40 Hour Program
Technician-level Emergency Responder
Participant Exercise Manual

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Midwest Consortium for Hazardous Waste Worker Training
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Exercise — Make a List

Think about your workplace or the workplaces that you serve. What are the hazardous materials that could be released? What is your main concern regarding each material (examples: health effects, fire, explosion)?

List the materials of interest to you, and why.

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<th>Material</th>
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If done in small groups, prepare a report back to the larger group.
Exercise – Using the NIOSH Pocket Guide (NPG) to Find Chemical Properties

Your instructor will provide you with a list of several chemicals. Use the table on the following page to list important information on each chemical from the NPG.

Working in small groups, use one table for each chemical (more work sheets will be distributed if necessary).

During the report back, discuss which chemical is of greatest concern, if there was a release? Why?
Chemical Properties Worksheet

Chemical name:

Synonyms and Trade Names

CAS Number

Physical Description

BP
VP
FL.P.
UEL
LEL
RGasD

Incompatibilities & Reactivities

Look at the line above “Incompatibilities & Reactivities” in the NPG. What information is there?
Toxicology and Health Effects

Exercise – Using the NIOSH Pocket Guide to Find Health Effect Information

Worksheet

Chemical name: _______________________

What are the routes of exposure?

List the symptoms of exposure

List the target organs that may be affected

Is this chemical a carcinogen?
Personal Protective Equipment (PPE)

Exercise – Using the NIOSH Pocket Guide to find Occupational Exposure Levels and Protective Measures

Your instructor will provide you with the measured concentration for the chemical that you found information on properties and health effects.

Complete the work sheet on the next page, considering the measured concentration.

Does this information on exposure guidelines/standards and the airborne concentration alter your evaluation of 'greatest concern'? Why?
Occupational Exposure Levels and Protective Measures Worksheet

Chemical Name: __________________________________________________________

Measured concentration: ____________________________

NIOSH recommended exposure level (REL)

OSHA permissible exposure level (PEL)

IDLH level

What would you do if it got on your skin?

What occupational exposure limit was not listed?

What respirator is required at the measured concentration?
Exercise - Respirator Protection Factor

Working in groups, perform the following calculations:

1. You are a responder to a spill of chlorobenzene. The safety officer has sampled using a detector tube and reports need for a full facepiece SCBA in demand mode?

   APF for respirator____________________________
   PEL for chemical____________________________
   IDLH for chemical____________________________
   MUC for the combination of respirator and chemical______________________

2. You are working when an ammonia leak occurs; the concentration is measured at 3,500 ppm. What is the minimum type of respiratory protection that can be safely used?

   Airborne concentration____________________________
   PEL for chemical____________________________
   IDLH for chemical____________________________
   Type of respirator____________________________
Exercise – Respiratory Protection Scenarios

You have been assigned and fit tested for a full-face APR as a member of the response team. In the following two situations, determine whether you will have adequate protection working at the point of emission/release.

Working in groups, explain your answers in the space provided.

The industrial hygienist has made a reading of 750 ppm of methyl chloride near the source of a spill from a container. Are you adequately protected if you wear your full-face APR to patch the container? Explain your answer.

PEL___________
IDLH___________
APF___________

The safety officer has reported readings of 200 and 215 ppm of N,N-Dimethylaniline near a pool under a leaking pipe. You are asked to repair the pipe to stop the leak. Is your full-face APR sufficient for this task? Explain your answer.

PEL___________
IDLH___________
APF___________
Exercise – Respiratory Protection Demo and Workshop

The purpose of this workshop is to give you the opportunity to wear and become familiar with SCBAs, air-purifying respirators (APRs), egress units, and respiratory protection inspection and cleaning procedures. This workshop includes four activities:

1. Donning and doffing SCBA
2. Qualitative fit testing an APR
3. Inspecting and cleaning respirators
4. Wearing an airline with escape unit

Copies of Performance Checklists for this exercise are provided on the following pages. However, the facilitator may hand out duplicates of these checklists that you will complete, have signed by the facilitator, and turn in at the end of the workshop. The training center retains this information with your other training records. Therefore, you may want to record your lab results separately for your personal records.
Name: __________________________________________

Respiratory Protection Performance Checklist
Station 1: Donning and Doffing an SCBA

1. What brand of SCBA and size of facepiece did you wear?
   Brand________________________________ Size_______________________________________

2. Please list the brands and sizes of facepieces you tried that could not pass the negative pressure fit test.
   Brand________________________________ Size_______________________________________
   Brand________________________________ Size_______________________________________
   Brand________________________________ Size_______________________________________

3. Before donning the SCBA, did you check your:
   a. Cylinders?__________________________________________ □ Yes □ No
   b. Alarm? ___________________________________________ □ Yes □ No
   c. Regulator gauge? ________________________________ □ Yes □ No
   d. Straps? __________________________________________ □ Yes □ No

4. Did you don the SCBA as you were instructed?________________________ □ Yes □ No

5. While wearing the SCBA, did you:
   a. Check the bypass valve?______________________________ □ Yes □ No
   b. Wear the SCBA for at least 7 minutes?__________________ □ Yes □ No
   c. Try to communicate with your buddy?____________________ □ Yes □ No
Name:____________________________

Respiratory Protection Performance Checklist Station 1 (cont.):
Donning and Doffing an SCBA

6. While wearing the SCBA, did you do an assigned task? □ Yes □ No
   If yes, describe the task: ____________________________________________________
   ________________________________________________________________________

7. After doffing the SCBA, did you:
   a. Extend the harness straps? □ Yes □ No
   b. Extend the facepiece straps? □ Yes □ No
   c. Clean the facepiece? □ Yes □ No
   d. Check the cylinder? □ Yes □ No
      i. Did the cylinder need to be changed? □ Yes □ No
      ii. If yes, did you have it changed? □ Yes □ No

8. How long did you wear the SCBA? _____ minutes

Date ______________ Instructor’s Signature__________________________________
Respiratory Protection Performance Checklist
Station 2: Qualitative Fit Testing an APR

1. Please check any of the following items that you wear.
   - Prescription glasses
   - Dentures
   - A beard
   - Contact lenses
   - Hairstyle that prohibits a good face seal

2. Did you do a negative-pressure fit check?  □ Yes □ No

3. Did you do a positive-pressure fit check?  □ Yes □ No

4. Did you go into a test chamber?  □ Yes □ No
   - If yes, which type of chamber?
     - "Banana oil"
     - Smoke
     - Both
     - Other

5. What brand and size of air-purifying respirator did you wear?
   - Brand ___________________________ Size ___________________________
   - Full-face____________________ Half-face____________________
Name:___________________________

Respiratory Protection Performance Checklist

Station 2 (cont.): Fit Testing an APR

6. Please list the brands and sizes of respirators you tried that could not pass the fit test.
   Brand _____________________ Size_____________________
   Brand _____________________ Size_____________________
   Brand _____________________ Size_____________________
   Brand _____________________ Size_____________________

7. Did you wash your respirator during this lab?------------------------ □ Yes □ No
   If yes, check the supplies that you used.
   □ Towelette
   □ Wash basin
   □ Other

8. How long did you wear the respirator? _____ minutes

Date _________________ Instructor’s Signature: ________________________________
Name: ______________________________

Respiratory Protection Performance Checklist

Inspecting and Cleaning Respirators

Daily Maintenance of Your Respirator:

1. Did the instructor tell you how to wash your respirator? □ Yes □ No
2. Did you clean your respirator? □ Yes □ No
3. Did you see a disassembled respirator and all its parts? □ Yes □ No
   If yes, did someone in the lab reassemble the respirator? □ Yes □ No
4. Did someone in your lab inspect a respirator? □ Yes □ No
5. Were defects found during the inspection? □ Yes □ No
   If yes, describe the defects: ____________________________________________
   ________________________________________________________________

OSHA-Required Inspections of SCBA:

6. Was the inspection procedure that must be done at least once per month described? □ Yes □ No
7. Were you shown the hydrostatic test date? □ Yes □ No
8. Did you see someone demonstrate inspection of an SCBA according to the manufacturer’s guidelines? □ Yes □ No

Date ______________ Instructor’s Signature: _______________________________
Respiratory Protection Performance Checklist

Wearing an Airline with Escape Unit

1. Did the station leader demonstrate how to hook up and use the unit? --- □ Yes □ No

2. Did the station leader demonstrate how to switch to the 5-minute escape bottle?

3. Did one of the trainees in the lab wear an egress unit? --------------------- □ Yes □ No

4. Did you wear the unit? ---------------------------------------------------------------- □ Yes □ No

5. Did a trainee who wore the egress unit switch to the 5-minute escape bottle?

6. Please indicate which level of protection is provided by an airline egress unit.

   □ A       □ B       □ C

Date ______________ Instructor’s Signature: _______________________________
**Exercise - Levels of Protection**

In your small group, discuss each of the situations below, and decide what level of protection is required.

1. At XYZ Inc. 15 drums identified to contain dioxane have been toppled, and some are leaking. What level of protection should be used to stop/contain the leak(s) and restage the drums for removal?

2. A tractor trailer has jackknifed, and a cloud is escaping from the open door at the back end of the trailer; the cloud is drifting toward the tractor. What level of protection should be worn to help the driver who appears to be unconscious?

3. You are responding to a small leak (puddle is 1 x 1.5 feet; stream the size of a pencil) from a 55-gallon drum of ethanol on a loading pad. What do you wear as you approach the drum to plug the leak?

4. At a food processing plant, ammonia is detected at a perimeter monitoring station. What level of protection do you wear to check the perimeter station?

5. At a food processing plant, ammonia is entering the warehouse. What level of protection is used to approach the pipe that has been damaged to stop the leak?
Exercise – Level C Checkout and Dressout

The purpose of this workshop is to give you the opportunity to Checkout Level C PPE and don and doff Level C protective gear.

There are two Performance Checklists for this exercise on the following pages. However, the facilitator may hand out duplicates for you to complete, have signed by the facilitator, and turn in at the end of the workshop.

The training center retains this information with your other training records. Therefore, you may want to record your results separately for your personal records.
PPE Checkout

Name ___________________________

Performance Checklist

Buddy’s Name: ___________________________

1. Inspection procedures were described for:
   a. Boots? □ Yes □ No
   b. Outer gloves? □ Yes □ No
   c. Inner gloves? □ Yes □ No
   d. Hard hats? □ Yes □ No
   e. Reusable suits? □ Yes □ No
   f. Other ____________ □ Yes □ No

2. Did you inspect outer the gloves? □ Yes □ No
   Did you find defects in the glove? □ Yes □ No
   If yes, describe the defects: _______________________________

3. Did you inspect inner gloves? □ Yes □ No
   Did you find defects in the inner glove? □ Yes □ No
   If yes, describe the defects: _______________________________

4. Did you inspect the suit? □ Yes □ No
   Did you find defects in the reusable suit? □ Yes □ No
   If yes, describe the defects: _______________________________

5. We also inspected ________________ □ Yes □ No
   Did you find defects in this PPE? □ Yes □ No
   If yes, describe the defects: _______________________________

Date ______________ Instructor’s Signature: ___________________________
PPE Performance Checklist
Donning and Doffing Level C

1. List the size that you chose for all of the following equipment. If you did not wear the listed equipment, put an “X” on the line.

   Chemical-protective clothing      Size _____
   Air-purifying respirator         Size _____ Brand
   Boots                           Size _____
   Inner gloves                    Size _____
   Outer gloves                    Size _____
   Hard hat                        Size = adjustable

   List any equipment for which you could not find a proper size, and state whether you needed a larger or smaller size.
   Type of Equipment _______________________ Size_________________
   Type of Equipment _______________________ Size_________________

2. Did you inspect the equipment before donning it?..........................  Yes  No

3. Did your buddy:
   a. Make pull tabs when taping your boots/pants? …………………  Yes  No
   b. Make pull tabs when taping your gloves/sleeves? ……………..  Yes  No
   c. Review the communications system with you? …………………  Yes  No

4. Did you do an assigned task? ..................................................  Yes  No
   If yes, describe the task: _________________________________________
   ____________________________________________________________________

5. Did you take off the suit in a manner that would protect you and the other workers around you from contamination? ……………………………………  Yes  No

6. Did you remove your inner gloves properly? ………………………..  Yes  No

7. When removing your respirator:
   a. Were you wearing your inner gloves? …………………………  Yes  No
   b. Did you extend your facepiece straps? …………………………  Yes  No
   c. Did you wash the respirator? ……………………………………  Yes  No

8. How long did you stay in Level C? _____ minutes

Date ________________ Instructor’s Signature: _________________________________
Exercise –Level B Dressout

The purpose of this workshop is to give you the opportunity to don and doff Level B protective gear.

A Performance Checklist for this exercise is provided on the following pages. However, the facilitator may hand out a duplicate checklist for you to complete, have signed by the facilitator, and turn in at the end of the workshop.

The training center retains this information with your other training records. Therefore, you may want to record your results separately for your personal records.
Name: _________________________________

Buddy's Name: ___________________________

PPE Performance Checklist – Donning and Doffing Level B

1. List the size that you chose for all of the following equipment. If you did not wear the listed equipment, put an “X” on the line.
   a. Chemical-protective clothing Size _____
   b. Air-purifying respirator Size _____ Brand____________________
   c. Boots Size _____
   d. Inner gloves Size _____
   e. Outer gloves Size _____
   f. Hard hat Size = adjustable

   List any equipment for which you could not find a proper size, and state whether you needed a larger or smaller size.

   Type of Equipment  ________________Size_____________________________
   Type of Equipment  ________________Size_____________________________
   Type of Equipment  ________________Size_____________________________

2. Did you inspect the equipment before donning it? ................................□ Yes □ No

3. Did your buddy:
   a. Make pull tabs when taping your boots/pants? ………………………… □ Yes □ No
   b. Make pull tabs when taping your gloves/sleeves? ……………………….. □ Yes □ No
   c. Review the communications system with you? ………………………… □ Yes □ No

4. Did you do an assigned task? …..………  …………………………….. □ Yes □ No
   If yes, describe the task: ________________________________________________
   _____________________________________________________________________

5. After doffing the SCBA, did you:
   a. Extend the harness straps? ................................................................. □ Yes □ No
   b. Extend the facepiece straps? ............................................................... □ Yes □ No
   c. Clean the facepiece? ................................................................. □ Yes □ No
   d. Check the cylinder? ................................................................. □ Yes □ No

   If yes, did the cylinder need to be changed? ........................................... □ Yes □ No
   If yes, did you change it or have it changed? ........................................... □ Yes □ No

6. How long did you stay in Level B? _____ minutes

Date _________________ Instructor’s Signature__________________________________
Exercise – Level A Dressout

The purpose of this workshop is to give you the opportunity to don and doff Level A protective gear.

A Performance Checklist for this exercise is provided on the following pages. However, the facilitator may hand out a duplicate for you to complete, have signed by the facilitator, and turn in at the end of the workshop.

The training center retains this information with your other training records. Therefore, you may want to record your results separately for your personal records.
Name: ____________________________________________

Buddy’s Name: ____________________________________

PPE Performance Checklist--Donning and Doffing Level A

Preparing to Don the Equipment

1. List the size that you chose for all of the following equipment. If you did not wear the listed equipment, put an "X" on the line.
   a. Disposable suit    Size _____
   b. SCBA facepiece    Size _____ Brand__________________________
   c. Level A training suit  Size _____
   d. Boots    Size _____
   e. Inner gloves    Size _____
   f. Outer gloves    Size _____
   g. Hard hat    Size = adjustable

List any equipment for which you could not find a proper size, and state whether you needed a larger or smaller size.

Type of Equipment ____________________ Size_________________
Type of Equipment ____________________ Size_________________
Type of Equipment_____________________ Size_________________

2. Did you inspect the equipment before donning it?.............................. Yes  No

3. Did you and your buddy help each other get dressed? ……………… Yes  No

Donning the Equipment

4. Did you do a negative-pressure check of your facepiece? …………… Yes  No

5. Did you check the SCBA by-pass valve before you put on Level A?..  Yes  No

6. Did your buddy ask if you could breathe OK before your suit was closed??
   ……………………………………………………………………………………………………………………… Yes  No
Name: ____________________________________________

Buddy’s Name: __________________________________

PPE Performance Checklist—Donning and Doffing Level A (Continued)

Hooked to Air in Level A

7. Did your buddy check your suit’s sealing points (zipper, cuff, ted.) after your suit was closed? ………………………………………………………………………………………………………………………………□ Yes □ No

8. Did you and your buddy review the communications system after your suit was closed? ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………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Exercise – Using the OSHA standards and Other Guidelines

Using a PPE standard or guideline provided by the Facilitator, work in groups to complete the work sheet below on requirements. One member of the group should prepare the report back from the worksheet.

OSHA Standard/Other Guideline title: ________________________________

When is this PPE required?

What steps must be taken to fit the PPE to the worker?

What training is required? How often?

Are there medical restrictions to use?

What are the limitations?

Where is the PPE stored?

Is work needed to meet the requirements of the standard? (be specific)

______________________________________________  ________________________________

______________________________________________  ________________________________
Material Identification

Exercise - Pictograms

This exercise checks your knowledge of the meaning of Pictograms included on labels. The pictograms are an important summary resource to help identify hazards during a response.

In your group, identify the hazard(s) represented by each pictogram. Look back at your NIOSH Pocket Guide worksheets to identify hazardous materials that should have the pictogram on the label.
Worksheet: Pictogram—Hazard and Hazardous Material

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>Hazard</th>
<th>Hazardous Material (example)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Pictogram" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image2" alt="Pictogram" /></td>
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<tr>
<td><img src="image3" alt="Pictogram" /></td>
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<tr>
<td><img src="image4" alt="Pictogram" /></td>
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<tr>
<td><img src="image5" alt="Pictogram" /></td>
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<tr>
<td><img src="image6" alt="Pictogram" /></td>
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<tr>
<td><img src="image7" alt="Pictogram" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image8" alt="Pictogram" /></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exercise – Placards and Labels

Using the placard or label provided by the facilitator, work in small groups to answer the following questions:

1. What is the name of the chemical?

2. What does the placard or label tell you about the chemical?

3. What are the physical hazards of the substance—explosion, fire, reactive, oxidizing material, etc.?

4. What are the health hazards?

5. What target organs does this chemical affect?

6. What are the safe handling recommendations?

7. What personal protective equipment is recommended to limit worker exposure?

8. Is First Aid information given? What is it?

9. Is the chemical volatile? What is the vapor pressure and vapor density?
Exercise –Finding Safety and Health Information, SDS

Your facilitator will provide resources (SDSs for hazardous material(s) of interest or internet access to use electronic resources.

SDS exercise - Use the SDS provided to your group to find the information requested in the worksheet on the next page.
## Worksheet – Information in an SDS

Name of hazardous material ________________________________

<table>
<thead>
<tr>
<th>Type of information</th>
<th>Section</th>
<th>Answer/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the appropriate firefighting agent?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the physical form of the hazard?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a respirator needed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the allowable workplace exposure (PEL or TLV)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the hazard?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What PPE is needed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show information from two different sections that must be on the label.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there storage requirements?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do I need special tools?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there a contact, if needed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the product?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there an acute health effect?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What action is needed if someone is splashed on the skin?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exercise – Finding Safety and Health Information, Electronic Resources

Overview

Electronic resources are increasingly useful tools for emergency responders. In this Incident Command System exercise you will use several online databases as resources to gather information needed to plan a response to an emergency scenario.

Objectives

1. Access electronic resources.
2. Demonstrate the use of online resources such as WISER, CAMEO, NAERG and NPG to gather information and complete a worksheet for an emergency response to a scenario.

Your facilitator will provide guidance on which sections each group should complete.

Gather Information

Using the online resources demonstrated in class, spend about 1 hour completing the hazardous substance information worksheet on the next 4 pages for the following scenario:

“Your emergency response team has been called to the chemical supply room at your manufacturing facility. The area supervisor indicates that a 400-gallon intermodal container or tote containing (acetone or other flammable liquid) has developed a significant leak around its valve assembly. All workers have been evacuated from the area, but a large pool of product, estimated to be approximately 100 gallons, is on the floor.”
Haz-Mat Staff Positions

- Haz-Mat Director
- Incident Commander
- Safety Officer
- Finance/Admin.
- Decon Officer
- Logistics
- Monitoring Officer
- Operations
- Science Officer
- Planning
- EMS Officer
- Safety
- Hazmat Radio Channel
- All other On-Site Radio Channel

Hazardous Substance Information Worksheet

Product Identification:

<table>
<thead>
<tr>
<th>Common Name:</th>
<th>Chemical Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Class:</td>
<td>Shipping Label:</td>
</tr>
<tr>
<td>Manufacturer:</td>
<td>ID #:</td>
</tr>
<tr>
<td>NFPA 704:</td>
<td>Health (Blue):</td>
</tr>
</tbody>
</table>

Weather Conditions:

<table>
<thead>
<tr>
<th>Temperature:</th>
<th>Humidity:</th>
<th>Precipitation:</th>
<th>Sky:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dew Point:</td>
<td>Barometric Pressure:</td>
<td>Inversion Height:</td>
<td></td>
</tr>
<tr>
<td>Wind Direction:</td>
<td>Wind Speed:</td>
<td>Forecast:</td>
<td></td>
</tr>
</tbody>
</table>

Physical Properties:

<table>
<thead>
<tr>
<th>Reference Source: (Consult three different sources)</th>
<th>#1: Page:</th>
<th>#2: Page:</th>
<th>#3: Page:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Description:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Gas Density:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure: mm Hg at F</td>
<td>F</td>
<td>mm Hg at F</td>
<td>F</td>
</tr>
<tr>
<td>Boiling/Condensing Point:</td>
<td>F</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Melting/Freezing Point:</td>
<td>F</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Expansion Ratio for gases:</td>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Soluble With What:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of Solubility:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion from mg/m³ to ppm: 24.45 x TLV (mg/m³) / MW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Flammability Properties:  □ Yes □ No

<table>
<thead>
<tr>
<th>Reference Sources:</th>
<th>#1: Page:</th>
<th>#2: Page:</th>
<th>#3: Page:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEL:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UEL:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition Temp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition: □ Y □ N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosion Potential: □ Y □ N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toxic Products of Combustion:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extinguishing Agents:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### Reactivity Properties:  □ Yes □ No

<table>
<thead>
<tr>
<th>Reference Sources:</th>
<th>#1: Page:</th>
<th>#2: Page:</th>
<th>#3: Page:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrophoric: □ Yes □ No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive: □ Yes □ No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polymerization: □ Yes □ No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With what other Chemicals?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
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</tbody>
</table>

### Corrosive Properties:  □ Yes □ No

<table>
<thead>
<tr>
<th>Reference Sources:</th>
<th>#1: Page:</th>
<th>#2: Page:</th>
<th>#3: Page:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin: □ Yes □ No</td>
<td></td>
<td></td>
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<tr>
<td>Metal: □ Yes □ No</td>
<td></td>
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<td></td>
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<tr>
<td>pH:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Neutralizing Agent:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other:</td>
<td></td>
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</tbody>
</table>

### Radioactive Properties:  □ Yes □ No

<table>
<thead>
<tr>
<th>Reference Sources:</th>
<th>#1: Page:</th>
<th>#2: Page:</th>
<th>#3: Page:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beta:</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Gamma:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Neutrons:</td>
<td></td>
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</tbody>
</table>
**Toxicity Properties:**  □ Yes □ No

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>PEL:</td>
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<tr>
<td>IDLH:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TWA:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>STEL:</td>
<td></td>
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<tr>
<td>CEILING:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD&lt;sub&gt;50&lt;/sub&gt;</td>
<td></td>
<td></td>
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<tr>
<td>LC&lt;sub&gt;50&lt;/sub&gt;</td>
<td></td>
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</tbody>
</table>

Inhalation: □ Yes □ No

Ingestion: □ Yes □ No

Skin Absorption: □ Yes □ No

Eye Absorption: □ Yes □ No

Carcinogen: □ Yes □ No

Teratogen: □ Yes □ No

Mutagenic: □ Yes □ No

Aquatic: □ Yes □ No

Other: ___________

**Target Organs:**  □ Yes □ No

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</table>

**Exposure Signs/Symptoms:**

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</tbody>
</table>
### Recommended PPE:

<table>
<thead>
<tr>
<th>Reference Sources</th>
<th>#1: ______________________</th>
<th>#2: ______________________</th>
<th>#3: ______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page:</td>
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</tbody>
</table>

### First Aid:

<table>
<thead>
<tr>
<th>Reference Sources</th>
<th>#1: ______________________</th>
<th>#2: ______________________</th>
<th>#3: ______________________</th>
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</thead>
<tbody>
<tr>
<td>Page:</td>
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</tbody>
</table>

### Mitigation Procedures:

<table>
<thead>
<tr>
<th>Reference Sources</th>
<th>#1: ______________________</th>
<th>#2: ______________________</th>
<th>#3: ______________________</th>
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</thead>
<tbody>
<tr>
<td>Page:</td>
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</tbody>
</table>

### Shelter, Protection, Evacuation Procedures:

- __________________________________________
- __________________________________________
- __________________________________________
- __________________________________________
- __________________________________________
- __________________________________________
- __________________________________________
- __________________________________________
Discuss

Be ready to discuss the following:

- Who would compile the information in the worksheet?
- How would information developed on this form be used in the Incident Command System?
- Using information from the worksheet, prepare an entry briefing for your staff.
- What information on this form would be of value for making strategic decisions regarding:
  - PPE?
  - Decon?
  - Evacuation?
  - Hazard Control?
Monitoring

You will work in small groups and do one of the following monitoring exercises. A work sheet is provided for each exercise. At the end of the exercise, complete the Performance Checklist. The Facilitator will review and sign to document skill.

**Exercise – Measuring Concentration #1**

**Station 1. Calibration**

Check the calibration of the instrument you have been given. If not in acceptable limits, calibrate the meter.

For the bag of gas you have been given, complete the following with your instrument; put NA if not measured:

<table>
<thead>
<tr>
<th>LEL %</th>
<th>% O₂</th>
<th>H₂S ppm</th>
<th>CO ppm</th>
<th>Other (show units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Station 2. Colorimetric Tubes**

Leak check the pump and prepare the tube(s) for use. Using the same bag, determine the chemical(s) present and read the concentration.

<table>
<thead>
<tr>
<th>Chemical(s)</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Station 3. Response Factor**

1. Measure the concentration of hexane in the bag using a colorimetric tube.
   
   ____ ppm

2. Measure the concentration of hexane using the PID provided.
   
   ____ ppm

3. Calculate the ‘response factor’

   \[
   RF = \frac{\text{colorimetric tube concentration}}{\text{PID concentration}}
   \]
Station 4. Practical Application

Vertical tube. Evaluate O₂, LEL and concentrations with your multi-gas meter at the three sample ports in the vertical tube set up by the facilitator. Complete the table below:

<table>
<thead>
<tr>
<th></th>
<th>LEL</th>
<th>O₂</th>
<th>Chemical 1</th>
<th>Chemical 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top port</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle port</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom port</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How do you explain the data?
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Horizontal source. Evaluate LEL at the different positions (A1&2 through E1&2) shown below. A1 is one inch above the surface at the perimeter edge; A2 is 6 inches above the surface and the A1 position. Record your results on the next page.

View from top

<table>
<thead>
<tr>
<th>Location</th>
<th>LEL (%) Reading</th>
<th>O2 (%) Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exercise – Measuring Concentration #2

Station 1. Calibration

Check the calibration of the instrument you have been given. If not in acceptable limits, calibrate the meter.

Station 2. Colorimetric Tubes

Leak check the pump and review use of tubes.

Identify and quantify the chemical(s) in the bag assigned to your group, using the colorimetric tubes and a 4-gas meter. Below, keep notes on what you learn from each ‘test’, as well as our final answer.

Station 3. Response Factor

1. Measure the concentration of hexane in the bag using a colorimetric tube.
   ___ ppm
2. Measure the concentration of hexane using the PID provided.
   ___ ppm
3. Calculate the ‘response factor’

   \[
   RF = \frac{\text{colorimetric tube concentration}}{\text{PID concentration}}
   \]
Station 4. Static Room

Monitor the toluene concentration at the three ports in the ‘room’. Complete the table below:

<table>
<thead>
<tr>
<th></th>
<th>LEL</th>
<th>O₂</th>
<th>PID</th>
<th>Col. Tube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How do you explain the data?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Exercise – Air Monitoring Instrument

Your group will be given a bag containing gas(es) of unknown name and concentration. Using the instruments and manuals provided, complete the worksheet below for Bag identifier/label _________________________

Multi-gas monitor: make ____________ model________

Response

   Flammables: _____   O₂_____   CO ______

PID: make ____________ model __________________

Response ___________

Detector tubes

   Hexane ____________   CO _______________
   Alcohols ___________   Ammonia __________

Relative Response Calculations (show work)

Identified content(s) and concentration(s):
Name:_____________________________________

**Monitoring Performance Checklist**

Instrument: _________________________________

I completed the following:

- **Calibration**
  - □ yes
  - □ no

- **Measurement**
  - □ yes
  - □ no

- **Calculation**
  - □ yes
  - □ no

- **Described or explained the result**
  - □ yes
  - □ no

Date ______________ Instructor’s Signature: _______________________________
Work Practices

Depending on the types of actions you may be expected to conduct during a response, the facilitator will select one of the following exercises to practice various tasks or decision making.

The needed information and/or supplies will be provided.
Exercise – Spill Control

You will work in small groups. Each group will have absorbents and a bucket for water.

Background:

1 gallon of water weighs approximately 8 pounds

Determine the following for the absorbent(s) you are provided, using manufacturer information:

Identify the absorption rate/ratio

Calculate the amount of absorbent you will need to build a dam or dike; build it.

Determine amount absorbed.

Did the dam or dike contain the spill?

Compare results between the groups in a report back.

Exercise – Patching and Plugging
Performance Checklist

Did you...

1. Review an SOP/SOG?  □ Yes □ No
2. Select appropriate materials from available supplies?  □ Yes □ No
3. Inspect the container for condition?  □ Yes □ No
4. Inspect the container for labels?  □ Yes □ No
5. Inspect PPE before use  □ Yes □ No
6. Don proper PPE?  □ Yes □ No
7. Work in a manner to limit contamination?  □ Yes □ No
8. Maintained Buddy System or communication?  □ Yes □ No
9. Go through decon?  □ Yes □ No

What actions could you have taken that would have further reduced contamination?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Date ______________ Instructor’s Signature: ___________________________

Exercise – Confined Space Permits
Performance Checklist

Name _________________________

Permit # ________________ Is entry permissible? ________________ Justify your answer

1. ☐ Yes ☐ No

________________________________________________________________________

2. ☐ Yes ☐ No

________________________________________________________________________

3. ☐ Yes ☐ No

________________________________________________________________________

4. ☐ Yes ☐ No

________________________________________________________________________

Date ________________ Instructor’s Signature: ____________________________
Exercise – Overpacking

Performance Checklist

Name _________________________

Did you…

1. Review an SOP/SOG?  ☐ Yes ☐ No
2. Select appropriate materials from available supplies?  ☐ Yes ☐ No
3. Inspect the container for condition?  ☐ Yes ☐ No
4. Inspect the container for labels?  ☐ Yes ☐ No
5. Inspect PPE before use?  ☐ Yes ☐ No
6. Don proper PPE?  ☐ Yes ☐ No
7. Work in a manner to limit contamination?  ☐ Yes ☐ No
8. Maintained Buddy System or communication?  ☐ Yes ☐ No
9. Go through decon?  ☐ Yes ☐ No

What actions could you have taken that would have further reduced contamination?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Date ______________ Instructor’s Signature: ___________________________
Decontamination

Exercise – Setting up a Decon Line

During this exercise you will set up a decon line for a specific response provided by the facilitator. You will work as a group.

A performance checklist is provided.
Performance Checklist—Decon set up

Name ____________________________

Did you…

1. Receive a briefing?               □ Yes □ No
2. Select appropriate materials from available supplies? □ Yes □ No
3. Inspect the supplies for condition? □ Yes □ No
4. Identify expected wind direction? □ Yes □ No
5. Consider various factors in determining the best site? □ Yes □ No

6. Identify level of PPE for decon line workers? □ Yes □ No
7. Place systems to collect water/decon solutions? □ Yes □ No
8. Place barrels for contaminated waste? □ Yes □ No
9. Consider safety of those being deconned? □ Yes □ No

What actions could be taken to further reduce spread of contamination?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Date ______________ Instructor’s Signature: ___________________________
Rights and Responsibilities

Exercise – Worker and Employer Rights and Responsibilities

The following set of questions is intended to see how much you already know about worker and employer safety and health rights and responsibilities. For each of the following questions, answer “True” (“T”) or “False” (“F”), using your current understanding of the law. Your facilitator will review the correct answer to each of these questions at the end of this section.

T or F 1. The employer must pay for all health and safety equipment required by OSHA standards.

T or F 2. OSHA can fine workers for violating OSHA standards.

T or F 3. The employer has the right to discuss apparent violations with the government agency responsible for OSHA compliance.

T or F 4. OSHA violations can be issued when workplace hazards are causing serious physical harm.

T or F 5. If OSHA conducts an inspection of the work site, the union or employee representatives must be paid for time they spend on the walk-around, according to OSHA regulations.

T or F 6. OSHA has the right to enter the workplace and conduct an inspection at any time, whether the employer wants it or not.

T or F 7. The “general duty clause” can be used by OSHA if a serious hazard exists but no specific safety and health standard covers the problem.

T or F 8. According to the OSHAct, the employer and the employees have an equal duty to provide a safe and healthful workplace.

T or F 9. If employers receive an OSHA citation, they must appeal it within a certain number of days or the citation becomes final.

T or F 10. The OSHA 300A form must be posted during the months of February, March, and April and presents the annual summary of recordable employee injuries.
Exercise – Using Rights and Responsibilities

You are a member of an employer-employee safety and health committee. The committee has decided to review all employer safety and health programs to make certain that they meet or exceed all existing safety and health regulations. You have made up a list of questions or concerns, and your job is now to check them out and report back to the entire committee. Work in small groups to complete the following:

1. What agency and regulations might govern respirators for emergency response?

2. Your facility is located near a Great Lake port. Who would you notify if an accidental release occurred?

3. You drive into the facility during off hours and see that a pallet of 55-gallon drums has fallen and contents are leaking into the sewer. What is your first action? Why?

4. List two OSHA regulations that include training of emergency responders.

5. Where will Safety Data Sheets be kept to allow responder access?

6. Which emergency responders must receive medical examinations, and who pays for them?

7. To what safety and health records does an employee have access upon request?

8. List the agency you would contact to help control the following possible releases/emergency:

   Trucks entering without proper documentation

   Particles from a very black plum exiting a nearby facility are falling on your raw material and you are concerned about fouling

   Requirements for working on a pond

   Uncovered waste with some containers showing a radiation symbol
Emergency Response

Tabletop Exercise

The facilitator will distribute worksheets for a Tabletop exercise designed for teams to work together to think through a simulated response from initial alert to termination. Space is provided in the materials so that your group can insert answers.
Exercise – Level A or B simulation with full Decon

In this exercise you will lay out a decon line and conduct decon. Activities include:

1. Don and Doff Level A or B as a member of the response team.
2. Don and Doff Level B or C PPE as a member of the decon team.
3. Inspect PPE.
4. Go through a decon line and perform an assignment in the response.

Performance Checklists for Decon and an Assignment are provided on the following pages. However, the facilitator may hand out a duplicate for you to complete, have signed by the facilitator, and turn in at the end of the workshop.

The training center retains this information with your other training records. Therefore, you may want to record your lab results separately for your personal records.
Decon Performance Checklist: Decon line

Think about when you were on the decon line, then answer the following questions by checking the appropriate line.

1. Was all of the needed decon equipment assembled?  □ Yes □ No
2. Was the decon team ready when the response team arrived?  □ Yes □ No
3. Did all of the equipment work properly?  □ Yes □ No
4. Were decon workers wearing appropriate level(s) of protection?  □ Yes □ No
5. Did the decon team stay in communication with the responders?  □ Yes □ No
6. Did the response team follow the decon team’s instructions?  □ Yes □ No
7. Were all response team members fully decontaminated?  □ Yes □ No
8. Were wastewater and materials controlled?  □ Yes □ No
9. Were the reusable supplies and equipment decontaminated?  □ Yes □ No
10. Did decon team self-decontaminate before leaving the area? □ Yes □ No

Date ______________  Instructor’s Signature:  ___________________________
Name_______________________________________
Buddy’s Name________________________________

Performance Checklist: Completing my assignment in a response

My assignment: _________________________________

1. I had all the supplies/equipment needed  □ Yes □ No
   If ‘no’, explain:

2. Questions I asked about my assignment were answered clearly  □ Yes □ No
   If ‘no’, explain:

3. I had support from other members of the response team.  □ Yes □ No
   If ‘no’, explain:

4. My training was used in my assignment?  □ Yes □ No
   If ‘no’, explain:

5. I was able to complete my assignment safely?  □ Yes □ No
   If ‘no’, explain:

Date ______________ Instructor’s Signature: ___________________________
Exercise – Emergency Response Simulation

In this simulated response, the group will rotate through selected tasks and work stations.

A Performance Checklist for this exercise is provided on the following page. However, the facilitator may hand out duplicates for you to complete, have signed by the facilitator, and turn in at the end of the workshop.

The training center retains this information with your other training records. Therefore, you may want to record your lab results separately for your personal records.
Name: _________________________________

Buddy’s Name: ___________________________

Performance Checklist: Emergency Response Simulation

1. I wore the following levels of protection
   A  □ Yes □ No
   B  □ Yes □ No
   C  □ Yes □ No

2. I completed the following assignments
   Plug/patch  □ Yes □ No
   Over pack   □ Yes □ No
   Other _____________ □ Yes □ No
   Decon worker □ Yes □ No
   Was deconned □ Yes □ No

3. I reviewed the following
   SOP/SOG for activity □ Yes □ No
   Emergency Response Plan □ Yes □ No

4. One action I could have taken to reduce contamination spreading at the response site is ______________________________________________________

5. One action I could have taken to reduce contamination in decon is _____________________________________________________________

Date ____________ Instructor’s Signature: _________________________________
Clean up and Critique (Termination)

Exercise – Termination

At the conclusion of the HAZMAT response termination procedures assure that lessons learned are captured for future action, required reports are filed and supplies are inspected and resupplied.

A performance checklist is shown on the following page.
Performance Skills Checklist—Termination

Name________________________

Activity

1) Did you resupply equipment?
   a) Suit □ Yes □ No
   b) Gloves □ Yes □ No
   c) Boots □ Yes □ No
   d) Hard Hat □ Yes □ No
   e) Tape □ Yes □ No
   f) Decon Bags/Pads □ Yes □ No

2) Did you inspect the following equipment before putting it in the inventory?
   a) Suit □ Yes □ No
   b) Gloves
      i) Outer □ Yes □ No
      ii) Inner □ Yes □ No
   c) Boots □ Yes □ No
   d) Hard Hat □ Yes □ No
   e) Tape □ Yes □ No
   f) Decon Bags □ Yes □ No
      i) Plug/patch supplies □ Yes □ No
      j) Neutralizing solution/decon additives □ Yes □ No

3) Was the decon line disassembled? □ Yes □ No
4) Were any extra boxes inspected? □ Yes □ No
5) Were all materials and equipment returned to storage? □ Yes □ No
6) Did you participate in Debriefing? □ Yes □ No