

Office of Environmental Health and Safety

100 Morrissey Blvd. Boston, MA 02125-3393 617.287.5445 www.umb.edu/ehs

Mold Remediation

Standard Operating Procedure

SOP Number: E -01-01

Effective Date: October, 2021 Next Review: October, 2024

1. PURPOSE

The purpose of this document is to provide guidelines for remediating building materials contaminated with mold. It is the intent of the Office of Environmental Health and Safety (OEHS) that all mold remediation be conducted as safely as possible.

2. SCOPE

The scope of this Standard Operating Procedure is applied based on the surface area affected by mold contamination. OEHS will assess the affected area prior to any remediation efforts, and actions will be implemented as follows:

- Less than ten (10) square feet of surface area impacted by mold growth OEHS will request remediation by properly trained Facilities personnel in accordance with this guidance document and accepted best practices.
- ullet Ten (10) square feet up to one hundred (100) square feet of surface area impacted by mold growth

OEHS will evaluate area and request remediation by properly trained Facilities personnel or through a Remediation Contractor. Remediation contractors will perform all work in accordance with this guidance document and accepted best practices.

• One hundred (100) or more square feet of surface area impacted by mold growth OEHS will request remediation through Facilities. Remediation contractors will perform all work in accordance with this guidance document and accepted best practices.

• Mold impacting ten (10) or more square feet within an HVAC system and mold associated with suspected asbestos containing materials will be addressed on a case-by-case basis.

3. PRECAUTIONS AND HAZARDS

Failure to adhere to this procedure will result in inconsistent messaging to the UMass Boston community.

4. PROCEDURE

Mold growth within an occupied building is indicative of a water problem. The cause of the water problem must be investigated and resolved to prevent remediating the same site multiple times. Likewise, when water is introduced into the indoor environment, the impacted area must be dried as soon as possible, typically not later than 24 to 48 hours, depending on conditions, to avoid promotion of mold growth.

Once the source of water intrusion is identified and eliminated, or concurrent with such efforts when deemed appropriate, one or more methods for remediating visible mold growth must be implemented. Each situation will dictate which method is most appropriate. Refer to Appendix 1 for examples of method selection.

Methods

Method 1: Wet vacuum – steam cleaning may be an alternative for carpets and upholstery.

Method 2: Damp wipe with plain water or with water/detergent solution. Scrub as necessary.

Method 3: HEPA vacuum thoroughly dry surfaces. Dispose of HEPA contents in a well-sealed plastic bag.

Method 4: Discard contaminated material in a sealed plastic bag. HEPA vacuum area after material has been removed, then dispose of HEPA contents in a well-sealed bag.

Personal Protective Equipment (PPE)

Employees engaging in the abatement of mold shall use PPE as appropriate and may include:

- Safety glasses or goggles
- Dust mask
- Disposable Coveralls
- Gloves

Since mold remediation is not a one size fits all situation, employees with questions concerning the appropriate PPE, should contact their supervisor or OEHS.

Work Area Containment

General isolation is required for all mold remediation projects.

Containment of a work area for in-house work of less than 10 square feet is generally not needed. For areas greater than 100 square feet, and when OEHS determines that containment is needed, appropriate precautions must be implemented prior to performing remediation work. The following are best management practices for containment:

- Close all doors and restrict general access to the workplace while remediation is being performed.
- Perform work during hours of minimal building occupancy, such as nights or weekends, where possible.
- Shut down HVAC systems (especially return air system) in the immediate area of the work and/or cover air returns in the impacted area.
- Close windows in the workplace and turn off any portable fans; however, employees performing remediation will require fresh air in the work area if chemicals such as bleach are used.
- Install plastic containment as required.

Disposal

Once mold contaminated materials have been removed and sealed in plastic bags, the waste can be disposed of as regular trash. No special labeling or disposal requirements are necessary.

ROLES AND RESPONSIBILITES

5.1 UMB Faculty and staff:

University employee should contact OEHS when mold growth is observed.

- 5.2 Office of Environmental Health and Safety (OEHS) OEHS personnel have the following responsibilities:
- Receive mold contamination complaints from University faculty, staff and students.
- Evaluate areas suspected to be contaminated by mold growth and provide recommendations to Facilities on remediation.
- Assist Facilities in identifying the underlying causes of water intrusion and mold growth and develop the appropriate response(s) to prevent recurrence
- Assess conditions for occupancy after water restoration or mold remediation activities.
- Communicate with building occupants and Facilities
- For areas where mold growth impacts <10 up to 100 square feet provide training to Facilities staff on mold remediation.
- For areas >100 square feet of mold growth work with Facilities to arrange and manage contract services for remediation of mold.
- Communicate with building occupants and with regard to remediation scheduling, contractor activity, relocation of personnel, and related information.

• Provide general information and materials to University employees about mold growth. Information should include causes, health impacts, remediation process, and prevention.

5.3 Facilities

Facilities employees have the following responsibilities:

- Identify and repair the source(s) of water leak(s) or intrusion.
- Notify OEHS immediately when discovering suspected mold growth.
- Remediate areas as directed by OEHS that contain mold growth of less than ten (10) square feet and, when directed, between 10 and 100 square feet.
- Communicate with building occupants and OEHS with regard to remediation scheduling, relocation of personnel, and related information.

5.4 Contractors

Mold remediation contractors have the following responsibilities:

- Assess and document the extent of damage (e.g., water or mold) in the structure, systems, and building contents using appropriate monitoring and detection equipment.
- Communicate assessment results to OEHS.
- Designate a project leader, representing the contractor, to work with OEHS during the entire project.
- Provide OEHS with a written action plan
 - Depending on the response activity, the action plan will include a timeline and goals for drying and the implementation of mold remediation techniques.
- Notify OEHS situations that may require deviation from the original action plan.
- Record and document all activities and services performed in response to the problem.
- Complete the project in a manner which complies with all University procedures.

6. REFERENCES

None.

7. EQUIPMENT AND MATERIALS

8. TRAINING

OEHS to provide training as needed to Facilities personnel.

9. DEFINITIONS

Containment. A component or enclosure designed or intended to control the release of mold or mold containing dust or materials into surrounding areas in the building.

Indoor Air. Air within the envelope of a building, including air in spaces normally occupied by persons in the building, but excluding air in attics and crawl spaces that are vented to the outside of the building.

Indoor Mold. Mold contamination that was not purposely grown or brought into a building that has the potential to affect the indoor air quality of a building.

Mold. Any living or dead fungi or related products or parts, including spores, hyphae, and mycotoxins.

Mold Remediation. The removal, cleaning, sanitizing, demolition, or other treatment, including preventive activities, of mold, or mold-contaminated matter that was not purposely grown at location. Preventive activities include those intended to prevent future mold contamination of remediated area, including applying biocides or antimicrobial compounds.

10. RECORDKEEPING

The most current version of this document and every SOP is to be maintained on the OEHS OneDrive folder "SOPs and Guidelines" in PDF format with that version also published on the OEHS website. The Microsoft Word version is to be stored on the shared drive in the "Word Version" subfolder. Older versions shall be filed in the subfolder 'archive'. All SOPs shall be tracked in the OEHS Document Status List spreadsheet.

11. APPROVAL SIGNATURE

	Zehra Schneider Graham OEHS Director	10/18/2021
Approved by signature	Name, Title	Date

12. ATTACHMENTS

Appendix 1. Guidelines for Remediating Building Materials with Mold Growth Appendix 2. Mold Response Plan Flow Chart

Appendix 1. Guidelines for Remediating Building Materials with Mold Growth.

This Appendix accompanies the Methods Section of the Standard Operating Procedure and applies to areas where mold growth was caused by clean water.

Material or Furnishing Affected	Cleanup Method	
SMALL - < 10 square feet		
Books and papers	3	
Carpet and backing	1,3	
Concrete or cinder block	1,3	
Hard surface, porous flooring (linoleum,	1,2,3	
ceramic tile, vinyl)		
Non-porous, hard surfaces (plastics, metals)	1,2,3	
Upholstered furniture, drapes	1,3	
Wallboard (drywall and gypsum)	3	
Wood surfaces	1,2,3	
MEDIUM between 10-100 square feet		
Books and papers	3	
Carpet and backing	1,3,4	
Concrete or cinder block	1,3	
Hard surface, porous flooring (linoleum,	1,2,3	
ceramic tile, vinyl)		
Non-porous, hard surfaces (plastics, metals)	1,2,3	
Upholstered furniture, drapes	1,3,4	
Wallboard (drywall and gypsum)	3,4	
Wood surfaces	1,2,3	
LARGE >100 square feet		
Books and papers	3	
Carpet and backing	1,3,4	
Concrete or cinder block	1,3	
Hard surface, porous flooring (linoleum,	1,2,3,4	
ceramic tile, vinyl)		
Non-porous, hard surfaces (plastics, metals)	1,2,3	
Upholstered furniture, drapes	1,3,4	
Wallboard (drywall and gypsum)	3,4	
Wood surfaces	1,2,3,4	

Appendix 2. Mold Response Plan Flow Chart

