



# **Mold Remediation**

## **Facilitator Guide**

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Midwest Consortium for Hazardous Waste Worker Training

## **Acknowledgements**

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The Midwest Consortium developed this curriculum under cooperative agreement number U45 ES 06184 from the National Institute of Environmental Health Sciences (NIEHS).

We encourage you to comment on these materials. Please give your suggestions to your Program Director.

## **Warning**

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The Midwest Consortium has copyrighted this material. A recipient of the material other than the Federal Government may not reproduce it without permission of the copyright owner.

The material was prepared for use by facilitators experienced in the training of persons who anticipate involvement in mold remediation. Authors of this material have prepared it for the training of this category of workers as of the date specified on the title page. Users are cautioned that the subject is constantly evolving. Therefore, the material may require additions, deletions, or modifications to incorporate the effects of that evolution occurring after the date of this material preparation.

## **Disclaimer**

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There is currently no Occupational Safety and Health Administration (OSHA) regulation specifically regarding mold remediation. Some applicable regulations are: OSHA's Hand Protection Standard (29 CFR 1910.138), Eye and Face Protection Standard (29 CFR 1910.133), Respiratory Protection Standard (29 CFR 1910.134), and Personal Protective Equipment General Requirements (29 CFR 1910.132).

Additional training may be necessary to perform some activities, such as identifying specific molds and associated health hazards, and performing advanced control containment or confinement.

This program was updated August 5, 2024; all web links are active as of that date. If you find an error, please inform your program director so that it can be updated.

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## **Course Overview**

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This course was developed in response to the need for workers to gain knowledge and skills related to mold remediation. It can be delivered as an 8-hour awareness level course or a second day of hands-on exercises can be added to create a 16-hour operations level course. This Facilitator Guide applies to both the 8-hour and 16-hour courses.

### **Facilitator Preparation**

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This Facilitator Guide provides guidance for presenting the course. It includes information such as time requirements, suggested facilitator preparation, minimum content requirements, questions which may arise, and reference materials.

In addition to this guide, course materials include a PowerPoint, a Participant Guide (printed PowerPoint), and Day 2 Exercise Guide (for 16-hour course only). Every facilitator should be familiar with the material in the Facilitator Guide and PowerPoint. In addition, facilitators should be familiar with applicable OSHA Standards.

Lesson plan forms shown below may be helpful when drafting your presentation outline.

The facilitator should also:

- Ensure operation of audiovisual equipment prior to the session.
- Ensure you are able to show videos. Several are included in the PowerPoint and others are available if desired (see Instructional Resources below).
- Test web links prior to the session.
- Print and make copies of the PowerPoint (3-slide Handout option) so participants can take notes and have all content to refer to in the future. These will also be needed for participants to complete the exercises. Note the PowerPoint contains all content typically found in a Participant Guide.
- Gather materials needed for Day 2 Exercises (16-hour course).

Lesson Plan Form 1

<p><b>Teaching Methods for This Lesson Plan</b> (Check each method you will use)</p>	<p><b>Audiovisual Requirements</b> (Check each that is needed)</p>
<p> <input type="checkbox"/> Discussion  <input type="checkbox"/> Question and answer  <input type="checkbox"/> Hands-on simulation  <input type="checkbox"/> Team teaching  <input type="checkbox"/> Small-group activities  <input type="checkbox"/> Case study  <input type="checkbox"/> Other (describe):         </p>	<p> <input type="checkbox"/> Supplemental material  <input type="checkbox"/> Online platform (Zoom etc)  <input type="checkbox"/> Websites loaded on devices   <input type="checkbox"/> Whiteboard or equivalent  <input type="checkbox"/> Hands-on simulation  <input type="checkbox"/> Other (describe):         </p>
<p><b>Reference Materials</b> (List all materials needed--paper or electronic)</p>	<p><b>Special Space or Facility Requirements</b></p>
	<p>(List any room size or special facility regulations here, such as set-up areas, equipment storage concerns, etc.)</p>
<p><b>Suggested Discussion Questions</b> (Think <u>in advance</u> what you might be asked, and prepare responses)</p>	<p><b>Suggested Instructor Preparation</b> (Consult with others as needed to improve preparation skills)</p>

## Lesson Plan Form 2

<b>Subject Area or Element</b>	<b>Detail</b>	<b>Reference Number or Citation</b>
Major subject heading from outline format.	Detailed breakdown of subject area or element. This detail will necessarily occupy more space than shown here.	e.g., page number in training handbook, section number of regulation, or audiovisual material.

## Instructional Resources

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- NIEHS Mold Remediation Guidance: [https://tools.niehs.nih.gov/wetp/public/hasl\\_get\\_blob.cfm?ID=9795](https://tools.niehs.nih.gov/wetp/public/hasl_get_blob.cfm?ID=9795)
- EPA: <https://www.epa.gov/mold>
- EPA: <https://www.epa.gov/sites/default/files/2014-08/documents/moldremediation.pdf>
- EPA videos: <https://www.epa.gov/flooded-homes>
- CDC: [CDC Mold](#)
- NIOSH: [NIOSH Mold](#)
- OSHA: <https://www.osha.gov/mold>  
<https://www.osha.gov/sites/default/files/publications/OSHA3691.pdf>

## Presentation of Material

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### Small-Group Activities and Exercises

Small-group activities and exercises are incorporated throughout this course. The purpose of these activities and exercises is to involve participants in clarifying information, identifying options, and applying skills.

Class activities and exercises can enhance the learning process; therefore, it is strongly recommended that you make activities and discussions comfortable so that everyone can participate. Assume that every class will have participants with a wide range of communication skills. Some participants will have no problems participating in group discussion, while others may have a hard time talking in front of the group.

Suggestions for facilitating group activities and discussions include:

- Allow participants to freely express their values, attitudes, and opinions.
- Do not judge participant's responses.
- Facilitate discussion by paraphrasing and clarifying. It is seldom appropriate for the facilitator to give opinions.
- Avoid putting people on the spot. Instead of asking individuals for answers, have a voluntary group spokesperson present findings to/for the entire group.
- Keep the groups focused on the task at hand. Because small-group exercises can draw heavily on the participants' personal experience, sometimes conversation can drift.
- Be alert to the potential for one person to dominate work in small groups. If you see this happening, facilitate participation by other members of the group.

- Keep the participants alert and interested by encouraging participation. If the groups are not participating or giving only cursory answers, ask them probing questions linked to previous work or life experiences.

Exercises are designed to provide the opportunity for participants to observe demonstrations and receive hands-on experience using equipment while reinforcing knowledge content. Checklists are completed by the participant during the exercises. At the end of each exercise, checklists must be signed by the facilitator, collected, and retained by the training center as part of the participant's permanent records.

## Course Evaluation

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The course evaluation gathers input from participants regarding a program's value to them, achievement of learning objectives, and insights into how to improve the program. NIEHS supports 'model programs' that employ interactive training methods to build skills; see

[https://tools.niehs.nih.gov/wetp/public/hasl\\_get\\_blob.cfm?ID=11266&file\\_name=WTP\\_Minimum\\_Criteria\\_062818\\_Final\\_508.pdf](https://tools.niehs.nih.gov/wetp/public/hasl_get_blob.cfm?ID=11266&file_name=WTP_Minimum_Criteria_062818_Final_508.pdf). Collection and use of evaluation data are key to program improvement. Adherence to these criteria is a term-and-condition of NIEHS funding.

Evaluation forms are available at <http://mwc.umn.edu>.

## Successful completion

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Successful completion for this course is defined as: 100% attendance and 100% on all Performance Checklists. Note the 8-hour course will not have any Performance Checklists.



## **Sample Agenda**

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### **Day 1**

Introduction	20 minutes
Module 1: Mold and Health Effects	40 minutes
Module 2: PPE and CPC	40 minutes
Exercise #1: PPE Selection	30 minutes
Break	
Module 3: Inspection and Sampling	50 minutes
Module 4: Remediation Planning	60 minutes
Exercise #2: Planning Scenarios	40 minutes
Lunch	
Module 5: Remediation	90 minutes
Exercise #3: Remediation Scenarios	40 minutes
Break	
Module 6: Work Practices	30 minutes
Exercise #4: Safety Practices	20 minutes
Closing and Course Evaluation (for 8-hour course)	20 minutes

### **Day 2**

Introduction	10 minutes
Mold Remediation Methods	120 minutes
Mold Remediation Exercise	120 minutes
Containment Methods	90 minutes
Containment Exercise	120 minutes
Closing and Course Evaluation	20 minutes

# Introduction

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Time Requirement: 20 minutes

Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

## Materials

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- Registration and sign-in forms
- Copies of agenda for participants
- Technology - computer(s), projector, screen, cables, internet

## Course Objectives (Day 1)

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After completion, participants will better be able to:

- Recognize hazards related to mold and mold remediation
- Identify appropriate PPE and safe work practices
- Describe the investigation of mold and moisture problems
- Describe steps in a mold remediation plan
- Identify appropriate mold remediation methods

## Objectives for the Introduction

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- Introduce facilitator(s), program, participants
- Describe format of class sessions and activities
- Distribute and complete class forms
- Discuss class expectations and rules as applicable

## Suggested Facilitator Preparation

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- Gather necessary paperwork and handouts prior to the session

## **Minimum Content Requirements**

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- Introduction of facilitator(s), program, participants
- Complete registration forms (if not done in advance)
- Everyone signs in

## **Presentation of the Session**

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The session can be presented as follows.

Introduce facilitator(s) and provide any needed orientation. Review MWC, NIEHS 'model programs', and uses of evaluation. Note that attendance is required for the duration of the program.

Present the agenda that has been prepared, noting that training time does not include lunch or breaks. Introduce the course.

Ask participants to introduce themselves, describing experience and what each wants to gain from the session. Note any goals identified by participants that are not in the listing above - address any that may fit with the session materials and describe why remaining goals are outside the scope of this training.

Collect any forms and provide to program staff for retention.

# **Module 1: Mold and Health Effects**

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Time Requirement: 40 minutes

Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

## **Materials**

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- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet

## **Objective**

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When completed, participants will better be able to:

- Recognize hazards related to mold

## **Suggested Facilitator Preparation**

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- Review PowerPoint

## **Minimum Content Requirements**

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- Mold characteristics
- Mold hazards

### Question you may be asked

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Is all black mold dangerous?

There are many types of black mold. *Stachybotrys chartarum* is usually the one referred to as "toxic mold." All molds can cause symptoms in people who are sensitive to or allergic to mold, but there is no reason to believe that black mold is any more dangerous than other types or colors of mold.

### Presentation of the Session

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Use the Mold Remediation Awareness PowerPoint to cover this module.

# **Module 2: Personal Protective Equipment / Chemical Protective Clothing**

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Time Requirement: 40 minutes plus 30 minutes for Exercise #1

Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

## **Materials**

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- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet

## **Objective**

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When completed, participants will better be able to:

- Identify appropriate PPE for mold remediation

## **Suggested Facilitator Preparation**

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- Review PowerPoint and exercise
- Review reference materials and regulatory standards
- Ensure web access or have videos on a flash drive
- Consider bringing PPE and CPC for demonstration

## **Minimum Content Requirements**

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- PPE selection
- CPC selection
- Donning and doffing PPE
- Importance of fit
- Inspection and maintenance of PPE and CPC
- Exercise

## **Presentation of the Session**

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Use the Mold Remediation Awareness PowerPoint and exercise below to cover this module.

### **Exercise #1: PPE Selection**

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Number of Facilitators: 1 or more, consistent with ratio in Minimum Criteria.

Time Requirement: 30 minutes

Materials:

- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet
- Table for each group

Introduction: The purpose of this exercise is to give participants the opportunity to practice selecting PPE for different mold remediation scenarios.

Instructions:

- Divide the participants into groups of 4-6
- Each group will work through the 4 PowerPoint slides related to this exercise
- Facilitate a report back and discussion at the end

Answers:

#### Slide 1

Maximum Protection:

- gloves
- full face respirator with HEPA filter goggles/eye protection
- disposable full body clothing head cover
- foot coverings

Minimum Protection:

- gloves
- N95 respirator
- goggles/eye protection
- long sleeves/pants

Intermediate Protection:

- gloves
- N95 or half-face respirator with HEPA filter
- goggles/eye protection
- disposable overalls

Slide 2

Scenario 1- Maximum Protection

Slide 3

Scenario 2 - Intermediate Protection

Slide 4

Scenario 3 - Minimum Protection



## **Module 3: Inspection and Sampling**

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Time Requirement: 50 minutes

Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

### **Materials**

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- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet

### **Objective**

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When completed, participants will better be able to:

- Describe the investigation of mold and moisture problems

### **Suggested Facilitator Preparation**

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- Review PowerPoint
- Ensure web access or have video available on flash drive
- Review usage of inspection tools
- Consider bringing a moisture meter and infrared camera for demonstration

### **Minimum Content Requirements**

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- Mold inspection strategies and best practices
- Mold inspection tools

### **Presentation of the Session**

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Use the Mold Remediation Awareness PowerPoint and notes below to cover this module.

Use images provided in the PowerPoint to facilitate discussion about inspection target areas, methods, and tools.

## **Module 4: Remediation Planning**

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Time Requirement: 60 minutes and 40 minutes for Exercise #2

Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

### **Materials**

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- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet

### **Objective**

---

When completed, participants will better be able to:

- Describe steps in a mold remediation plan

### **Suggested Facilitator Preparation**

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Review PowerPoint and exercise

### **Minimum Content Requirements**

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- Steps in mold remediation planning
- Exercise

### Question You May be Asked

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Is all this planning necessary? My boss just tells us to go in and get the job done.

Serious health effects can result from mold exposure. Also, proper work practices will reduce injury and follow up will reduce the potential for continued mold growth. Planning is essential to full remediation.

### Presentation of the Session

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Use the Mold Remediation Awareness and notes below for this module.

Below are answers to the “Responsibilities” slide

1. Which of the duties listed should the owner be responsible for?
  - Consult health professional as appropriate throughout process
  - Select remediation manager
  - Check for return of moisture and mold problem
  - Communicate with building occupants throughout the process as appropriate to situation
2. Which of the duties listed should the supervisor be responsible for?
  - Assess size of problem and note type of mold-damaged materials
  - Plan remediation, adapt guidelines to fit situation
  - Identify source or cause of water or moisture problem
  - Select personal protective equipment (PPE)
  - Select remediation and containment equipment
  - Select remediation personnel
  - If hidden mold discovered, re-evaluate plan
3. Which of the duties listed should the workers be responsible for?
  - Remediation
  - Clean and dry moldy items
  - Discard moldy items that can't be cleaned
  - Dry non-moldy items within 48 hours
  - Fix water or moisture problem (if adequately trained, otherwise, owner finds contractor)

### Exercise #2: Planning Scenarios

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Number of Facilitators: 1 or more, consistent with ratio in Minimum Criteria.

Time Requirement: 40 minutes

Materials:

- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet
- Table for each group

Introduction: The purpose of this exercise is to give participants the opportunity to practice planning for remediation or inspection.

Instructions:

- Divide participants into groups of 4-6
- Each group will work through the 4 PowerPoint slides related to this exercise
- Facilitate a report back and discussion at the end

Answers:

Scenario 1: Wear N-95. Visually inspect around window (from outside as well). Inspect under other sections of wallpaper. Inspect under carpet. Use moisture meter to assist (and infrared camera if available). Need to identify source of moisture.

Scenario 2: This is a very large project that might be larger if other apartments are also impacted. Need to check with nearby apartment owners. A communication plan will likely be needed. Might need to test mold if other apartments are impacted. Need to identify and stop the source of moisture. Need to assess what else in apartment has been impacted. Will require maximum PPE and containment.

Scenario 3: Will need to determine the extent of mold – is it elsewhere in the offices? Will need a communication plan. Will need to decide which workers will be relocated. Will need to identify and stop source of moisture. Level of PPE and containment depend upon extent of mold.

Scenario 4: Will need to determine the extent of mold – is it elsewhere? Will need a communication plan. Will need to decide if anyone needs to be relocated. Should consider testing mold given the potential impact upon children. Will need to identify and stop source of moisture. Level of PPE and containment depend upon extent of mold.

## **Module 5: Remediation**

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Time Requirement: 90 minutes plus 40 minutes for Exercise #3

Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

### **Materials**

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- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet

### **Objective**

---

When completed, participants will better be able to:

- Identify appropriate mold remediation methods

### **Suggested Facilitator Preparation**

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- Review PowerPoint and exercise
- Ensure web access or have video available on flash drive
- Review resources

### **Minimum Content Requirements**

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- Mold remediation steps
- Mold remediation methods
- Mold prevention
- Decontamination
- Flood response

## **Presentation of the Session**

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Use the Mold Remediation Awareness PowerPoint and exercise below to cover this module.

Note the Flood Response section can be used as a case study, allowing participants to put together the various aspects of mold remediation.

## **Exercise #3: Remediation Scenarios**

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Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

Time Requirement: 40 minutes

Materials:

- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet
- Table for each group

Introduction: The purpose of this exercise is to give participants the opportunity to practice selecting remediation methods given various scenarios.

Instructions:

- Divide participants into groups of 4-6
- Each group will work through the 3 PowerPoint slides related to this exercise
- Facilitate a report back and discussion at the end

Answers:

Scenario 1: Many types of materials have been impacted. Will require damp wipe, HEPA vacuum, and likely much discarding. Full containment will be required given the extent of mold and potential impact on children.

Scenario 2: The drywall can be disposed of. The wood appears structurally sound so it can likely be damp wiped and vacuumed.

Scenario 3: The mold is extensive and will require full containment. Much will need to be discarded. It is unclear if there are items that can be cleaned and salvaged.

## **Module 6: Work Practices**

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Time Requirement: 30 minutes plus 20 minutes for Exercise #4

Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

### **Materials**

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- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet

### **Objective**

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When completed, participants will better be able to:

- Identify safe work practices

### **Suggested Facilitator Preparation**

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- Review PowerPoint and exercise
- Note this module can be used as a bridge between Day 1 and Day 2, if this program is being offered as part of a 16-hour Mold Remediation course

### **Minimum Content Requirements**

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- Other hazards potentially associated with mold remediation
- Safe working practices

### Presentation of the Session

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Use the Mold Remediation Awareness PowerPoint and exercise below to cover this module.

### Exercise #4: Safety Practices

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Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

Time Requirement: 20 minutes

Materials:

- Mold Remediation Awareness PowerPoint
- Participant Guide (3-slide Handout option of the PowerPoint)
- Technology – computer(s), projector, screen, cables, internet
- Table for each group

Introduction: The purpose of this exercise is to give participants the opportunity to reinforce safety practices for hazards related to mold remediation.

Instructions:

- Divide participants into groups of 4-6
- Each group will work through the PowerPoint slide related to this exercise
- Facilitate a report back and discussion at the end



## Day 2 Overview

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This course was developed in response to the need for workers to gain additional knowledge and skills related to mold remediation. 'Day 2' is the second day of a 16-hour operations level course and focuses on hands on exercises. It includes 8-hours of content, not including breaks.

In addition to this guide, course materials include a Day 2 Exercise Guide for the participants. The printed PowerPoint from Day 1 may be utilized as a resource as well. Every facilitator should be familiar with the material in the Facilitator Guide, Exercise Guide and PowerPoint. In addition, facilitators should be familiar with applicable OSHA Standards.

Be sure to consider MWC policy for medical fitness for respirator use during training (MWC Procedure and Policy Manual – Tab 6).

Number of facilitators: 1 or more, consistent with ratio in Minimum Criteria. Having at least 2 facilitators is recommended for the exercises.

### Sample Agenda

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Introduction	10 minutes
Mold Remediation Methods	120 minutes
Mold Remediation Exercise	120 minutes
Containment Methods	90 minutes
Containment Exercise	120 minutes
Closing and Course Evaluation	20 minutes

## Materials

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- Large workspace to complete exercises, including tables and a sink
- Whiteboard or equivalent; markers
- Day 2 Exercise Guide for each participant
- Equipment and supplies for demonstration and exercises including:
  - Moisture meter
  - Infrared camera
  - PPE (gloves, goggles, N-95)
  - Wet vacuum
  - HEPA vacuum
  - Solid waste (drywall, ceiling tile, carpet)
  - Squares of linoleum, ceramic tiles, plastics, wood
  - Miscellaneous supplies: Rags, buckets, duct tape, soap
  - Rollable plastic sheeting (poly)
  - Containment materials: spray adhesive, furring strips, hammers, saws, nails, staple gun and staples, utility knives, work gloves

See each Exercise below for additional details on materials.

## Objectives

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When complete, participants will be better able to:

- Don/doff personal protective equipment (PPE)
- Demonstrate wet wipe work practices
- Demonstrate disposal of solid waste
- Demonstrate use of a wet vacuum
- Demonstrate use of a HEPA vacuum
- Demonstrate setting up a containment area

## Facilitator Preparation

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- Review this guidance
- Review Day 2 Exercise Guide
- Print Day 2 Exercise Guides for participants
- Gather materials for exercises
- Note as currently designed the exercises use limited PPE (goggles, gloves, N-95). If desired, Level B PPE could be used.

## **Minimum Required Content**

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Hands on exercises related to mold remediation including don/doff PPE, wet wipe, wet vacuum, HEPA vacuum, disposal of solid waste, setting up containment, and decon/handwashing.

## **Successful Completion**

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Successful completion for this course is defined as: 100% attendance and 100% on all Performance Checklists. Note the 8-hour course will not have any Performance Checklists.

## **Presentation of the Session**

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The session can be presented as follows:

## **Mold Remediation Methods**

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Demonstrate and provide instruction for each mold remediation topic found in the Day 2 Exercise Guide: moisture meter, infrared camera, don/doff PPE, wet wipe, wet vacuum, HEPA vacuum, disposal of solid waste, and decon/handwashing. Setting up a containment area will be covered later.

Basic guidance for each topic is provided in the Day 2 Exercise Guide. Note the equipment and materials needed to demonstrate these mold remediation methods are the same as those needed for the Mold Remediation Exercise that follows.

During demonstration of donning/doffing PPE would be an ideal time to reinforce concepts from Day 1 such as selection of PPE to match the task and the importance of respirator fit.

During demonstration of mold remediation equipment would be an ideal time to reinforce concepts from Day 1 regarding selection of the appropriate method(s) to clean various items (carpet, drywall, hard surface, etc.).

## **Mold Remediation Exercise**

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This exercise involves groups of participants rotating through 8 stations. The stations are don PPE, moisture meter, infrared camera, wet wipe, wet vacuum, HEPA vacuum, disposal of solid waste, doff PPE and decon/handwashing. Don PPE should be first and doff PPE/Decon should be last but otherwise the order of stations doesn't matter.

Depending on the class size and availability of equipment/materials, it may be helpful to have more than one of certain stations (e.g., 2 moisture meter stations). A second facilitator would also be helpful.

Orient the participants to the site and the various stations. Participants should be divided into groups, ideally of 2-3. Participants will complete their checklist as they move through the exercise, with the facilitator signing off completed checklists. The facilitator(s) should move around the room, assisting as needed.

### **Don PPE**

Materials

- Goggles
- Gloves
- N-95 masks

Actions: Participants should don PPE in this order: N-95, gloves, goggles. They should ensure N-95 is properly fit.

### **Moisture meter**

Materials

- Moisture meter
- Several items of varying moisture content

Actions: Participants will use the meter to measure the moisture in the items provided or other items around the room.

### **Infrared camera**

Materials

- Infrared camera

Actions: Participants will use the camera to identify hot and cold spots around the room.

### **Wet Wipe**

Materials

- Worktable
- Squares of linoleum, ceramic tiles, plastics, wood
- Bucket of soapy water and disposable rags
- Utility sink or drain for wastewater disposal
- Trash can

Actions: Participants will use the soapy water and rags to wipe some items provided. Wastewater should be disposed of using the sink/drain and rags in the trash.

**Wet vacuum**

## Materials

- Wet vacuum
- Bucket for liquid

Actions: Participants will use the wet vacuum to collect some water from the bucket. They will practice removing the filter.

**HEPA vacuum**

## Materials

- HEPA vacuum

Actions: Participants will use the HEPA vacuum. They will practice safe removal of the filter(s).

**Disposal of solid waste**

## Materials

- Solid waste for disposal such as:
  - Rugs or pieces of carpeting
  - Lumber, plywood, or old wooden desks/chairs
  - Drywall
  - Ceiling tile
- Rollable plastic sheeting (poly)
- Duct tape

Actions: Participants will render waste unusable (if necessary), encase waste in poly using duct tape, and move encased materials to a designated area. A focus should be minimizing dust and self-contamination.

**Doff PPE and Decon/Handwashing**

## Materials

- Trash can
- “Decon Bucket” for goggles
- Sink with soap and water for handwashing

Actions: Participants should doff PPE in the correct order, decon/trash as appropriate and wash hands. Based on availability of N-95 respirators, you may ask participants to save them for use during the upcoming Containment Exercise.

## Critique

After all groups have completed all stations, facilitate a discussion about the exercise. Answer participant questions about mold remediation equipment and methods.

## Containment Methods

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Using the Day 2 Exercise Guide content, provide instruction/demonstration regarding the assembly of a containment area.

## Containment Exercise

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In this exercise, participants will practice setting up a containment area. Divide participants into groups based on available space and materials. Ensure all participants are actively participating in the exercise. Sign completed checklists.

Materials:

- Area(s) to set up containment
- 6-mil poly
- Duct tape
- Spray adhesive
- Furring strips
- Nails
- Hammers & saws
- Staple gun & staples
- Utility knives
- Ladders
- Work gloves

Participant Actions:

- Turn off power at the source. Lock out/tag out.
- Remove furniture & light fixtures from room.
- In real life, these should be HEPA vacuumed & wet wiped before removing. Skip this for now.
- If items cannot be removed, they should be dried and covered in plastic.
- In real life, the entire room should then be HEPA vacuumed. Skip this for now.
- Seal all vents, windows, and extra doors with two layers of 6-mil poly and duct tape.
  - There should be only one entrance to the work area.
  - Overlap the tape.
  - Extend the poly 4 to 6 inches past the frame of vents, windows, and doors.

- The first layer must not be removed until the room has passed inspection.
- Floors
  - Cover floors with several layers of poly that are glued together with spray adhesive. This will guard against wear and tear.
  - Be aware of possible fumes from the spray adhesive. Read the label carefully.
  - Cover any seams in the floor layer with duct tape.
  - The floor covering should extend 24 inches up the wall.
- Walls
  - Cover uncontaminated walls with a single layer of poly.
  - Cover all seams with duct tape.
- Floors
  - Put a second layer of poly on the floors using duct tape and spray adhesive.
  - The edges of this layer should extend up the wall a few inches past the first layer.
  - Seams of the second layer should be offset from the first layer.
- Walls
  - Put a second layer of poly on uncontaminated walls.
- Ceiling
  - Put a layer of poly on the ceiling and secure with duct tape and furring strips.
- Create a doorway/airlock
  - Cover the doorway with a sheet of 6-mil poly, extending the edges of the poly 4-6 inches past the frame.
  - Duct tape the edges down, overlapping the ends of the tape.
  - Cut a slit in the center of the poly.
  - Tape a second sheet of poly on one side of the doorway, with tape extending along the top of the poly and on the left-hand side (when facing doorway).
  - Move to the other side of the doorway.
  - Tape a third sheet of poly on one side of the doorway, with tape extending along the top of the poly and the right-hand side (when facing doorway).
  - This will create an S-shaped entryway.

### Critique

After the exercise is complete, facilitate a discussion.

## **Closing and Evaluation**

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Time Requirement: 20 minutes  
Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

### **Materials**

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- Whiteboard or equivalent; markers
- Evaluation forms

### **Objectives**

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- Review program objectives
- Answer questions
- Collect feedback (evaluation forms)

### **Suggested Facilitator Preparation**

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Ensure you have evaluation forms prior to the program.



### Minimum Content Requirements

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- Evaluation
- Answer any final questions
- Provide certificates for those who met the definition of successful completion; provide remediation according to Training Center and MWC policy for anyone who did not attend the entire program.

### Presentation of the Session

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Thank participants for attending the program.

Review the goals of the program.

This is an opportunity for final questions.

Evaluation is important to continued program improvement. This should not be rushed. Provide time to complete the program evaluation forms and collect them.