is conducted in a public area, a sign shall be posted identifying it as a training simulation.

VI. Physical Hazards

- D. Heavy lifting and physical exertion will be required. Extra caution is required because of the additional stresses from PPE wear. Use of proper lifting technique is essential.

- E. The bulky, heavy PPE increases potential for falling because it restricts range of motion and changes center of gravity. The extra weight also increases the risk of injury from a fall. These problems will be magnified if the simulation site is not on level ground. The need for caution and attention to balance and dexterity must be emphasized. Non-suited safety person must stay close to each suited person.
- F. Handling and moving drums is always hazardous but even more so in PPE. All instructors and course attendees on site are required to wear safety shoes. Extra care and attention is required to protect the hand from pinching or crushing injuries.

VII. Heat Stress

- I. Heat stress due to wearing heavy equipment and chemical protective suits must be a major concern in summer months and cannot be ignored even in cold weather.
- J. All attendees should be familiar with heat stress from classroom presentations and be able to recognize it.
- K. Adequate drinking water and electrolyte replacements (e.g. Gatorade) must always be available. At high heat stress levels up to 2 liters per hour of liquid may be required by each person to maintain body fluid levels.
- L. Air temperature and humidity should be monitored before suits are donned. This information is available from the National Weather Service or the local airport weather station.
- M. The lead instructor on site must monitor heat stress condition and adjust work/rest times and breaks to insure everyone drinks enough fluid.
- N. All instructors and attendees must insure they drink adequate liquids to avoid becoming heat casualty.
- O. Shaded break area is recommended.
- P. Cool weather may present opposite problem as suit is removed, person could chill from cold air hitting body.

VIII. Wearing Level A or B

- E. Wearing Level A or B protection presents additional hazards which rate attention:
 - a. Weight- The additional weight increases stress and affects mobility and balance.

- b. Claustrophobia-Some people cannot handle being enclosed in a respirator or suit. They must be calmed and removed from the suit to restore normal breathing.
 - c. Hyperventilation- The stress of suit or respirator causes some people to hyperventilate. They must be calmed and removed from the suit to restore normal breathing.
 - d. Breathing rate-Under stress the breathing rate increases and the SCBA tanks will empty faster than the rated time. This means less work can be accomplished.
 - e. Low Pressure Alarm-People wearing SCBAs should be reminded that the low-pressure alarm does not mean their air is gone, but there is 3 to 5 minutes remaining. This additional warning may help to prevent panic when someone's alarm sounds.
- F. While wearing Level A or B protection during the Site Simulation Exercise, each course attendee shall have a "buddy" within arms and length, who is not suited and can react to and assist in any emergencies.
- G. All SCBA facemasks will be cleaned/disinfected between users.
- H. All Level A training suits should be sprayed with a disinfectant and towel (paper) dried between users.

IX. Responsibilities

C. Instructors:

- a. Must ensure that all issues listed in this plan have been discussed in class prior to the site simulation exercise.
- b. Must ensure all participants are aware of the hazards, how to recognize and react to them.
- c. Must have at least three instructors present at all times during the Site Simulation Exercise. (Four would be preferable) One shall be designated as lead and have overall responsibility for the exercise.

D. Attendees:

- a. Be aware of the hazards covered in classroom training and the site safety briefing.
- b. Watch yourself and your fellow classmates to try to avoid the hazards.

X. Weather

- C. In the event of adverse or inclement weather the lead instructor must determine if the Exercise can be conducted without endangering the attendees substantially beyond the inherent risks of the Exercise under the best conditions. Weather conditions to be considered include, but are not limited to excessive heat or cold, rain, snow and limited visibility.
- D. Plans should exist for use of an alternate sheltered site to avoid disruption due to weather.

XI. Emergency Stop

- C. An emergency stop signal (e.g. hand-held air horns work well), separate and distinct from any signal used as a training stimulus will be used to terminate the exercise in the event of an emergency.
- D. All personnel on site must know the emergency stop signal.

Revised 2019

For exercises and simulation, specific trainer qualifications must be met in order to help assure safety of participants and facilitators. An Emergency Response Plan or Site Safety Plan must be in place for the activity. Appropriate documentation of the qualifications, emergency plan and a description of the activity is retained in the Program File for the training.

Trainer qualification considerations include:

- Sufficient staffing, consistent with the Minimum Criteria
- Medically cleared to use respiratory protection
- Experienced in use of all the PPE and procedures
- Skills in anticipation and recognition of possible hazards when using PPE
- Skills in anticipation and recognition of possible hazards during decon
- At least one certified in First Aid and CPR, unless EMS is onsite
- Documented training in recognizing heat and cold stress effects
- Working knowledge of the Emergency Response Plan

A plan for emergency situations includes:

- Safety Briefing
- Emergency communication, including emergency stop

- Emergency Medical Care
- Site description/access
- Site description
- Physical Hazard analysis, including heat and cold or weather events
- Responsibilities of Facilitators and Participants/Accountability

Samples/templates for use are shown on the following pages; these are provided as guidance.

Template 1: Site Safety Plan for Hazardous Materials Site Worker Refresher

Location: _____ Date: _____
Lead Instructor: _____
Associate Instructor: _____

INCIDENT MANAGEMENT SYSTEM

Training Center Personnel Roles and Responsibilities

1. _____ will serve as the Site Supervisor (SS) and is responsible for implementing the Site Safety Plan.
2. _____ will serve as the Site Safety Officer (SSO) and is responsible for identifying and controlling hazards during all hands-on activities.

HAZARD CONTROL

The SS and SSO will take the following steps to control hazards during all hands-on activities.

- A written plan will be developed for conducting the response simulation. The SS and SSO will eliminate possible hazards from the site where the activity will occur or they will select a site that is free of foreseeable and potential hazards.
- The SS and SSO will ensure the use of the buddy system for all hands-on activities.
- The SS and SSO will instruct participants in the emergency signals that will be used during the course of hands-on activities.
- Participants will wear the appropriate protective equipment based on the hazards that are being simulated.
- Participants will conduct themselves appropriate to the seriousness of the emergency response simulation.
- At least two entry/exit points will be available at the site.
- During periods of high ambient temperatures (>90 degrees F), the SSO will pay special attention to the potential for heat stress. The SSO will monitor all participants and assure adequate fluid in-take. A shady rest area will be available if the site is out-of-doors.

ZONING

- The exercise area will be zoned into three areas: hot zone, warm zone, and staging.
- The hot zone will be established at the simulated hazards.
- The warm zone will be designated for decontamination activities.
- Staging is where all participants are assigned when not performing a task in the other zones as assigned by the instructors.
- All zones will be clearly marked with cones and tape.
- No more than 4 participants per instructor will be allowed in the hot zone at one time.

ACCOUNTABILITY

To ensure accountability:

- All participants will sign in at the beginning of each day.
- Any visitors or observers will sign in and out during any hands-on activities.
- _____ will be responsible for taking the roster to the exercise area during the hands-on activities.
- Immediately after any emergency, the SS will conduct a roll call of all participants and visitors.
- Any personnel leaving the area must check out and provide time and date.
- All participants must sign out at the end of each day.

COMMUNICATION

- The SSO will use an air horn or other effective method as a warning device. When the air horn is sounded, all participants will assemble in the staging area for a personnel accountability report.
- A communication device will be available during hands-on activities to contact the appropriate author during an emergency. The SSO will verify the communication device is functioning properly before the simulation begins.

NOTIFICATION

The SS will make arrangements to contact the following should the need arise:

- For site Emergencies:

- Environmental:

- Local Fire Department:

- The SS will establish a procedure whereby instructors or participants can be contacted during the course of the training program. For training conducted at this site, the phone number is: _____.
- Appropriate contact numbers will be posted at the site.

MEDICAL CARE

- At least one instructor will be certified in basic first aid and CPR.
- A basic first aid kit will be available in the exercise area and in the classroom.
- Participants will be advised to discuss any special medical concerns they may have with the lead instructor.

SAFETY BRIEFING

- The SS and SSO will conduct a safety briefing for participants prior to any hands-on activities.
- The safety briefing will cover the following areas: hazard control, zoning, accountability, communications, notification, and medical care.

Site Supervisor

Date

Site Safety Officer

Date

Template 2. Site Safety Plan for Emergency Response Refresher

Location: _____ Date: _____
Lead Instructor: _____
Associate Instructor: _____

INCIDENT MANAGEMENT SYSTEM

Training Center Personnel Roles and Responsibilities:

1. _____ will serve as the Incident Commander (IC) and is responsible for implementing the Site Safety Plan.
2. _____ will serve as the Site Safety Officer (SSO) and is responsible for identifying and controlling hazards during all hands-on activities.

HAZARD CONTROL

The IC and SSO will take the following steps to control hazards during all hands-on activities.

- A written plan will be developed for conducting the response simulation. The IC and SSO will eliminate possible hazards from the site where the activity will occur or they will select a site that is free of foreseeable and potential hazards.
- The IC and SSO will ensure the use of the buddy system for all hands-on activities.
- The IC and SSO will instruct participants in the emergency signals that will be used during the course of hands-on activities.
- Participants will wear the appropriate protective equipment based on the hazards that are being simulated.
- Participants will conduct themselves appropriate to the seriousness of the emergency response simulation.
- At least two entry/exit points will be available at the site.
- During periods of high ambient temperatures (>90 degrees F), the SSO will pay special attention to the potential for heat stress. The SSO will monitor all participants and assure adequate fluid in-take. A shady rest area will be available if the site is out-of-doors.

ZONING

- The exercise area will be zoned into three areas: hot zone, warm zone, and staging.
- The hot zone will be established at the simulated hazards.
- The warm zone will be designated for decontamination activities.
- Staging is where all participants are assigned when not performing a task in the other zones as assigned by the instructors.
- All zones will be clearly marked with cones and tape.
- No more than 4 participants per instructor will be allowed in the hot zone at one time.

ACCOUNTABILITY

To ensure accountability:

- All participants will sign in at the beginning of each day.
- Any visitors or observers will sign in and out during any hands-on activities.
- _____ will be responsible for taking the roster to the exercise area during the hands-on activities.
- Immediately after any emergency, the SS will conduct a roll call of all participants and visitors.
- Any personnel leaving the area must check out and provide time and date.
- All participants must sign out at the end of each day.

COMMUNICATION

- The SSO will use an air horn or other effective method as a warning device. When the air horn is sounded, all participants will assemble in the staging area for a personnel accountability report.
- A communication device will be available during hands-on activities to contact the appropriate author during an emergency. The SSO will verify the communication device is functioning properly before the simulation begins.

NOTIFICATION

The IC will make arrangements to contact the following should the need arise:

- For site Emergencies: _____
- Environmental: _____
- Local Fire Department: _____
- The IC will establish a procedure whereby instructors or participants can be contacted during the course of the training program. For training conducted at this site, the phone number is: _____.
- Appropriate contact numbers will be posted at the site.

MEDICAL CARE

At least one instructor will be certified in basic first aid and CPR.

- A basic first aid kit will be available in the exercise area and in the classroom.
- Participants will be advised to discuss any special medical concerns they may have with the lead instructor.

SAFETY BRIEFING

- The IC and SSO will conduct a safety briefing for participants prior to any hands-on activities.

- The safety briefing will cover the following areas: hazard control, zoning, accountability, communications, notification, and medical care.

Site Supervisor

Date

Site Safety Officer

Date

Template 3. Emergency Response Plan for Site Worker Simulations

EMERGENCY RESPONSE PLAN to use when conducting simulated site work

XII. Introduction

- E. The Site Simulation Exercise is a complex, multi-part exercise which integrates much of the training of the 40 Hour General Site Worker Program into a hands-on simulation where attendees don and perform tasks in Levels A, B and C of respiratory personal protective equipment.
- F. As with any hands-on simulation or exercise there are numerous potential safety hazards (e.g. crushed by a falling drum, etc.). In order to ensure that instructors and attendees are aware of these potential hazards and how to react to them, the minimum safety requirements enumerated below must be implemented during every Site Simulation Exercise.

XIII. Safety Briefing

Before the Site Simulation Exercise is started all attendees will receive a safety briefing that covers the contents of this plan. (May want to have students sign a document to acknowledge receipt of briefing.) If in-suit radios are not used, a clear set of hand signals must be established, verified and used during the Exercise.

XIV. Emergency Communications

- I. Emergency communications equipment (telephone or 2-way radio) will be present on the site.
- J. Communications equipment will be verified to be working before the Exercise begins.
- K. Emergency telephone numbers and directions to the site will be posted at each telephone on the site.
- L. Maps to the nearest treatment center should be posted in the event it is elected to transport a non-emergency case for treatment.

XV. Emergency Medical Treatment

- I. At least one instructor present on the site shall have completed at least the equivalent of the Red Cross Basic CPR course (8-hr).
- J. At least one instructor present shall have current certification in the Red Cross Basic CPR Course or its equivalent (8-hr).
- K. A standard First Aid Kit shall be available for use during the Site Simulation Exercise.
- L. Use of standby EMS crew is preferable (if available) instead of the above.

XVI. Site Access

- E. There shall be at least two entrance/exit points to the simulation site.
- F. If the Site Simulation Exercise is conducted in a public area, a sign shall be posted identifying it as a training simulation.

XVII. Physical Hazards

- G. Heavy lifting and physical exertion will be required. Extra caution is required because of the additional stresses from PPE wear. Use of proper lifting technique is essential.
- H. The bulky, heavy PPE increases potential for falling because it restricts range of motion and changes center of gravity. The extra weight also increases the risk of injury from a fall. These problems will be magnified if the simulation site is not on level ground. The need for caution and attention to balance and dexterity must be emphasized. Non-suited safety person must stay close to each suited person.
- I. The task of handling and moving drums is always hazardous but even more so in PPE. All instructors and course attendees on site are required to wear safety shoes. Extra care and attention are required to protect the hand from pinching or crushing injuries.

XVIII. Heat Stress

- Q. Heat stress due to wearing heavy equipment and chemical protective suits must be a major concern in summer months and cannot be ignored even in cold weather.
- R. All attendees should be familiar with heat stress from classroom presentations and be able to recognize it.
- S. Adequate drinking water and electrolyte replacements (e.g. Gatorade) must always be available. At high heat stress levels up to 2 liters per hour of liquid may be required by each person to maintain body fluid levels.

- T. Air temperature and humidity should be monitored before suits are donned. This information is available from the National Weather Service or the local airport weather station.
- U. The lead instructor on site must monitor heat stress condition and adjust work/rest times and breaks to insure everyone drinks enough fluid.
- V. All instructors and attendees must insure they drink adequate liquids to avoid becoming heat casualty.
- W. Shaded break area is recommended.
- X. Cool weather may present opposite problem as suit is removed, person could chill from cold air hitting body.

XIX. Wearing Level A or B

- I. Wearing Level A or B protection presents additional hazards which rate attention:
 - a. Weight- The additional weight increases stress and affects mobility and balance.
 - b. Claustrophobia-Some people cannot handle being enclosed in a respirator or suit. They must be calmed and removed from the suit to restore normal breathing.
 - c. Hyperventilation- The stress of suit or respirator causes some people to hyperventilate. They must be calmed and removed from the suit to restore normal breathing.
 - d. Breathing rate-Under stress the breathing rate increases and the SCBA tanks will empty faster than the rated time. This means less work can be accomplished.
 - e. Low Pressure Alarm-People wearing SCBAs should be reminded that the low-pressure alarm does not mean their air is gone, but there is 3 to 5 minutes remaining. This additional warning may help to prevent panic when someone's alarm sounds.
- J. While wearing Level A or B protection during the Site Simulation Exercise, each course attendee shall have a "buddy" within arms and length, who is not suited and can react to and assist in any emergencies.
- K. All SCBA facemasks will be cleaned/disinfected between users.
- L. All Level A training suits should be sprayed with a disinfectant and towel (paper) dried between users.

XX. Responsibilities

E. Instructors:

- a. Must ensure that all issues listed in this plan have been discussed in class prior to the site simulation exercise.
- b. Must ensure all participants are aware of the hazards, how to recognize and react to them.
- c. Must have at least three instructors present at all times during the Site Simulation Exercise. (Four would be preferable) One shall be designated as lead and have overall responsibility for the exercise.

F. Attendees:

- a. Be aware of the hazards covered in classroom training and the site safety briefing.
- b. Watch yourself and your fellow classmates to try to avoid the hazards.

XXI. Weather

- E. In the event of adverse or inclement weather the lead instructor must determine if the Exercise can be conducted without endangering the attendees substantially beyond the inherent risks of the Exercise under the best conditions. Weather conditions to be considered include, but are not limited to excessive heat or cold, rain, snow and limited visibility.
- F. Plans should exist for use of an alternate sheltered site to avoid disruption due to weather.

XXII. Emergency Stop

- E. An emergency stop signal (e.g. hand-held air horns work well), separate and distinct from any signal used as a training stimulus will be used to terminate the exercise in the event of an emergency.
- F. All personnel on site must know the emergency stop signal.

**Tab 100 (Tab 21)
Outreach Monthly Report
(1997)**

Title: Outreach Monthly Report
Adopted 1997

NIEHS OUTREACH SUMMARY

Training Center _____

For each of the following types of programs, show the name, duration, number of times given and the total number of trainees during the year.

Training programs (examples: lead, asbestos)

Seminars/Presentations/Meetings (example: presentation on air emissions to the Rotary)

Other (examples: newspaper article on your activities; radio show contribution)

Please use the Monthly report form or provide a simple listing in a table with the headers shown above.

NIEHS OUTREACH SUMMARY – 1997-98 (DRAFT FORM)

TRAINING CENTER _____

Training Programs

<u>Program Type</u>	<u>Duration</u>	<u># Programs</u>	<u># Trainees</u>
---------------------	-----------------	-------------------	-------------------

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Seminars/Presentations/Meetings

	Audience Description	# In Audience	Duration
1.	_____		
2.	_____		
3.	_____		
4.	_____		
5.	_____		

Other

	Description	# Reached
1.	_____	
2.	_____	
3.	_____	
4.	_____	
5.	_____	

Outreach Activity Documentation Form

For Month of _____

Related Training Program

<u>Date(s)</u>	<u>Program Title</u>	<u>Duration</u>	<u>#Trained</u>
1.			
2.			
3.			
4.			

Meetings/Information Sharing/Presentations

<u>Date(s)</u>	<u>Target Group</u>	<u>Description</u>
1.		
2.		
3.		

Other

<u>Date(s)</u>	<u>Description</u>
1.	
2.	
3.	

Tab 100 (Tab 22)
Program Guidance Outline Programs
(See each program summary below for tracking dates)

Tab 22a

Title: Outline Program—3AW

Adopted 1995

NIEHS approved use of the outline format (attached) contingent upon:

Trainers must review materials, as shown below for the topic to be covered.

Step 1 - select the topic(s) for the Program

Emergency Response – 29 CFR 1910.120 (q)

Consortium Awareness, Operations- and Technician-level programs

National Response Team website,

<https://www.nrt.org/Main/Resources.aspx?ResourceType=Hazards&ResourceSection=2>

“Protecting Emergency Responders – Lessons Learned from Terrorist Attacks”, available here:

https://www.rand.org/pubs/conf_proceedings/CF176.html.

Training Requirements – 29 CFR 1910.120

Consortium 3AW program (Handbook)

OSHA

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=976

5

Evacuation – 29 CFR 1910.120

Consortium Evacuation Coordinator Program

“Protecting Emergency Responders – Lessons Learned from Terrorist Attacks”, available here:

https://www.rand.org/pubs/conf_proceedings/CF176.html.

OSHA website:

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=976

5

IAFF websites, <https://client.prod.iaff.org/>

Related OSHA Standards – standards cited in 29 CFR 1910.120

Relevant Standards (tailored to audiences)

OSHA website,

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=976

5

CERT Intro – 29 CFR 1910.120

MWC PPM - inactiveTab 100168

Levels of training, 120(q)
CERT website – www.us-cert.gov
MWC REL TRI exercise

Please note that as a condition of our award acknowledgment of support must be included in the handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

Step 2 - Design content

3AW (Hazwoper Awareness)

A 3-hour program to assist public and private sector organizations in understanding various HAZWOPER requirements.

Course Agenda

Introduction

Content: Overall course objectives; provide student materials, review agenda Terminal

Objectives: Describe program purpose and class procedures

- receive course/handout
- review agenda for program
- complete paperwork

Exercises: Introductions, “What I want to learn and what skills I hope to acquire”

Presentation: Interactive discussion

Topics for this program may include one or more of the following:

Emergency Response Planning

Reference Midwest Consortium Programs: ISA, Disaster Preparedness

Content: 29 CFR 1910.120(q)

Terminal Objectives:

- Identify planning requirements
- Identify elements of an integrated contingency plan
- Identify steps in the planning process

Exercises:

- Match elements of plan with legal requirements
- match activities during response with sections of the plan
- Discuss needs (modify from exercises ISA program)

MWC PPM - inactiveTab 100169

Presentation:

- Interactive discussion
- Small group activity

Training Requirements

Reference Midwest Consortium Programs: 40H Site, 8SU, 24 IER, 40H Tech.

Content: 29 CFR 1910.120

Terminal Objectives:

- Identify HAZWOPER training requirements
- Identify levels of training
- Identify training needs

Exercises: Match activities and levels of training required

- Identify unmet needs
- Brainstorm how to access needed training (modify from exercises in 40 Hour Site Worker and Operations and Technician Programs)

Presentation:

- Interactive discussion
- Small group activity

Evacuation Procedures

Reference Midwest Consortium Programs: Evacuation Coordinator

Content: 29 CFR 1910.38 Employee emergency plans and fire prevention plans

29 CFR 1910.165 Employee alarm system

Terminal Objectives:

- Identify evacuation requirements
- Identify emergency conditions
- Identify methods for assisting and directing employees

Exercises:

- Identify responses for given scenarios
- Identify need for training (modify from exercises in Evacuation Coordinator)

Presentation:

- Interactive discussion
- Small group activity

Related OSHA Standards

Reference: 3AW

Content: As appropriate (e.g. 29 CFR 1910.134, 29 CFR 1910.146, 29 CFR 1910.147 ...)

Terminal Objectives:

- Identify OSHA standards impacted by HAZWOPER
- Identify gaps in compliance
- Identify methods for achieving compliance

Exercises:

- Identify appropriate regulations for given scenario
- Discuss gaps as shown in the 3AW program exercise (relevant scenarios must be developed for the participants)

Presentation:

Interactive discussion

Small group activity

CERT Introduction

Reference: WMD ER modules and Reporting Environmental Releases

Content: CERT frequently asked questions <https://www.us-cert.gov/faq>

Terminal Objectives:

- Introduce the CERT program
- Identify resources and discuss training elements

Exercises:

Identify threats in the community (modify from intro exercises in WMD. See also TRI exercise in Reporting Environmental Releases.

Presentation:

- Interactive discussion
- Small group activity
- Match to training needs

Step 3 - double check that content matches NIEHS requirements for the approval

CHECKLIST

Emergency Response:

Reviewed 29 CFR 1910.120 (q)

Reviewed Consortium Awareness, Operations, Technician level programs; ISA, Disaster Preparedness

Discussed National Response Team website

MWC PPM - inactiveTab 100171

Reviewed “Protecting Emergency Responders – Lessons learned from Terrorist Attacks”. Available on NIOSH website.

Training Requirements:

Reviewed 29 CFR 1910.120

Reviewed Consortium 3AW, 40 Hour Site Worker, 8 Hour Supervisor, 24 IER, 40 Hour Tech programs

Accessed OSHA HAZMAT website

Evacuation:

Reviewed 29 CFR 1910.120

Reviewed Consortium Evacuation Coordinator Program

Reviewed “Protecting Emergency Responders – Lessons learned from Terrorist Attacks”. Available on NIOSH website.

Accessed OSHA and IAFF websites

Related OSHA Standards:

Reviewed 29 CFR 1910.120

Reviewed Consortium 3AW program

Covered relevant standards (tailored to audience)

Accessed OSHA website

CERT Introduction:

Reviewed 29 CFR 1910.120

Reviewed Emergency Response Modules and Reporting Environmental Releases

Accessed CERT website – www.us-cert.gov

Step 4 - Document program delivery and file content documents

A checklist is attached should you wish to use it to document compliance with this policy:

All 3AW Outline Programs

Program objectives, agenda, exercises and handouts filed with training program directors. NIEHS support acknowledged (a term & condition of the award).

Program Dates	Lead Trainer/Program Director
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____

____/____/____
____/____/____
____/____/____

Tab 22b (IMS)

Title: Outline Program--IMS

Adopted December 5, 2000; Amended January 17, 2002; Amended January 21, 2003

Adopted 2000

NIEHS approved use of the outline format (attached) contingent upon:

Trainers must

1. Review the National Response Team website for information on municipal responders
2. Access the web site provided the International Association of Firefighters (IAFF)
3. Include at least one exercise using ATT

Please note that as a condition of our award acknowledgment of support must be included in the handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

NIEHS funds cannot be used for anti-terrorism training.

A checklist is attached should you wish to document compliance with this policy.

Amended 2002—Not available

Amended 2003

NIEHS approved use of the outline format (attached) contingent upon:

Trainers must:

1. Review the National Response Team website for information on municipal responders
2. Access the web site provided for the International Association of Firefighters (IAFF)
3. Include at least one exercise using ATT

MWC PPM - inactiveTab 100173

Required preparation for Trainers: Review “Protecting Emergency Responders- Lessons Learned from Terrorist Attacks”.

Please note that as a condition of our award acknowledgment of support must be included in the handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

Step 1

Review required websites

Select ATT exercise

Identify needed local- and State-specific content

Step 2

A 2-day, 16-hour program to prepare chemical emergency responders to acquire skills in a systems approach to emergency management

Course Agenda

Introduction

Content: Overall Course Objectives
Provide Student Materials
Review Agenda

Terminal Objective(s): Describe program purpose and class procedures
Receive course manual/handout
Review agenda for program
Complete paperwork

Exercise: Introductions: What I want to learn and what skills I hope to acquire

Presentation: Interactive discussion

Understanding Emergencies

Content: Types of Emergencies

Terminal Objective(s): List of types of emergencies and characteristics of each
Identify potential emergencies at participants’ work site

Exercises: List potential emergencies
Categorize potential emergencies by type

Presentation: Interactive discussion
Small group activity

Tools and Constraints for an Organized Response

Content: Laws, Regulations, Guidelines
 Incident Management System
 Local Emergency Response Plan
 State Emergency Response Plan
 Federal Regional Response Team

Terminal Objective(s): understand legal requirements for emergency response
 List best practices for Incident Management System
 Describe context of your team to plan, local, state and
 federal teams
 Describe function of various team elements
 List training required for various team functions
 Identify constraints to best practices

Exercises: Critique various IMS structures
 Identify training required for various functions

Presentation: Presentation
 Interactive discussion
 Small group activities

The Written Emergency Response Plan

Content: Required Elements
 Resources for Team Members
 Hazard Evaluation
 Release
 Reactions/events following release
 Stress of working in protective clothing
 Mitigation Equipment
 Protective Equipment
 Decontamination
 Termination
 Strategies to review Plan and Resources

Terminal Objective(s): Implement plan
 Identify complete and incomplete elements in a plan
 Identify approaches to improve plan/resources
 Identify any differences between plan and external plans or
 requirements

Exercises: Critique participant's plan or a "model" plan
Access electronic information resource(s)
Compare plan with external requirements

Presentation: Interactive discussion
Small group activities
brainstorming

Elements of Implementing a Plan

Content: Initial Actions
Size-up
Sustained Actions
Termination

Terminal Objective(s): Identify correct and incorrect actions during a response
Identify need post-emergency actions

Exercises: Review video
Conduct table-top simulation according to the written plan
(or)
Walkthrough simulated response using available resources

Presentation: Interactive discussion
Small group activity

Closing

Content: Solicit comments on the overall program
Complete evaluation forms
Assure all checklists used to document competency are collected
Provide follow-up resources

Exercises: Did program meet participants objectives/needs

Presentation: Interactive discussion

Step 3 - Double check that content matches requirements

Step 4 - Document program delivery and content

A checklist is attached should you wish to document compliance with this policy.

CHECKLIST

- ◇ Reviewed National Response Team website
- ◇ Accessed the IAFF website
- ◇ Use at least one ATT exercise in the program.
- ◇ Presentation consistent with outline.
- ◇ NIEHS support acknowledged (a term & condition of the award.)

Program Dates

Lead Trainer/Program Director

____/____/____
____/____/____
____/____/____
____/____/____
____/____/____
____/____/____
____/____/____
____/____/____

Tab 22c
Title: ISA for WMD Hazards - Guidance
Adopted May 31, 2002

NIEHS approved use of the outline format (attached) contingent upon:
Trainers must

MWC PPM - inactive Tab 100177

1. Review the National Response Team website for information on municipal responders
2. Access the web site provided the International Association of Firefighters (IAFF)
3. Include at least one exercise using ATT

Required preparation for Trainers: Review “Protecting Emergency Responders- Lessons Learned from Terrorist Attacks”.

Please note that as a condition of our award acknowledgment of support must be included in the handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

Step 1

Review required websites

Select ATT exercise

Identify needed local- and State-specific content pertaining to WMD Hazards

Step 2

A 2-day, 16-hour program to prepare chemical emergency responders to acquire skills in a systems approach to emergency management where WMD hazards exist

Course Agenda

Introduction

Content: Overall Course Objectives
Provide Student Materials
Review Agenda

Terminal Objective(s): Describe program purpose and class procedures
Receive course manual/handout
Review agenda for program
Complete paperwork

Exercise: Introductions: What I want to learn and what skills I hope to acquire

Presentation: Interactive discussion

Understanding Emergencies

Content: Types of Emergencies

Terminal Objective(s): List of types of emergencies and characteristics of each
Identify potential emergencies at participants' work site

Exercises: List potential emergencies
Categorize potential emergencies by type

Presentation: Interactive discussion
Small group activity

Tools and Constraints for an Organized Response

Content: Laws, Regulations, Guidelines
Incident Management System
Local Emergency Response Plan
State Emergency Response Plan
Federal Regional Response Team

Terminal Objective(s): understand legal requirements for emergency response
List best practices for Incident Management System
Describe context of your team to plan, local, state and federal teams
Describe function of various team elements
List training required for various team functions
Identify constraints to best practices

Exercises: Critique various IMS structures
Identify training required for various functions

Presentation: Presentation
Interactive discussion
Small group activities

The Written Emergency Response Plan

Content: Required Elements
Resources for Team Members
Hazard Evaluation
Release
Reactions/events following release
Stress of working in protective clothing
Mitigation Equipment
Protective Equipment
Decontamination
Termination
Strategies to review Plan and Resources

Terminal Objective(s): Implement plan
Identify complete and incomplete elements in a plan
Identify approaches to improve plan/resources
Identify any differences between plan and external plans or requirements

Exercises: Critique participant's plan or a "model" plan
Access electronic information resource(s)
Compare plan with external requirements

Presentation: Interactive discussion
Small group activities
Brainstorming

Elements of Implementing a Plan

Content: Initial Actions
Size-up
Sustained Actions
Termination

Terminal Objective(s): Identify correct and incorrect actions during a response
Identify need post-emergency actions

Exercises: Review video
Conduct table-top simulation according to the written plan
(or)
Walkthrough simulated response using available resources

Presentation: Interactive discussion
Small group activity

Closing

Content: Solicit comments on the overall program
Complete evaluation forms
Assure all checklists used to document competency are collected
Provide follow-up resources

Exercises: Did program meet participants objectives/needs

Presentation: Interactive discussion

Step 3 Double check that content matches requirements

MWC PPM - inactiveTab 100180

Step 4 Document program delivery and content

A checklist is attached should you wish to document compliance with this policy

CHECKLIST

- ◇ Reviewed National Response Team website
- ◇ Accessed the IAFF website
- ◇ Use at least one ATT exercise in the program.
- ◇ Presentation consistent with outline.
- ◇ NIEHS support acknowledged (a term & condition of the award.)

Program Dates

Lead Trainer/Program Director

____/____/____

____/____/____

____/____/____

____/____/____

____/____/____

____/____/____

____/____/____

NIEHS approved use of the outline format (attached) contingent upon:

Trainers must

1. Review the National Response Team website for information on municipal responders
2. Access the web site provided the International Association of Firefighters (IAFF)
3. Include Internet resources

Required preparation for Trainers: Review “Protecting Emergency Responders- Lessons Learned from Terrorist Attacks”.

Please note that as a condition of our award acknowledgment of support must be included in the handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

Step 1

Review required websites

Select internet resources

Step 2 - Design content

Incident Management System Awareness

This 4-hour to assist public health organizations, law enforcement and community groups recognize the IMS as an essential framework for response operations.

Course Agenda

Introduction

Content: Overall Course Objectives
Provide Student Materials
Review Agenda

Terminal Objective(s): Describe program purpose and class procedures
Receive course manual/handout
Review agenda for 4-hour program
Complete paperwork

Exercise: Introductions: What I want to learn and what skills I hope to acquire

Presentation: Interactive discussion

Requirements for Emergency Response Planning

MWC PPM - inactiveTab 100182

Content: Types of Emergencies

Terminal Objective(s): List types of emergencies and characteristics of each
Identify potential emergencies relevant to participants

Exercises: List potential emergencies
Categorize potential emergencies by affected population

Presentation: Interactive discussion
Small group activity

Incident Management System

Content: Laws, Regulations, Guidelines
Incident Management System
Local Emergency Response Plan
State Emergency Response Plan
Federal Regional Response Team

Terminal Objective(s): Describe legal requirements for emergency response
List best practices for Incident Management System
Understand context of your team to plan, local, state
and federal teams
Describe function of various team elements
List training required for various team functions
Identify constraints to best practices

Exercises: Identify key people and contact information
Identify training required for various functions

Presentation: Presentation
Interactive discussion
Small group activities

Training Needs

Content: Required Elements
Resources for Team Members
Hazard Evaluation
Release
Reactions/events following release

Stress of working in protective clothing
Mitigation Equipment
Protective Equipment
Decontamination
Termination
Strategies to review Plan and Resources

Terminal Objective(s): Describe elements of a plan
Identify key function in local implementation
Develop strategy to gain information about plans

Exercises: Identify key functions needed locally
Access or review electronic information resource(s)
Determine how to access the relevant plans; if plans are available, then critique should be conducted.

Presentation: Interactive discussion
Small group activities
Brainstorming

Actions Needed to Implement or Participate

Content: Key Players Roles
Coordination
Incident Commander
Using Unified Command for Multiple Response

Terminal Objective(s): Describe how key players work together
Identify information gaps among group
Identify needed actions

Exercises: walkthrough simulated response using available resources; all key players roles are simulated

Presentation: Interactive discussion
Small group activity

Closing

Content: Solicit comments on the overall program
Complete evaluation forms
Assure all checklists used to document competency are collected
Provide follow-up resources

Exercises: did program meet participants objectives/needs

Presentation: Interactive discussion

Step 4

Document content and delivery

A checklist is attached should you wish to document compliance with this policy.

CHECKLIST

Reviewed National Response Team website

- ◇ Accessed the IAFF website
- ◇ Included Internet resources.
- ◇ Presentation consistent with outline.
- ◇ NIEHS support acknowledged (a term & condition of the award.)

Program Dates

Lead Trainer/Program Director

____/____/____

____/____/____

____/____/____

____/____/____

____/____/____

____/____/____

____/____/____

____/____/____

Tab 22e

Title: Outline Program—Guidance to construct a Confined Space Rescue Refresher
Adopted 2010.

Program structure:

Use 24-hour Confined Space Rescue manual
Develop an 8-hour agenda, tailored to the needs of the participants

Include the following elements

Year in Review or Chapter 1 Rights and Responsibilities activity
(Year in Review can be adapted from site refresher)
Chapter 2 Rescue and Scene Management Activity
Four or more activities from Chapters 3-5 to meet
needs of participants, and shown in the Agenda

Complete Registration and TPE forms for Audra Morrison, Evaluation Services
Center, Cincinnati, OH.

Documentation:

Retain: Program specific agenda
Evaluation: Registration and Trainee Program Evaluation (TPE)

Tab 22f

Title: TSD Refresher—Guidance to construct the program
Adopted 2010

TSD facilities are often unique operations with few employees. Therefore, this refresher approach was designed to enable facilitators to use reconnaissance regarding trainees and duties to tailor (with documentation) an 8-hour program using the 24-hour manual.

Program structure:

Use 24-hour Treatment Storage and Facility manual
Refer to 24-hour IER program for resources on lesson plan, exercises etc.
Develop an 8-hour agenda with detailed lesson plan, tailored to the needs of the participants based on a reconnaissance needs assessment (may be updated based on input from participants at beginning of program). Reference Minimum Criteria, 11.2.3 TSD Refresher.

Include the following elements (emphasize principles of adult learning)

Introduction
Discuss lessons learned in previous year

(include verification of reconnaissance/update needs assessment)
Review of major topics (knowledge and skills) in original training
Discuss any relevant regulatory changes
1910.134 and site-specific appropriate label systems

Incorporate interactive exercises using adult learning principles (small group and hands-on activities) for skills essential to worker protection, including respiratory protection and chemical protective clothing use/practices

ERG Exercise (graded)
Closing

Complete Registration and TPE forms for, Evaluation Services Center,
Cincinnati, OH.

Documentation:

Retain: Program-specific agenda and lesson plan
Evaluation: Registration and Trainee Program Evaluation (TPE)

Tab 22g

Title: Outline Program—Personal Protective Equipment Use Demonstration
Adopted March 2005

PPE program- outline format. Requirements approved by NIEHS are listed. Use the checklist provided to assure compliance. Agenda, checklist and evaluation forms provided.

PPE Program- Outline Format

NIEHS approves the use of the outline format for PPE training, contingent upon:

1. review of the NIOSH, NIEHS WETP and manufacture's websites for relevant updates on the PPE used in the program
2. review of relevant written programs needed to support the use of the PPE
3. inclusion of internet resources

Required preparation for Trainers:

Read Protecting Emergency Responders- Lessons Learned from Terrorist Attacks, available on the NIOSH web site.

Prepare checklists for all activities (models are appended to this policy). The checklists in the 40-hour site worker program may be useful guides in tailoring checklists for these

MWC PPMTab 22a187

programs. Phil Berger at UK is available to help with checklist development, and needed for your program. Please contact him at pub711@uk.edu.

Please note that as a condition of our award from NIEHS, acknowledgement of their support must be included in handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

A checklist is attached for your use in documenting compliance with this policy.

TRAINING CENTER COMPLIANCE CHECKLIST

- ◇ Reviewed NIOSH and NIEHS WEPT websites.
- ◇ Reviewed manufacturer website, appropriate.
- ◇ Reviewed relevant written programs.
- ◇ Included Internet resources.
- ◇ Presentation consistent with outline.
- ◇ Prepared checklists appropriate for the PPE to be used; Retained copy in program file.
- ◇ NIEHS support acknowledged (a term & condition of the award.)

Program Dates

Lead Trainer/Program Director

____/____/____
____/____/____
____/____/____
____/____/____
____/____/____
____/____/____
____/____/____
____/____/____

Midwest Consortium for Hazardous Waste Worker Training

PPE Use Demonstration

This 4-hour program is designed to assure adequate practice with appropriate personal protective equipment that may be used as part of emergency response or remediation of hazardous materials. Examples include SCBA, chemical protective clothing, Level A dressout.

Course Agenda

Introduction

Content: Overall Program Objectives
Provide Participant Materials
Review Agenda

Terminal Objective(s): Understand program purpose and class procedures
Receive course handouts/materials
Understand agenda
Complete registration paperwork

Exercise: Introductions

Presentation: Interactive discussion

Written Program Requirements

Content: Written program and procedures
Storage use, check-out, responsible parties, training
Companion procedures (e.g., medical clearance)
Internet resources for PPE

Terminal Objective(s): Describe the purpose of the PPE used in the program
Describe who is allowed to use the PPE
Describe training/retraining needs to use the PPE
Describe other relevant policies and procedures

Exercises: Identify relevant sections of written procedures
List training/retraining needs

Presentation: Interactive discussion
Small group activity
Outcome measure: Complete checklist- Written program requirements

Use

Content: Use PPE in accordance with operating procedures
Identify parts/elements of PPE
Check-out procedure
Don/doff

Terminal Objective(s): Review use procedures (manufacturer/employer)
Demonstrate safe use

Exercises: Identify components of PPE
List steps in use of PPE
Demonstrate check out procedures and use

Presentation: Small group activities
Individual demonstrations

Outline measure: Complete checklists- Components of PPE
Operation/Use
Use

Care and Maintenance

Content: Post-use reservicing and maintenance procedures
Checklist
Schedule
Records

Terminal Objective(s): Demonstrate after-service procedures

Exercises: Review after-service checklist
Identify procedures for maintenance
Review a maintenance checklist

Presentation: Small group activities

Outcome measure: Complete checklist- Afterservice Checklist

Closing

Content: Solicit comments on the overall program
Complete evaluation forms
Collect all checklists used to document competency
Provide followup resources

Exercises: None

Presentation: Interactive discussion.

Successful completion: 100% on all checklists, as appropriate

Name _____

Activity- Written Program Requirements

For this PPE, I reviewed Yes No

The purpose

Authorized users

Training/retraining needs

Other relevant policies

List

PPE Type _____

Name _____

Components of PPE

During this training, I identified the following parts of the PPE Yes No

List:

Operation/Use Checklist

During the training, I completed the operational/use checklist items, as shown

Yes No

List:

Manufacturer _____ Model

Type _____

Name _____

Afterservice Checklist

I conducted the following steps as part of afterservice check-out:

Yes _____ No _____

List:

Manufacturer_____

Type_____

A vote was finalized on July 20, 2021 to remove Tab 22/Outline Programs from the Policy & Procedure manual. Tab 22 removed August 12, 2021.
Content is below.

Tab 22a (3AW)

Title: Outline Program—3AW

Adopted 1995

Amended January 15, 2019

Amended August 12, 2021

3AW Outline program. This program can be used to introduce the training needs in five areas: Emergency Response, Training Requirements, Evacuation, Related OSHA Standards and CERT. Specific trainer and participant material guidance is shown for each topic.

Tab 22b (ICS)

Title: Outline Program--IMS

Adopted December 5, 2000

Amended January 17, 2002

Amended January 21, 2003

Amended July 22, 2019

Incident Management Systems- outline format to be adapted to your State or local area. Follow guidance to assure compliance with NIEHS approval. Agenda, checklist and evaluation forms provided.

Tab 22c (ICS for WMD)

Title: Outline Program - ICS for WMD incorporating local- or State-specific information

Adopted May 31, 2002

Amended July 22, 2019.

Deleted August 2021 due to lack of use

Incident Command Management Systems Awareness for WMD- outline format to be adapted to your State or local area. Follow guidance to assure compliance with NIEHS approval. Agenda, checklist and evaluation forms provided.

Tab 22d (ICA)

Title: Outline Program - ICS incorporating local- or State-specific information

Adopted December 1, 2003

Deleted July 22, 2019, as a Manual is available. (No content shown here)

Incident Command Systems Awareness- outline format to be adapted to your State or local area. Follow guidance to assure compliance with NIEHS approval. Agenda, checklist and evaluation forms provided.

Tab 22e (8CS)

Title: Outline Program—Guidance to construct a Confined Space Rescue Refresher
Adopted June 2009
Amended January 15, 2019.

Confined Space Rescue Refresher- details shown here are required elements for the program; the content should be tailored to the equipment at each facility.

Tab 22f (8TR)

Title: TSD Refresher—Guidance to construct the program
Adopted 2010
Deleted January 15, 2019; replaced by modular format; requirement to use ERG Exercise (no content shown here).

TSD facilities are often unique operations with few employees. Therefore, this refresher approach was designed to enable facilitators to use reconnaissance regarding trainees and duties to tailor (with documentation) an 8-hour program using the 24-hour manual content.

Tab 22g (PPE)

Title: Outline Program—Personal Protective Equipment Use Demonstration
Adopted March 9, 2005
Deleted 2016 when 4- or 8-hour programs implemented. (No content shown here.)

To facilitate training on company-specific PPE, this flexible program was developed to be completed in four hours.

Tab 22a. 3AW (Hazard Awareness) - Guidance

NIEHS approved use of the outline format (attached) contingent upon:

Trainers must review materials, as shown below for the topic to be covered.

Step 1 - select the topic(s) for the Program

Emergency Response Planning – 29 CFR 1910.120 (q)

Consortium ISA, Disaster Preparedness, Preparedness for Residents, 1910.120(q) programs—
FOS, Operations, Technician

National Response Team resource websites: <https://www.osha.gov/laws-regs/federalregister/1996-06-05-0>, <https://www.nrt.org/sites/2/files/icppres1996.pdf>, <https://www.nrt.org/Main/Resources.aspx?ResourceType=Hazards&ResourceSection=2>
“Protecting Emergency Responders – Lessons Learned from Terrorist Attacks”, available here: https://www.rand.org/pubs/conf_proceedings/CF176.html.

Training Requirements – 29 CFR 1910.120

MWC PPMTab 22a195

Consortium 3AW program (Handbook)

OSHA training requirements, available here: <https://oshatraining.com/osha-general-industry-training-requirements.php>

Evacuation – 29 CFR 1910.120

Consortium Evacuation Coordinator Program

“Protecting Emergency Responders – Lessons Learned from Terrorist Attacks”, available here:

https://www.rand.org/pubs/conf_proceedings/CF176.html.

OSHA standards, available here: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910TableofContents>

IAFF websites, <http://www.iaff.org/hs/Alerts/index.asp>

Related OSHA Standards – standards cited in 29 CFR 1910.120

Relevant Standards (tailored to audiences)

OSHA standards, available here: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910TableofContents>

CERT Intro – 29 CFR 1910.120

Levels of emergency response training, 29CFR 1910.120(q)

CERT website – <https://www.ready.gov/community-emergency-response-team>

MWC REL TRI exercise

Please note that as a condition of our award acknowledgment of support must be included in the handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

Step 2 - Design content

3AW (Hazardous Waste Awareness)

A 3-hour program to assist public and private sector organizations in identifying various HAZWOPER requirements.

Course Agenda

Introduction

Content: Overall course objectives; provide student materials, review agenda, Objectives: Describe program purpose and class procedures

- receive course/handout
- review agenda for program
- complete paperwork

Exercises: Introductions, “What I want to learn and what skills I hope to acquire”

Presentation: Interactive discussion

Topics for this program may include one or more of the following:

Emergency Response Planning

Reference Midwest Consortium Programs: Preparedness for Residents, 1910.120(q) programs—FOS, Operations, Technician ISA, Disaster Preparedness

Content: 29 CFR 1910.120(q)

Objectives:

- Identify planning requirements
- Identify elements of an integrated contingency plan
- Identify steps in the planning process

Exercises:

- Match elements of plan with legal requirements
- match activities during response with sections of the plan
- Discuss needs (modify from exercises ISA program)

Presentation:

- Interactive discussion
- Small group activity (emphasize principles of adult learning)

Training Requirements

Reference Midwest Consortium Programs: 40H Site, 8SU, 24 IER, 40H Tech., 3AW (handbook)

Content: 29 CFR 1910.120

Objectives:

- Identify HAZWOPER training requirements
- Identify levels of training
- Identify training needs

Exercises: Match activities and levels of training required

- Identify unmet needs
- Brainstorm how to access needed training (modify from exercises in 40 Hour Site Worker and Operations and Technician Programs)

Presentation:

- Interactive discussion
- Small group activity (emphasize principles of adult learning)

Evacuation Procedures

Reference Midwest Consortium Programs: Evacuation Coordinator Content: 29 CFR 1910.38 Emergency Action Plans, 29 CFR 1910.165 Employee Alarm Systems

Objectives:

- Identify training needs
- Identify evacuation requirements
- Identify emergency conditions
- Identify methods for assisting and directing employees

Exercises:

- Identify responses for given scenarios
- Identify need for training (modify from exercises in Evacuation Coordinator)

Presentation:

- Interactive discussion
- Small group activity (emphasize principles of adult learning)

Related OSHA Standards

Reference: 3AW

Content: As appropriate (e.g. 29 CFR 1910.134, 29 CFR 1910.146, 29 CFR 1910.147 ...)

Objectives:

- Identify training needs
- Identify OSHA standards impacted by HAZWOPER
- Identify gaps in compliance
- Identify methods for achieving compliance

Exercises:

- Identify appropriate regulations for given scenario
- Discuss gaps as shown in the 3AW program exercise (relevant scenarios must be developed for the participants)

Presentation:

- Interactive discussion
- Small group activity (emphasize principles of adult learning)

CERT Introduction

Reference MWC programs: WMD ER modules and Reporting Environmental Releases; also Preparedness for Residents.

Content: <https://www.ready.gov/community-emergency-response-team>

Objectives:

- Identify training needs
- Introduce the CERT program
- Identify resources and discuss training elements

Exercises:

Identify threats in the community (modify from intro exercises in MWC programs, including WMD, TRI exercise in Reporting Environmental Releases and exercises in Preparedness for Residents.

Presentation:

- Interactive discussion
- Small group activity (emphasize principles of adult learning)
- Match to training needs

Step 3 - double check that content matches NIEHS requirements for the approval

CHECKLIST (the following is a listing of requirements, by topic. Verify content.)

Emergency Response Planning:

Reviewed 29 CFR 1910.120 (q)

Reviewed relevant MWC programs
Discussed National Response Team website
Reviewed “Protecting Emergency Responders – Lessons learned from Terrorist Attacks”.

Training Requirements:

Reviewed 29 CFR 1910.120
Reviewed relevant MWC programs
Accessed OSHA website(s)

Evacuation:

Reviewed 29 CFR 1910.120
Reviewed Consortium Evacuation Coordinator Program
Reviewed “Protecting Emergency Responders – Lessons learned from Terrorist Attacks”.
Accessed OSHA and IAFF websites

Related OSHA Standards:

Reviewed 29 CFR 1910.120
Reviewed Consortium 3AW Handbook
Covered relevant standards (tailored to audience)
Accessed OSHA website(s)

CERT Introduction:

Reviewed 29 CFR 1910.120
Reviewed relevant MWC programs
Accessed CERT website

Step 4 - Document program—required for each 3AW Outline Program

Complete the following OVERALL CHECKLIST to document compliance with this policy:

- ◇ Program objectives, agenda, exercises and handouts filed with training program director.
- ◇ NIEHS support acknowledged (a term & condition of the award).

Tab 22b. ICS

This (and the other outline programs) were developed to provide a structure of programs that training centers were already providing. The program directors at the time did not want a single program across the consortium because of local and state requirements. This format provided an overall structure. NIEHS approved it. If starting from 'scratch' it would take a good bit of effort; however, consider the 'fill ins' that would be needed for a generic program to be tailored to the various participant groups across the MWC.

The topics shown below can be reordered and others added, as needed. This outline shows the minimum content. Facilitators must be competent in ICS, by training and experience.

NIEHS approved use of the outline format (below) contingent upon:

Trainers must:

1. Review the National Response Team websites for information on municipal responders, <https://www.osha.gov/laws-regs/federalregister/1996-06-05-0>
<https://www.nrt.org/sites/2/files/icppres1996.pdf>
<https://www.nrt.org/Main/Resources.aspx?ResourceType=Hazards&ResourceSection=2>
2. Review National Incident Management System, Third Edition, October 2017, https://www.fema.gov/media-library-data/1508151197225-ced8c60378c3936adb92c1a3ee6f6564/FINAL_NIMS_2017.pdf
3. Access the web site provided for the International Association of Firefighters (IAFF), <http://www.iaff.org/hs/Alerts/index.asp>
4. Include at least one exercise using advanced training technologies (ATT) See section 10.5, Minimum Criteria
https://tools.niehs.nih.gov/wetp/public/hasl_get_blob.cfm?ID=11266&file_name=WTP_Minimum_Criteria_062818_Final_508.pdf
5. Review "Protecting Emergency Responders- Lessons Learned from Terrorist Attacks".
https://www.rand.org/pubs/conf_proceedings/CF176.html

Please note that as a condition of our award acknowledgment of support must be included in the handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

Note: This training does not meet the requirements for serving as an Incident Commander at an actual incident. To serve as an Incident Commander, additional training is required, including an initial 24-hours of training at the Operations Level.

Step 1

Review required websites

Select Advanced Training Technology (ATT) exercise

Identify needed local- and State-specific content

Step 2

A 2-day, 16-hour program to enable chemical emergency responders to acquire skills in a systems approach to emergency management

Course Agenda

Introduction

- Content: Overall Course Objectives
Provide Student Materials
Review Agenda
- Objective(s): Describe program purpose and class procedures
Receive course manual/handout
Review agenda for program
Complete paperwork
- Exercise: Introductions: What I want to learn and what skills I hope to acquire
(Icebreaker)
- Presentation: Interactive discussion

What is an Emergency?

- Content: Types of Emergencies
- Objective(s): List of types of emergencies and characteristics of each
Identify potential emergencies at participants' work site
- Exercises: List potential emergencies
Categorize potential emergencies by type
- Presentation: Interactive discussion
Small group activity (emphasize principles of adult learning)

Tools and Constraints for an Organized Response

- Content: Laws, Regulations, Guidelines
Incident Management System
Local Emergency Response Plan
State Emergency Response Plan
Federal Regional Response Team
- Objective(s): Describe legal requirements for emergency response
List best practices for Incident Management System
Describe context of your team to plan, local, state and federal teams

Describe function of various team elements
List training required for various team functions
Identify constraints to best practices

Exercises: Critique various IMS structures
Identify training required for various functions

Presentation: Presentation
Interactive discussion
Small group activities

The Written Emergency Response Plan

Content: Required Elements
Resources for Team Members
Hazard Evaluation
 Release
 Reactions/events following release
 Stress of working in protective clothing
Mitigation Equipment
Protective Equipment
Decontamination
Termination
Strategies to review Plan and Resources

Objective(s): Implement plan
Identify complete and incomplete elements in a plan
Identify approaches to improve plan/resources
Identify any differences between plan and external plans or requirements

Exercises: Critique participant's plan or a "model" plan
Access electronic information resource(s)
Compare plan with external requirements

Presentation: Interactive discussion
Small group activities
brainstorming

Elements of Implementing a Plan

Content: Initial Actions
Size-up
Sustained Actions
Termination

Objective(s): Identify correct and incorrect actions during a response
Identify need post-emergency actions

Exercises: Review video
(or)
Conduct table-top simulation according to the written plan
(or)
Walkthrough simulated response using available resources

Presentation: Interactive discussion
Small group activity

Closing

Content: Solicit comments on the overall program
Complete evaluation forms
Assure all checklists used to document competency are collected
Provide follow-up resources

Exercises: Did program meet participants objectives/needs

Presentation: Interactive discussion

Step 3 - Double check that content matches requirements

Step 4 - Document program delivery and content

A checklist is provided to document that this program content is following this program policy (PPM, Tab 22b).

CHECKLIST

- ◇ Reviewed National Response Team websites
- ◇ Accessed the IAFF website
- ◇ Use at least one ATT exercise in the program.
- ◇ Presentation consistent with outline.
- ◇ NIEHS support acknowledged (a term & condition of the award.)

Program objectives, agenda, exercises and handouts filed with training program director.

Tab 22c. ICS for WMD Hazards

This (and the other outline programs) were developed to provide a structure of programs that training centers were already providing. The program directors at the time did not want a single program across the consortium because of local and state requirements. This format provided an overall structure. NIEHS approved it. If starting from 'scratch' it would take a good bit of effort; however, consider the 'fill ins' that would be needed for a generic program to be tailored to the various participant groups across the MWC.

The topics shown below can be reordered and others added, as needed. This outline shows the minimum content. Facilitators must be competent in ICS, by training and experience.

NIEHS approved use of the outline format (below) contingent upon:

Trainers must

4. Review the National Response Team websites for information on municipal responders
<https://www.osha.gov/laws-regs/federalregister/1996-06-05-0>
<https://www.nrt.org/sites/2/files/icppres1996.pdf>
<https://www.nrt.org/Main/Resources.aspx?ResourceType=Hazards&ResourceSection=2>
5. Access the web site provided the International Association of Firefighters (IAFF)
<http://www.iaff.org/hs/Alerts/index.asp>
6. Review "Protecting Emergency Responders- Lessons Learned from Terrorist Attacks".
https://www.rand.org/pubs/conf_proceedings/CF176.html.
7. Include at least one exercise using ATT

Please note that as a condition of our award acknowledgment of support must be included in the handouts, using the following text: This training was made possible by Grant Number ES06184 from the National Institute of Environmental Health Sciences (NIEHS).

Note: This training does not meet the requirements for serving as an Incident Commander at an actual incident. To serve as an Incident Commander, additional training is required, including an initial 24-hours of training at the Operations Level.

Step 1

Review required websites

Select Advanced Training Technology (ATT) exercise

Identify needed local- and State-specific content pertaining to WMD Hazards

Step 2

A 2-day, 16-hour program to enable prepare chemical emergency responders to acquire skills in a systems approach to emergency management where WMD hazards exist

Course Agenda

Introduction

- Content: Overall Course Objectives
Provide Student Materials
Review Agenda
- Objective(s): Describe program purpose and class procedures
Receive course manual/handout
Review agenda for program
Complete paperwork
- Exercise: Introductions: What I want to learn and what skills I hope to acquire
(Ice breaker)
- Presentation: Interactive discussion

What is an emergency?

- Content: Types of Emergencies
- Objective(s): List of types of emergencies and characteristics of each
Identify potential emergencies at participants' work site
- Exercises: List potential emergencies
Categorize potential emergencies by type
- Presentation: Interactive discussion
Small group activity

Tools and Constraints for an Organized Response

- Content: Laws, Regulations, Guidelines
Incident Management System
Local Emergency Response Plan
State Emergency Response Plan
Federal Regional Response Team
- Objective(s): Describe legal requirements for emergency response
List best practices for Incident Management System
Describe context of your team to plan, local, state and federal teams
Describe function of various team elements
List training required for various team functions
Identify constraints to best practices

Exercises: Critique various IMS structures
Identify training required for various functions

Presentation: Presentation
Interactive discussion
Small group activities

The Written Emergency Response Plan

Content: Required Elements
Resources for Team Members responding to potential WMD incident
Hazard Evaluation
 Release
 Reactions/events following release
 Stress of working in protective clothing
Mitigation Equipment
Protective Equipment
Decontamination
Termination
Strategies to review Plan and Resources

Objective(s): Implement plan
Identify complete and incomplete elements in a plan
Identify approaches to improve plan/resources
Identify any differences between plan and external plans or requirements

Exercises: Critique participant's plan or a "model" plan
Access electronic information resource(s)
Compare plan with external requirements

Presentation: Interactive discussion
Small group activities
Brainstorming

Elements of Implementing a Plan

Content: Initial Actions
Size-up
Sustained Actions
Termination

Objective(s): Identify correct and incorrect actions during a response
Identify need post-emergency actions

Exercises: Review video

Conduct table-top simulation according to the written plan
(or)
Walkthrough simulated response using available resources

Presentation: Interactive discussion
Small group activity

Closing

Content: Solicit comments on the overall program
Complete evaluation forms
Assure all checklists used to document competency are collected
Provide follow-up resources

Exercise: Did program meet participants objectives/needs

Presentation: Interactive discussion

Step 3 Double check that content matches requirements

Step 4 Document program delivery and content

A checklist is provided to document that this program content follows this program policy (PPM, Tab 22b).

CHECKLIST

- ◇ Reviewed National Response Team website
- ◇ Accessed the IAFF website
- ◇ Use at least one ATT exercise in the program.
- ◇ Presentation consistent with outline.
- ◇ NIEHS support acknowledged (a term & condition of the award.)

Program objectives, agenda, exercises and handouts filed with training program director.

Tab 22e. Confined Space Rescue Refresher - Guidance on Structure and Documentation

Program structure:

Use 24-hour Confined Space Rescue manual

Develop an 8-hour agenda, tailored to the needs of the participants

Include the following elements (emphasize principles of adult learning)

Year in Review or Chapter 1 Rights and Responsibilities activity
(Year in Review can be adapted from site refresher)

Chapter 2 Rescue and Scene Management Activity

Four or more activities from Chapters 3-5 to meet
needs of participants, and shown in the Agenda

Complete all required forms.

Documentation:

Retain: Program-specific agenda all other materials required for the Program File.

Tab 22f. TSDF Refresher—Guidance to construct the program

Adopted 2010

Deleted January 15, 2019

See Tab 100 for Prior Policy

A motion was made at the January 15, 2019 Steering Committee Meeting to remove policy due to replacement with the modular refresher with a requirement to use the ERG exercise. Motion carried. Policy removed.

Tab 22g. Outline Program--Personal Protective Equipment Use and Demonstration

Adopted March 2005

Deleted 2016

See Tab 100 for Prior Policy

Full 4- and 8-hour PPE programs in place. Policy deleted.

Safety Plan for Performance Measure Refresher Programs (2000, 2004)

Title: Safety Plan for Performance Measure Refresher Programs
Adopted December 5, 2000; Amended October 5, 2004

Adopted 2000—Not available

Amended 2004

The Midwest Consortium adopts the amendment that all training centers must use the Site Plan for Hazardous Materials Site Worker Refresher (performance) Simulation conducted as part of the performance-based Site Worker Refresher.

Note: the amendment added the performance programs to this requirement.

Site Safety Plan for Hazardous Materials Site Worker Refresher (Performance) Simulation

Location: _____ Date: _____
Lead Instructor: _____
Associate Instructor: _____

INCIDENT MANAGEMENT SYSTEM

Training Center Personnel Roles and Responsibilities

1. _____ will serve as the Site Supervisor (SS) and is responsible for implementing the Site Safety Plan.
2. _____ will serve as the Site Safety Officer (SSO) and is responsible for identifying and controlling hazards during all hands-on activities.

HAZARD CONTROL

The SS and SSO will take the following steps to control hazards during all hands-on activities.

- A written plan will be developed for conducting the response simulation. The SS and SSO will eliminate possible hazards from the site where the activity will occur or they will select a site that is free of foreseeable and potential hazards.
- The SS and SSO will ensure the use of the buddy system for all hands-on activities.

- The SS and SSO will instruct participants in the emergency signals that will be used during the course of hands-on activities.
- Participants will wear the appropriate protective equipment based on the hazards that are being simulated.
- Participants will conduct themselves appropriate to the seriousness of the emergency response simulation.
- At least two entry/exit points will be available at the site.
- During periods of high ambient temperatures (>90 degrees F), the SSO will pay special attention to the potential for heat stress. The SSO will monitor all participants and assure adequate fluid in-take. A shady rest area will be available if the site is out-of-doors.

ZONING

- The exercise area will be zoned into three areas: hot zone, warm zone, and staging.
- The hot zone will be established at the simulated hazards.
- The warm zone will be designated for decontamination activities.
- Staging is where all participants are assigned when not performing a task in the other zones as assigned by the instructors.
- All zones will be clearly marked with cones and tape.
- No more than 4 participants per instructor will be allowed in the hot zone at one time.

ACCOUNTABILITY

To ensure accountability:

- All participants will sign in at the beginning of each day.
- Any visitors or observers will sign in and out during any hands-on activities.
- _____ will be responsible for taking the roster to the exercise area during the hands-on activities.
- Immediately after any emergency, the SS will conduct a roll call of all participants and visitors.
- Any personnel leaving the area must check out and provide time and date.
- All participants must sign out at the end of each day.

COMMUNICATION

- The SSO will use an air horn or other effective method as a warning device. When the air horn is sounded, all participants will assemble in the staging area for a personnel accountability report.

- A communication device will be available during hands-on activities to contact the appropriate author during an emergency. The SSO will verify the communication device is functioning properly before the simulation begins.

NOTIFICATION

The SS will make arrangements to contact the following should the need arise:

- For site Emergencies:

- Environmental:

- Local Fire Department:

- The SS will establish a procedure whereby instructors or participants can be contacted during the course of the training program. For training conducted at this site, the phone number is: _____.
- Appropriate contact numbers will be posted at the site.

MEDICAL CARE

- At least one instructor will be certified in basic first aid and CPR.
- A basic first aid kit will be available in the exercise area and in the classroom.
- Participants will be advised to discuss any special medical concerns they may have with the lead instructor.

SAFETY BRIEFING

- The SS and SSO will conduct a safety briefing for participants prior to any hands-on activities.
- The safety briefing will cover the following areas: hazard control, zoning, accountability, communications, notification, and medical care.

Site Supervisor

Date

Site Safety Officer

Date

Site Safety Plan for ERR-P

The Midwest Consortium adopts the policy that all training centers must use the Site Safety Plan for Hazardous Materials Emergency Response Simulation conducted as part of the performance-based Emergency Response Refresher.

Site Safety Plan for Emergency Response Performance Measure Refresher (Performance) Simulation

Location: _____ Date: _____
Lead Instructor: _____
Associate Instructor: _____

INCIDENT MANAGEMENT SYSTEM

Training Center Personnel Roles and Responsibilities:

3. _____ will serve as the Incident Commander (IC) and is responsible for implementing the Site Safety Plan.
4. _____ will serve as the Site Safety Officer (SSO) and is responsible for identifying and controlling hazards during all hands-on activities.

HAZARD CONTROL

The IC and SSO will take the following steps to control hazards during all hands-on activities.

- A written plan will be developed for conducting the response simulation. The IC and SSO will eliminate possible hazards from the site where the activity will occur or they will select a site that is free of foreseeable and potential hazards.
- The IC and SSO will ensure the use of the buddy system for all hands-on activities.
- The IC and SSO will instruct participants in the emergency signals that will be used during the course of hands-on activities.
- Participants will wear the appropriate protective equipment based on the hazards that are being simulated.
- Participants will conduct themselves appropriate to the seriousness of the emergency response simulation.
- At least two entry/exit points will be available at the site.

- During periods of high ambient temperatures (>90 degrees F), the SSO will pay special attention to the potential for heat stress. The SSO will monitor all participants and assure adequate fluid in-take. A shady rest area will be available if the site is out-of-doors.

ZONING

- The exercise area will be zoned into three areas: hot zone, warm zone, and staging.
- The hot zone will be established at the simulated hazards.
- The warm zone will be designated for decontamination activities.
- Staging is where all participants are assigned when not performing a task in the other zones as assigned by the instructors.
- All zones will be clearly marked with cones and tape.
- No more than 4 participants per instructor will be allowed in the hot zone at one time.

ACCOUNTABILITY

To ensure accountability:

- All participants will sign in at the beginning of each day.
- Any visitors or observers will sign in and out during any hands-on activities.
- _____ will be responsible for taking the roster to the exercise area during the hands-on activities.
- Immediately after any emergency, the SS will conduct a roll call of all participants and visitors.
- Any personnel leaving the area must check out and provide time and date.
- All participants must sign out at the end of each day.

COMMUNICATION

- The SSO will use an air horn or other effective method as a warning device. When the air horn is sounded, all participants will assemble in the staging area for a personnel accountability report.
- A communication device will be available during hands-on activities to contact the appropriate author during an emergency. The SSO will verify the communication device is functioning properly before the simulation begins.

NOTIFICATION

The IC will make arrangements to contact the following should the need arise:

- For site Emergencies:

- Environmental:

- Local Fire Department:

- The IC will establish a procedure whereby instructors or participants can be contacted during the course of the training program. For training conducted at this site, the phone number is: _____.
- Appropriate contact numbers will be posted at the site.

MEDICAL CARE

- At least one instructor will be certified in basic first aid and CPR.
- A basic first aid kit will be available in the exercise area and in the classroom.
- Participants will be advised to discuss any special medical concerns they may have with the lead instructor.

SAFETY BREIFING

- The IC and SSO will conduct a safety briefing for participants prior to any hands-on activities.
- The safety briefing will cover the following areas: hazard control, zoning, accountability, communications, notification, and medical care.

Site Supervisor

Date

Site Safety Officer

Date

Tab 100 (Tab 24)
Disbarment from Doing Business with Any Government Agency
(2006)

Title: Disbarment from Doing Business with any Government Agency
Adopted January 6, 2006

Any Midwest Consortium member institution that is disbarred from doing business with the Government will provide written documentation to the Grants Management Office and Principal Investigator at the University of Cincinnati of this determination within five business days of notification.

Tab 100 (Tab 25)
Payment to Consultants (2008)

Title: Payment to Consultants
Adopted January 2008

Payment to Advisory Board Members is \$400 per day. Payment to Technical Advisors is \$500 per day.

Tab 100 (Tab 29) Competent Person Documentation

Title: Competent Person Documentation
Background to policy Adopted January 15, 2019

Background: In reading through the Minimum Criteria in preparation for the Steering Committee work, note that section 13 requires that confined space and trenching trainers be certified as competent by the program director. Here is the language: Such shall be conducted by instructors certified as competent to do so by the training director. Four program directors responded in the affirmative that a policy should be developed.

Approach: The OSHA website was searched for definition and application.

Definition: One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. [[29 CFR 1926.32\(f\)](#)].

Further explanation: By way of training and/or experience, a competent person is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation, and has the authority to correct them. Some standards add additional specific requirements which must be met by the competent person.

From https://www.osha.gov/dts/osta/otm/otm_v/otm_v_2.html trenching
Training, experience and knowledge of soil, protective systems, standard
Ability to detect potential hazards and failures of protective systems
Authority to take prompt corrective measures to eliminate hazards/stop work
Monitor control measures
Conduct inspections

From a document on OSHA regs that include training
General Industry, Suggested General Criteria
Definitions: "Competent" means possessing the skills, knowledge, experience, and judgment to perform assigned tasks or activities satisfactorily as determined by the employer

Tab 100 (Tab 30) Program Income

Title: Program Income
Background to policy Adopted January 15, 2019

Background: Since inception, the Midwest Consortium (MWC) members have addressed the NIEHS focus on self-sufficiency in several ways, including the retention at the training center of any program income. These dollars are to be spent on personnel or supplies/equipment for NIEHS-supported programming that are not in the annual budget; this retention of income is an incentive to 'grow the program'. Moreover, since each subcontract provides for cost-reimbursement payment, the income account can be used as needed when contract/billing/payment schedules require available funds to meet payroll or purchase supplies.

In April 2018, NIEHS fiscal personnel announced that all program income must be spent prior to expenditure of grant funds. The language cited by NIEHS regarding expenditure of program income is shown in 2 CFR 200 (or 45 CFR 75) Section 305.b(5). (https://www.ecfr.gov/cgi-bin/text-idx?node=pt45.1.75#se45.1.75_1104) and copied here:

(5) Use of resources before requesting cash advance payments. To the extent available, the non-Federal entity must disburse funds available from program income (including repayments to a revolving fund), rebates, refunds, contract settlements, audit recoveries, and interest earned on such funds before requesting additional cash payments.

As the Midwest Consortium does not request advance payments, it appears that the requirement is not applicable. (At least one other major institutional awardee has determined this to be the case.) Compliance with NIH policies in general is required per the Notice of Award, and to underscore the importance of restricting expenditure of program income to this award, the policy below is provided. Amendments to this policy will be made as NIH rules change that impact MWC activities.