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REMEDIATION PROTOCOL

506 W Main St
Weimar, TX 78962

Weimar Independent School District
07/28/2026

Inspector
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General: Publishing Date

07/09/2026

WHR

General: Introduction

William Rivers, MAC, a licensed Texas Department of Licensing and Regulation (TDLR) Mold Assessment Consultant #MAC2022 representing Howard Environmental #ACO1264 has developed the following Mold Remediation Protocol for the remediation of microbial contamination at 506 W Main St, Weimar, TX 78962. The goal of this remediation protocol is to effectively remove suspect mold contaminated materials from areas of the property in accordance with the current Texas Department of Licensing and Regulation "Texas Mold Assessment and Remediation Rules" original effective date of May 16, 2004 and amended effective date of May 20, 2007.

This mold remediation protocol is being prepared to obtain a Texas Department of Insurance (TDI) "Certificate of Mold Damage Remediation" (CMDR) document for the property owner. This TDI Mold Certificate is signed by a TDLR licensed MAC and TDLR licensed MRC. This Protocol has been prepared based on a visual inspection of the impacted areas and sampling results collected by Howard Environmental. This Protocol has been prepared based only on the conditions of the areas and materials that were accessible for observation. The full extent of the impacted areas may extend beyond the areas specified in this Protocol. Any changes to this mold remediation Protocol after initiation of remediation and prior to completion of the project shall be documented as an Amendment and placed in the Scope of Remediation section under Remediation Instructions and/or Photo Documentation.

The work should be conducted in accordance with industry accepted practices and guidelines, including but not limited to the following:

- Institute of Inspection Cleaning and Restoration Certification (IICRC) S520, Standard and Reference Guide for Professional Mold Remediation, First Edition, December 2003.
- NYC Department of Health, Guidelines on Assessment and Remediation of Fungi in Indoor Environments.
- U.S. Environmental Protection Agency, Mold Remediation in Schools and Commercial Buildings.

Texas Department of State Health Services, Texas Mold Assessment and Remediation Rules (TMARR), Publication Number 2-15, May 16, 2004 and amended May 20, 2007. The Texas Department of Licensing and Regulation adopted the Mold Program in November of 2017.

Upon a successful clearance, a Texas Department of Insurance "Certificate of Mold Damage Remediation" will be issued to the property owner.

Should the property owner have any questions concerning any area of this Protocol, they should contact the MAC (William Rivers 512-560-2428 william@howardenvironmental.com) for discussion. It is imperative that the property owner understand why specific remediation is being conducted – the property owner has the right to question any area of remediation as to any aspect of the remediation.

Upon being awarded the remediation, the MRC shall immediately provide MRC contact information (name, company, MRC #, phone, email, etc.) to the MAC.

WHR

General: General Information

All questions, concerns, or requests for clarification regarding the remediation scope, methodology, or intent of the protocol shall be directed exclusively to the Mold Assessment Consultant (MAC) who authored the remediation protocol.

The Mold Assessment Consultant is responsible for the development, interpretation, and justification of the remediation scope in accordance with applicable regulations and industry standards. Neither the remediation contractor nor other involved parties are authorized to modify, reinterpret, or expand the scope of work without prior written approval from the originating consultant.

This requirement ensures consistency with the original assessment findings and maintains compliance with governing regulations, including applicable provisions of the Texas Administrative Code (TAC).

There is no absolute guarantee that visible mold will be observed in all building materials removed or cleaned during any remediation. There is always the potential for there to be a “not yet visible mold presence” that has not amplified significantly from the initial 2 – 10 micron originating spore to be visible to the naked eye. Removed “sandwiched” building materials (between framing or between sheetrock and studs/sill plate/top place) may contain visible and/or “not yet visible” mold growth.

No mold remediation worker shall comment as to there being “no mold present” in any building material during or after mold remediation. Any questions about an actual mold presence or absence should be directed to the MAC, per TAC requirements.

In any residence, there is the potential for mold previously undiscovered to be revealed from unknown historical previous water incidents during previous owners in the residence that exhibit no current outward visible signs or evidence. There is always the possibility that potential mold containing areas are not visible due to painting, new building materials being installed over mold, or furniture blocking access to an area. This applies to the entire life of the property as water/mold issues years or decades ago could have been cosmetically repaired without completely removing mold containing materials.

WHR

General: Client Rights to Review

The client retains the right to review, question, and seek clarification regarding any portion of the remediation protocol prior to the commencement of work. This includes, but is not limited to, the defined scope of work, areas designated for remediation, methods and engineering controls to be utilized, and the extent of material removal or cleaning prescribed.

Clients may request additional explanation or supporting rationale for any component of the protocol to ensure a clear understanding of the proposed remediation activities and their necessity. Any concerns related to potential overreach, under-scoping, or site-specific conditions not addressed within the protocol should be formally communicated and documented prior to project initiation. No deviations from the established protocol should occur without appropriate review and written authorization.

WHR

General: Licensed Mold Remediation Contractor Recommended

It is recommended that you contact a licensed Mold Remediation Contractor to assist in remediation efforts following the recommendations in this protocol.

WHR

General: Notification

A mold remediation contractor or company shall notify the department or the department's representative or designee of a mold remediation, as defined in 16 TAC §78.10(29), when mold contamination affects a total surface area of 25 contiguous square feet or more. The notification shall be submitted to the department or its representative or designee no less than five calendar days before the anticipated start date of the mold remediation.

(29) 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 a location. Preventive activities include those intended to prevent future mold contamination of a remediated area, including applying biocides or anti-microbial compounds.

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Provision for emergency; an emergency exists if a delay in mold remediation services in response to a water damage occurrence would increase mold contamination. In an emergency, the mold remediation contractor or company shall submit a notification to the department as soon as practicable but not later than the following working day after the licensee identifies the emergency.

Based on the Texas Department of Licensing and Regulation (“TDLR”) Mold Monitor bulletin published in April 2025, the threshold for mandatory notification is when the mold remediation area—which refers to the total surface material requiring cleaning or removal—measures 25 contiguous square feet or more. The observed remediation area exceeds this threshold, thereby requiring submission of a mold remediation notification to TDLR in accordance with 16 TAC § 78.110.

Please see the TDLR Mold Monitor - April 2025 for further clarification and details.

Utilities: Electricity
On

Utilities: Water
On

Utilities: Gas
N/A

Source of Damage: **Source of Damage**

Plumbing Failure, Water Intrusion, Elevated Relative Humidity

All protocols require that the underlying cause of the moisture intrusion be determined and corrected – or further mold growth will reoccur. All known water infiltration should be stopped as soon as practically possible. Upon completion of the addressing of the water infiltration issue(s), drying, dehumidification, cleanup, and removal of water damaged materials will prevent or limit mold growth. A delay in responding to the drying out process may reduce the effectiveness of cleaning utilizing recognized mold remediation techniques.

When a moisture presence is detected in building materials, there is the potential for mold growth. When a moisture presence has been trapped/retained in building materials beyond 48 hours, the potential for mold growth further increases. As the moisture content of building materials change due to increased wetting and decreased wetting and drying out stages, various mold genus/species will begin and end mold spore growth. The amplification of spore growth due to moisture results in a visible mold colony. Mold spores are typically in the 1 – 10 micron size diameter.

When moisture is removed from a mold colony (whether from natural drying or forced drying), the mold colony remains. As a mold colony dries, millions of hyphae stalks are grown upon which the mold spore is produced. This is the natural process of mold propagating their species. Should moisture in the form of a liquid or humidity (at a level favorable for growth), return the following week, month, year, or century, then the viable mold spores can grow to increase the prior colony.

Typical factors that affect mold growth include (but are not limited to):

- The amount of water present.
- The frequency of water source (one time leak or slow leak over extended time).
- The type of food source (substrate) for the mold.
- The water affinity (ability to absorb moisture) of the substrate.
- The genus and species of naturally occurring background mold spores present.
- The temperature range present.

As factors/conditions change, various genus/species of molds may grow in a colony. When moisture is removed from a mold colony, the mold remains. The absence of moisture does not equate to the absence of mold. It is important to realize that when a prior water issue within a property has resulted in prior mold colonies – these prior mold colonies remain an undesirable presence indefinitely and can represent a health issue to occupants.

The Texas Mold Regulations do not specify different procedures for different types of mold. The policy of "universal precautions" is taken in which maximum precautions are taken in the remediation process while assuming all mold is hazardous. The specific type (genus-species) of ambient mold(s) present in an entire property may not need to be determined when the defined water penetration areas are known. Each mold case should be evaluated on its own merits concerning the extent of mold sampling. The Texas Mold Regulations do not require the State licensed Mold Assessment Consultant to perform mold sampling when his professional experience indicates mold is typically present.

Source of Damage: **Repairs Required**

All moisture sources identified in the mold inspection report, as well as any other moisture sources which may be discovered once items are removed, should be repaired prior to or concurrent with the remediation. If these sources are not remedied, water damage and/or fungal growth will recur, and the MAC will be unable to issue the CMDR.

Environmental Hazards: **Mold**

Confirmed Present

Aspergillus, Penicillium,
Stachybotrys

2: SCOPE OF REMEDIATION

Information

Environmental Awareness: Environmental Control

During mold remediation, portions of the HVAC system serving the remediation area may be disabled, isolated, or blocked off to prevent the spread of mold spores, dust, and other contaminants to unaffected areas of the structure. When normal HVAC operation is interrupted, environmental conditions within the containment area must be maintained using supplemental equipment.

Dehumidifiers shall be utilized as necessary to control humidity and promote the drying of water-impacted materials. Air scrubbers equipped with HEPA filtration shall be operated to remove airborne mold spores and remediation-related particulate while helping maintain negative pressure within the containment area.

The use of dehumidification and HEPA-filtered air filtration helps maintain appropriate environmental conditions, supports effective remediation, and reduces the potential for contaminant migration during remediation activities.

Environmental Awareness: Personal Protective Equipment

The primary function of personal protective equipment is to limit mold exposure.

If a remediation job disturbs mold, and mold spores then become airborne, the risk of respiratory exposure increases. Actions likely to stir up mold include:

- Breaking moldy porous materials such as wallboard
- Using invasive procedures to examine or remediate mold growth in wall cavities
- Stripping or peeling wallpaper to remove it
- Using fans to dry items

Personal Protective Equipment (PPE)

- Minimum: Gloves, N-95 respirator, goggles/eye protection.
- Limited: Gloves, N-95 respirator or half-face respirator with HEPA filter, disposable overalls, goggles/eye protection.
- Full: Gloves, disposable full body clothing, head gear, foot coverings, full-face respirator with HEPA filter.

Gloves

The material from which gloves are made should be suited to the type of materials being handled. If you choose to use a biocide, such as chlorine bleach, or a strong cleaning solution, gloves should be made from:

- Natural rubber
- Neoprene
- Nitrile
- Polyurethane
- Polyvinylchloride (PVC)

Goggles

Properly fitted goggles or full-face respirators provide eye protection. Goggles must be designed to keep out dust and small particles. Safety glasses or goggles that have open vent holes are not acceptable.

Respirators

Respirators protect remediation workers from inhaling airborne mold, mold spores and dust. Three types of respiratory protection are described:

- Minimum
- Limited
- Full

Only respirators approved by the National Institute for Occupational Safety and Health (NIOSH) should be worn during mold remediation. These respirators must be used according to any applicable Occupational Safety and Health Administration (OSHA) regulations.

Minimum PPE includes gloves, goggles/eye protection and an N-95 respirator. An N-95 respirator covers the nose and mouth, filters out 95 percent of airborne particulates and is available in most hardware stores. It does not provide eye protection. Use minimum PPE when cleaning up a small area affected by mold (less than 10 square feet total).

Limited PPE includes the use of half-face or full-face air purifying respirators (APRs) equipped with P100 filter cartridges. These respirators have inhalation and exhalation valves that filter the air and ensure it is free of mold particles. The P100 filters do not remove vapors or gases, and the half-face APRs do not protect the wearer's eyes. Limited PPE may be warranted when the total surface area affected by mold is between 10 and 100 square feet. Professional judgment should be used to make the final determination about whether to wear limited PPE.

Full PPE includes a full-face, powered air purifying respirator (PAPR). It is recommended when more than 100 square feet of mold is found, when high levels of airborne dust or mold spores are likely, or when intense or long-term exposures are expected. A powered air purifying respirator uses a blower to force air through a P100 filter. The filtered air is supplied to a mask that covers the wearer's face or a hood that covers the entire head. Positive pressure within the hood prevents unfiltered air from entering through penetrations or gaps. Individuals must be trained to use their respirators before they begin remediation.

Disposable clothing is recommended for medium and large remediation projects. It prevents the transfer and spread of mold to clothing and eliminates skin contact with mold. When limited protection is warranted, disposable paper coveralls can be used. When full protection is required, a body suit of breathable material, such as TYVEK®, and mold-impervious disposable head and foot coverings should be used. All gaps, such as those around ankles and wrists, should be sealed. (Many remediators use duct tape to seal clothing.)

Containment Specifications: Containment Standards

The following containment measures are designed to isolate the work area, prevent cross-contamination, and maintain controlled environmental conditions throughout the mold remediation process.

- All contents within the impacted area will be either removed or properly protected, and flooring will be covered to prevent cross-contamination. A Limited Containment will be established to fully enclose the remediation area as outlined in the Remediation Instructions and Photo Documentation, ensuring sufficient working space for removal and cleaning activities.
- A HEPA-filtered air scrubber will be installed to assist with air filtration, and negative air pressure will be established if feasible to prevent the spread of airborne contaminants. Once removal activities are completed, a dehumidifier will be introduced to maintain appropriate relative humidity levels throughout the space.
- If negative pressure is utilized, it should be maintained after removals have been completed at low CFM until post-remediation clearance has been achieved.

Limited Containment consists of a single layer of 6-mil fire-retardant polyethylene sheeting enclosing the affected area; painter's plastic or other lightweight, thin plastic sheeting is not considered adequate containment material. Access to the contained area is through a slit entry covered by a flap on the outside of the containment area. Limited Containment is generally recommended for areas involving 10 to 100 square feet of mold contamination. Signs advising that a mold remediation project is in progress shall be displayed at all entrances to remediation areas adjacent to occupied areas of the building. The sign shall be at least 8" x 10" with black letters on yellow background: "NOTICE: Mold remediation project in progress". The text of the signs shall be legible from a distance of ten feet.

In small areas, the polyethylene sheeting can be secured to the floor and ceiling with duct tape. In larger areas, tension posts can be utilized to hold the polyethylene sheeting. Epoxy can also be used to fasten the sheeting to the floor or ceiling.

All supply and air vents, doors and pipe chases in the containment area must be sealed with polyethylene sheeting to minimize the spread of mold and mold spores to other areas of the building. Stairs should also be sealed if a riser is missing or open. (A pipe chase is an enclosure through which pipes are run; a riser is the upright piece of a stair step, from tread to tread.)

The removal of ceiling tiles may affect HVAC systems if the space above the ceiling is used as a return air plenum. In such cases, containment would be installed across ceiling deck. The filters in the air-handling units serving the affected area are recommended to be replaced once the remediation is complete.

The containment(s) should be maintained under negative air pressure with a HEPA filtered fan unit between areas indoor that need remediation and unaffected areas of the structure to contain mold spores and dust/debris. If negative air pressure is lost, stop work and reestablish negative air before continuing. The containment or work area(s) should be unoccupied by non-remediation company workers during remediation activities.

The MRC shall be allowed to move and/or relocate containment as long as the integrity of the containment is not compromised. Reasons to relocate containment shall include, but not be limited to, allowing adequate work room, more effective anchoring of containment, more effective wall construction, etc. Any change in cost to the client from the MRC concerning containment changes shall be discussed with the client prior to such changes.

NOTE: Containment is not required if the entire dwelling is affected and only persons who are licensed or registered under the Texas Administrative Code (TAC Chapter 78.100) occupy the building in which the remediation takes place at any time between the start-date and stop-date for the project as specified on the notification.

Containment Specifications: Full Containment Recommended

Full Containment is recommended for the clean up of mold-contaminated surface areas of more than 100 square feet and when intense or long-term exposures are expected. It is also recommended if it appears likely that the occupant's space would be further contaminated if full containment were not used because high levels of airborne dust or mold spores are likely. Full Containment requires double layers of polyethylene sheeting to create a barrier between the moldy area and other parts of the building. A decontamination chamber or airlock -- an area with doors between the contaminated area and the clean area -- should be built for entry into and exit out of the remediation area. Signs advising that a mold remediation project is in progress shall be displayed at all entrances to remediation areas adjacent to occupied areas of the building. The sign shall be at least 8” x 10” with black letters on yellow background: “NOTICE: Mold remediation project in progress”. The text of the signs shall be legible from a distance of ten feet.

The entryways from the outside into the airlock and from the airlock into the containment area should be slits covered by flaps on the outside surface. The chamber should be large enough to hold a waste container and allow a worker to put on and remove Personal Protective Equipment (PPE). All contaminated PPE, except respirators, should be placed in a sealed bag while in this chamber.

Full PPE should be worn until remediation workers are outside containment chamber, within decontamination chamber.

Respirators should be worn until remediation workers are outside the decontamination chamber.

The containment(s) should be maintained under negative air pressure with a HEPA filtered fan unit between areas indoor that need remediation and unaffected areas of the structure to contain mold spores and dust/debris. If negative air pressure is lost, stop work and reestablish negative air before continuing. The containment or work area(s) should be unoccupied by non-remediation company workers during remediation activities.

The MRC shall be allowed to move and/or relocate containment as long as the integrity of the containment is not compromised. Reasons to relocate containment shall include, but not be limited to, allowing adequate work room, more effective anchoring of containment, more effective wall construction, etc. Any change in cost to the client from the MRC concerning containment changes shall be discussed with the client prior to such changes.

NOTE: Containment is not required if the entire dwelling is affected and only persons who are licensed or registered under the Texas Occupations Code (Chapter 1958) occupy the building in which the remediation takes place at any time between the start-date and stop-date for the project as specified on the notification.

Remediation Instructions: Estimated Quantities of Materials to be Removed or Cleaned

> 20,000sqft

Materials identified for removal typically include porous and semi-porous building components that are visibly impacted, water-damaged, or suspected to contain mold growth, such as drywall, insulation, carpeting, baseboards, and other finishes. These materials are generally not suitable for effective cleaning and are therefore removed to prevent continued contamination and to allow access to underlying structural components.

The quantities of materials listed in the remediation protocol are estimates based on visual observations and accessible conditions at the time of the assessment. Due to the potential for concealed damage within wall cavities, flooring systems, or other enclosed spaces, the full extent of impacted materials may not be known until remediation activities have commenced. As a result, additional materials may require removal as conditions are further exposed, and adjustments to the scope of work may be necessary to ensure proper and complete remediation.

Remediation Instructions: Areas of Remediation

Commercial Space

Remediation Instructions: General Remediation

This scope of remediation outlines the necessary procedures to identify, remove, and treat water and/or mold-impacted materials in order to restore the affected areas to a clean, dry, and habitable condition in accordance with industry standards.

- All water and/or mold-impacted materials identified during the inspection and verified by Photo Documentation shall be removed and responsibly disposed of in accordance with applicable local, state, and federal regulations. This includes, but is not limited to, porous building materials such as drywall, insulation, trim, carpet, and engineered flooring that show visible signs of fungal growth or water damage. Where feasible, all non-impacted, non-porous materials (e.g., metal, tile, certain plastics, and sealed surfaces) will be cleaned and salvaged rather than discarded, provided there is no evidence of contamination and surfaces can be effectively decontaminated.
- Demolition and removal of materials will extend a minimum of 24 inches (2 feet) beyond all visible or tested water-damaged or mold-impacted areas, in accordance with industry best practices and to ensure thorough containment of potential fungal spread beyond visibly affected boundaries.
- All remaining structural components (e.g., framing lumber, subflooring, sheathing) that are found to be structurally sound but bear surface fungal growth will be abrasively cleaned using approved methods such as sanding, wire brushing, or media blasting. This process is intended to remove all visible microbial contamination and return surfaces to a clean, dust-free condition.
- Should any structural elements be identified as compromised due to prolonged moisture exposure—evidenced by rot, warping, or loss of structural integrity—those components will require full removal and replacement in order to meet clearance and rebuild criteria.
- Following source removal and drying, the Contractor will perform Small Particle Cleaning (SPC) inside active containment(s) per this Protocol. SPC consists of a top-down, three-pass process: (1) comprehensive HEPA vacuuming of all accessible non-porous and semi-porous surfaces and remaining contents; (2) damp wiping with a mild surfactant/detergent (or, if specified by the Protocol, an EPA-registered antimicrobial used strictly per label); and (3) a final HEPA vacuum or dry wipe of horizontal surfaces. Tools, wipes, and solutions will be changed frequently to prevent redeposition of particulates.
- Upon completion of demolition and cleaning activities, and prior to post-remediation verification (PRV), an optional electrostatic fogging treatment may be applied. This involves the application of a broad-spectrum anti-microbial enzyme using an electrostatic sprayer to help neutralize any residual airborne spores or settled contaminants on surfaces. Following fogging, the area will undergo a thorough small-particle cleaning, which includes HEPA vacuuming of all surfaces and detailed wiping with microfiber cloths and appropriate cleaning agents, to remove fine particulates and microbial residues.
- These steps are essential to ensure the remediated space is returned to a clean, dry, and safe condition suitable for reconstruction and future occupancy.

NOTICE: No encapsulants, paints, sealants, or other coatings shall be applied to remediated surfaces prior to completion of the post-remediation assessment and issuance of clearance by the Mold Assessment Consultant. Encapsulation of materials may interfere with the visual and procedural evaluations required by 16 TAC §78.140 and will result in failure of the post-remediation assessment, unless otherwise directed by the Mold Assessment Consultant.

Remediation Instructions: Small Particle Cleaning (SPC)

Following completion of remediation activities within the established containment(s), the Contractor will extend SPC to unaffected areas of the dwelling, as directed in the Consultant's Protocol, to reduce fine particulate and mold spore reservoirs that may have migrated outside the primary work zone. While no demolition or source removal is performed in these areas, cleaning shall conform to the minimum work practices required under 16 TAC §78.120 and must be completed before post-remediation assessment (PRA) clearance.

Scope of Cleaning:

- SPC will be performed in all specified common areas, hallways, adjacent rooms, closets, and living spaces identified in the Protocol.
- Cleaning shall include horizontal and vertical surfaces, including flooring, walls, ceilings, trim, doors, cabinetry interiors/exteriors, shelving, fixtures, registers/grilles, window troughs, and any non-porous or semi-porous furnishings/contents not slated for disposal.
- HVAC Components: Supply and return registers in non-contained areas will be HEPA-vacuumed and damp wiped, and filters are to be replaced.

SPC Method (top-down, three-pass process):

1. HEPA Vacuum Pass: All accessible surfaces will be vacuumed using a properly functioning HEPA-filtered vacuum, including tops of door frames, shelves, and other horizontal surfaces.
2. Damp Wipe Pass: Surfaces will then be damp wiped with lint-free cloths lightly moistened with a mild detergent solution. If an antimicrobial or biocide is used, it must be EPA-registered for the intended use and used strictly per its label and the Consultant's Protocol. (§78.120(h)).
3. Final HEPA Vacuum/Dry Wipe: After surfaces dry, a final HEPA vacuum or dry wipe will be performed on horizontal surfaces to remove remaining fine particulate.

Contents:

- Non-porous and semi-porous contents (e.g., furniture, fixtures, décor) located in unaffected areas will be cleaned in place or relocated and cleaned as above.
- Porous contents (e.g., upholstered furniture, draperies) will only be cleaned if specifically authorized by the Consultant's Protocol and must be visibly free of mold growth and odors to remain.

Process Controls:

- Work will be staged systematically to avoid cross-contamination from affected areas to unaffected areas.
- HEPA air scrubbers may be deployed in these spaces during SPC, if required by the Protocol.
- Cloths, wipes, and vacuum attachments will be replaced or cleaned frequently to maintain cleaning effectiveness.
- All cleaning will be documented and included in the project file maintained on site (§78.120(c)).

Clearance:

- Although unaffected areas are not subject to full containment removal criteria, they will be visually assessed by the Consultant as part of the Post-Remediation Assessment (§78.140) to confirm that surfaces are clean, free of visible mold, and free of settled dust/debris.

NOTE: Suspected mold growth was ONLY observed on exposed surfaces; contents within enclosed spaces (cabinets, drawers, etc.) were not observed to be impacted during the time of assessment.

Remediation Instructions: Contaminated Contents

Contents are considered to be contaminated, with currently available information.

All contents from the area to be remediated shall be removed prior to any remediation activities being initiated.

- Porous contents with any visible growth should be discarded.

- All non-porous contents with gravitational mold spore contamination shall be detail wiped down – one direction – one surface and the wipe discarded.

- Porous contents with gravitational mold spore contamination should be HEPA vacuumed and cleaned appropriately.

Before any contents are discarded by the MRC or other authorized personnel, the client shall be notified and provided the opportunity to confirm that all necessary records and supporting documentation have been completed by the appropriate party.

Remediation Instructions: Standard Remediation Guidelines

1. Remove all furniture and contents from areas to be contained and/or remediated.

2. Erect a Containment for each area/room (or as detailed in Containment Specifications), and install critical barriers over all openings – lights, plumbing penetrations, a/c vents, etc. Establish negative pressure exhausting to exterior of dwelling and/or containment where feasible.

3. Wear proper Personal Protection Equipment.

4. If materials are wet, place dehumidifiers as needed to stabilize the environment and facilitate proper dry-out. All wood materials should be 15% moisture content or less to be considered “dry” at the time of the Clearance Inspection.

5. Remove impacted materials specified in description and/or diagram (**Scope of Work**) such as: baseboards, trim, door casings, drywall, insulation and all other non-structural building materials identified as mold impacted, water damaged, water stained, actively wet, or previously wet. Removal shall continue at least 1–2 feet beyond the last visible or known area of impact whenever feasible.

6. Clean in place structurally sound framing, flooring, ceiling joists, metal and other wood structures by sanding, grinding, or wire brushing. This treatment must remove all fungal growth from the affected materials. Heavily impacted structural framing and/or wood rot shall be abrasively cleaned and/or replaced. Metal studs and other building components that are rusted to the extent of being structurally unsound shall be replaced. When structural members are to be removed for replacement, it is recommended that a structural engineer be consulted prior to removal to maintain structural integrity of the building. Structural issues MUST be repaired in order to meet Clearance Criteria.

7. All mold containing building materials shall be removed in sealed plastic bags (double bagging when transported through clean areas).

8. Upon completion of demolition and cleaning activities, HEPA vacuum all surfaces within containment, including cracks, crevices, and other inaccessible areas. Following HEPA vacuuming, wipe all surfaces using a detergent solution or EPA-registered fungicidal product in accordance with the manufacturer's instructions.

9. Operate HEPA-filtered air filtration devices during and after remediation activities to reduce airborne particulate concentrations within the contained work area. Air scrubbing duration shall be determined by the size of the work area, the amount of material removed, and the airflow capacity of the filtration equipment.

10. All remediated materials/areas should be accessible and visible. No new materials should be installed until after the project is deemed successful by the Mold Assessment Consultant.

NOTICE: The use of EPA registered biocides or disinfectants may be used; however, under no circumstance should any microbial coating or encasement material or primers be applied to any surfaces prior to the Post-Remediation Inspection and Clearance Testing unless approved by the Mold Assessment Consultant.

Remediation Instructions: US EPA Cleaning Methods

A variety of mold cleanup methods are available for remediating damage to building materials and furnishings caused by moisture control problems and mold growth. The specific method or group of methods used will depend on the type of material affected, as presented in Table 2. Please note that professional remediators may use some methods not covered in these guidelines; absence of a method in the guidelines does not necessarily mean that it is not useful.

Method 1: Wet Vacuum

Wet vacuums are vacuum cleaners designed to collect water. They can be used to remove water from floors, carpets and hard surfaces where water has accumulated. They should not be used to vacuum porous materials, such as gypsum board. They should be used only when materials are still wet — wet vacuums may spread spores if sufficient liquid is not present. The tanks, hoses and attachments of these vacuums should be thoroughly cleaned and dried after use since mold and mold spores may stick to the surfaces.

Method 2: Damp Wipe

Whether dead or alive, mold is allergenic, and some molds may be toxic. Mold can generally be removed from nonporous (hard) surfaces by wiping or scrubbing with water, or water and detergent. It is important to dry these surfaces quickly and thoroughly to discourage further mold growth. Instructions for cleaning surfaces, as listed on product labels, should always be read and followed. Porous materials that are wet and have mold growing on them may have to be discarded. Since molds will infiltrate porous substances and grow on or fill in empty spaces or crevices, the mold can be difficult or impossible to remove completely.

Method 3: HEPA Vacuum

HEPA (High-Efficiency Particulate Air) vacuums are recommended for final cleanup of remediation areas after materials have been thoroughly dried and contaminated materials removed. HEPA vacuums are also recommended for cleanup of dust that may have settled on surfaces outside the remediation area. Care must be taken to assure that the filter is properly seated in the vacuum so that all the air must pass through the filter. When changing the vacuum filter, remediators should wear PPE to prevent exposure to the mold that has been captured. The filter and contents of the HEPA vacuum must be disposed of in well-sealed plastic bags.

Method 4: Discard — Remove Damaged Materials and Seal in Plastic Bags

Building materials and furnishings that are contaminated with mold growth and are not salvageable should be double-bagged using 6-mil polyethylene sheeting. These materials can then usually be discarded as ordinary construction waste. It is important to package mold-contaminated materials in sealed bags before removal from the containment area to minimize the dispersion of mold spores throughout the building. Large items that have heavy mold growth should be covered with polyethylene sheeting and sealed with duct tape before they are removed from the containment area.

Remediation Instructions: Disinfectants, Biocides, and Antimicrobial Coatings

An assessment consultant who indicates in a remediation protocol that a disinfectant, biocide, or antimicrobial coating will be used on a mold remediation project shall indicate a specific product or brand only if it is registered by the United States Environmental Protection Agency (EPA) for the intended use and if the use is consistent with the manufacturer's labeling instructions. A decision by an assessment consultant to use such products must take into account the potential for occupant sensitivities and possible adverse reactions to chemicals that have the potential to be off-gassed from surfaces coated with such products.

The list of approved EPA registered products is as follows:

Disinfectants and Biocides:
Benefect Decon 30
Benefect Botanical Disinfectant
RMR-141 RTU
Fiberlock ShockWave and ShockWave RTU
Vital Oxide
Biocide Systems BioCide 100
Concrobium Mold Control
Sodium Hypochlorite 7.5%

Antimicrobial Coatings:
Foster 40-20
Foster 40-30
Fiberlock IAQ 6000

The purpose of mold remediation is to remove the mold to prevent human exposure and damage to building materials and furnishings. It is necessary to clean up mold contamination, not just to kill the mold. Dead mold is still allergenic, and some dead molds are potentially toxic. The use of a biocide, such as chlorine bleach, is not recommended as a routine practice during mold remediation, although there may be instances where professional judgment may indicate its use (for example, when immune-compromised individuals are present). In most cases, it is not possible or desirable to sterilize an area; a background level of mold spores will remain in the air (roughly equivalent to or lower than the level in outside air). These spores will not grow if the moisture problem in the building has been resolved.

If you choose to use disinfectants or biocides, always ventilate the area. Outdoor air may need to be brought in with fans. When using fans, take care not to distribute mold spores throughout an unaffected area. Biocides are toxic to humans, as well as to mold. You should also use appropriate PPE and read and follow label precautions. Never mix chlorine bleach solution with cleaning solutions or detergents that contain ammonia; toxic fumes could be produced.

Some biocides are considered pesticides, and some States require that only registered pesticide applicators apply these products in schools. Make sure anyone applying a biocide is properly licensed, if necessary. Fungicides are commonly applied to outdoor plants, soil and grains as a dust or spray — examples include:

- Hexachlorobenzene
- Organomercurials
- Pentachlorophenol
- Phthalimides
- Dithiocarbamates

Do not use fungicides developed for use outdoors for mold remediation or for any other indoor situation.

Remediation Instructions: Additional Mold Growth

If additional mold growth is discovered during gross removal that is significantly outside the scope of the MRP, the MRC must obtain written approval from the MAC and owner prior to conducting additional work to address the expanded area.

Remediation Instructions: Additional Hazards

Prior to performing any destructive work, the remediation contractor shall properly de-energize the systems likely to be encountered. These include electricity, natural gas, steam, telephone as well as other energy systems. The Contractor shall follow proper lock-out/tag-out and testing procedures to verify that these systems are properly de-energized.

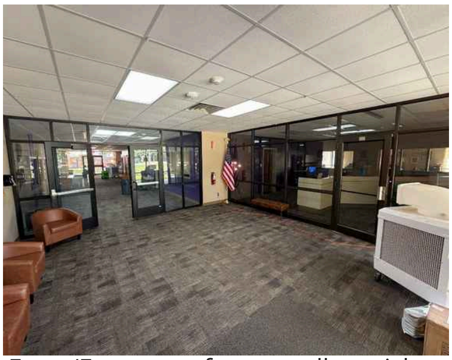
Additional hazards may exist that are dependent on the specific equipment and procedures used by the contractor to conduct the remediation. In addition to the work practice hazards, asbestos containing materials (ACM), and lead based paint may be present within the structure and could be included in some of the materials specified for removal as a part of this MRP. It is the responsibility of the remediation contractor to perform whatever investigation he deems necessary to identify these additional hazards and to take any necessary precautions to protect remediation workers from these and other hazards not addressed in the scope of work. In conducting the work, the remediation contractor shall comply with all federal state and local requirements regarding hazard identification, communication and worker protection.

Photo Documentation: Remediation Annotations

Photographs have been annotated to assist in understanding the scope of work; however, they are provided as supplemental documentation only. The **Containment Specifications** and **Remediation Instructions** constitute the governing directives for remediation and shall take precedence over any photographic references.

Photographs will be annotated in accordance with the specified Containment Specifications and Remediation Instructions. For clarity, photographic references indicate Containment in **GREEN**, Abrasive Cleaning and/or Small Particle Cleaning in **ORANGE**, and Removals in **RED**.

WHR



Entry/Foyer : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded

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Hallway(s) : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded

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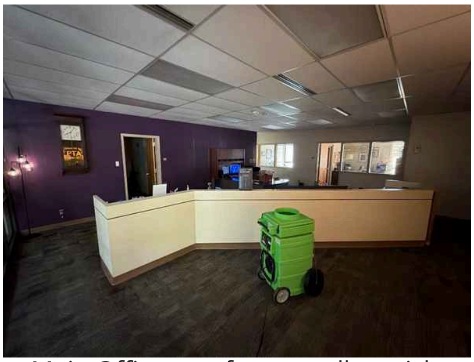
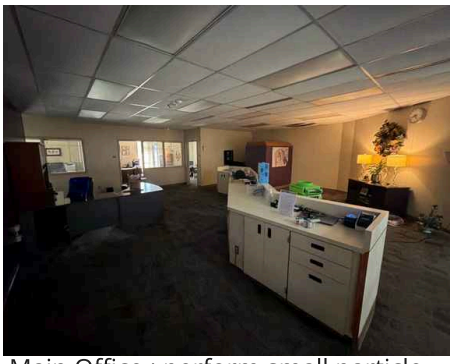
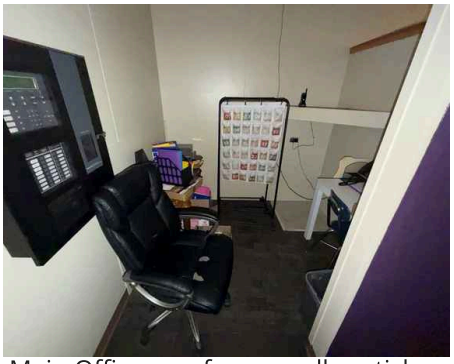


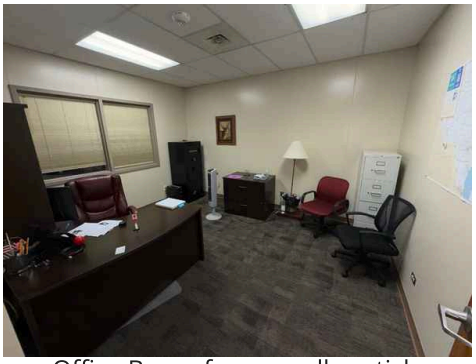
Main Office : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



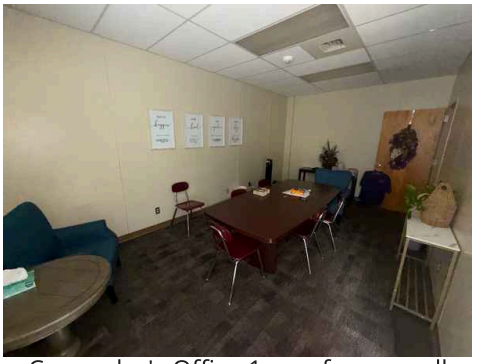
Main Office : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded (no mold impact was observed with cabinets or enclosed spaces)



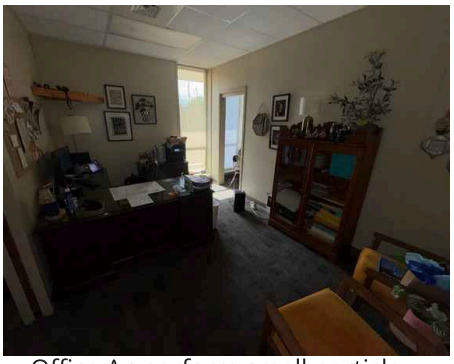
Main Office : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



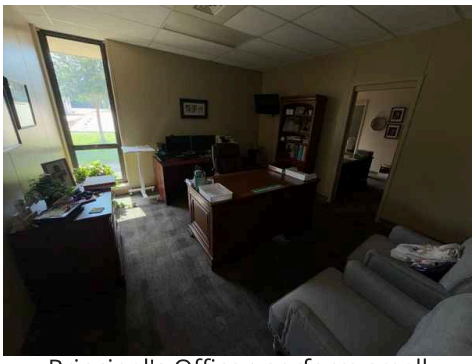
Office B : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



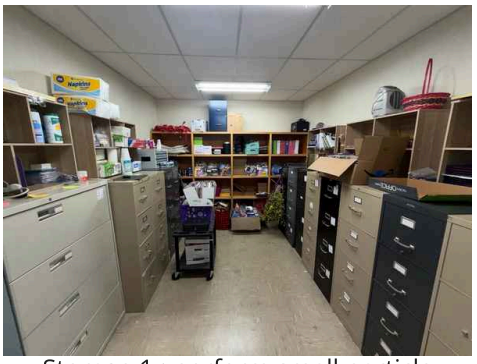
Counselor's Office 1 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



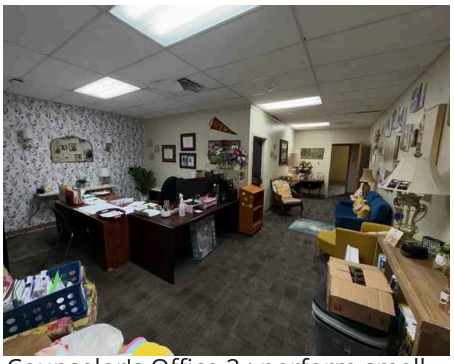
Office A : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



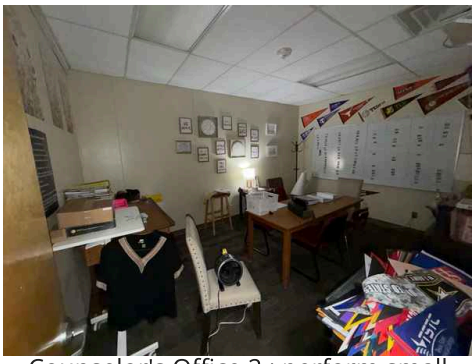
Principal's Office : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



Storage 1 : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded



Counselor's Office 2 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



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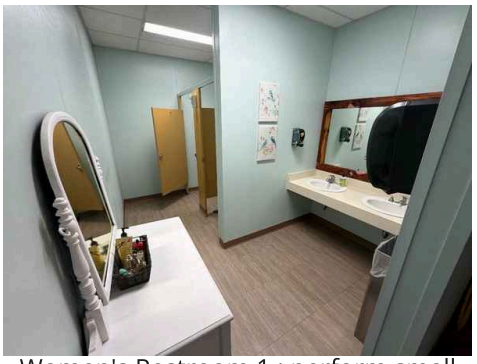
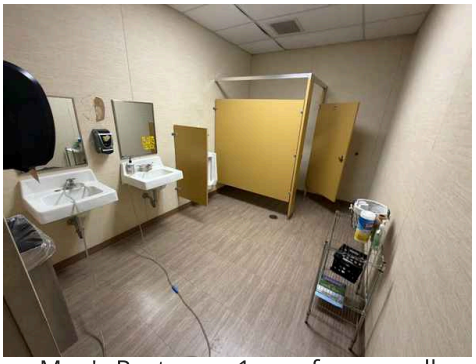
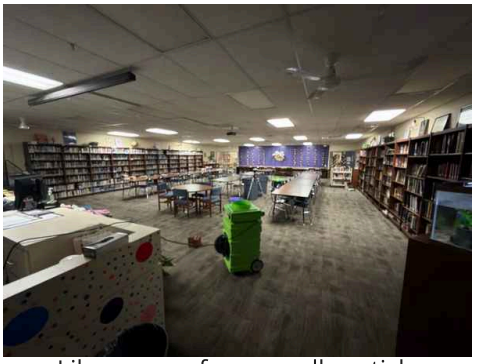


Women's Restroom 1 : perform small particle cleaning on exposed surfaces throughout entire area

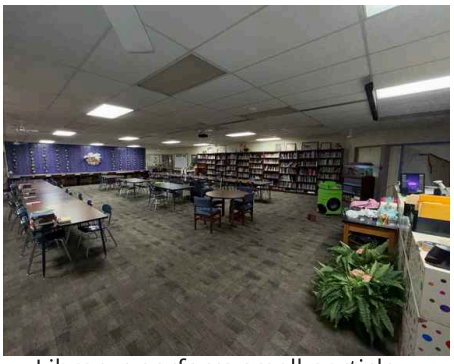
Women's Restroom 1 : porous contents with any visible growth should receive small particle cleaning or be discarded



Men's Restroom 1 : perform small particle cleaning on exposed surfaces throughout entire area

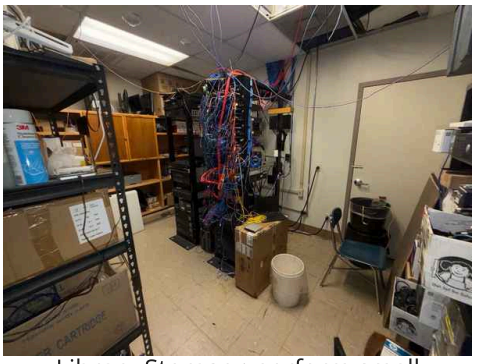


Library : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



Library : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded

Library Storage : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded



Library Storage : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded

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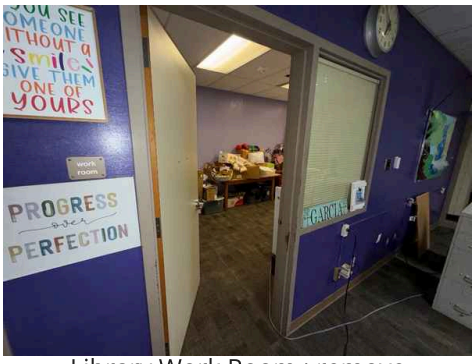
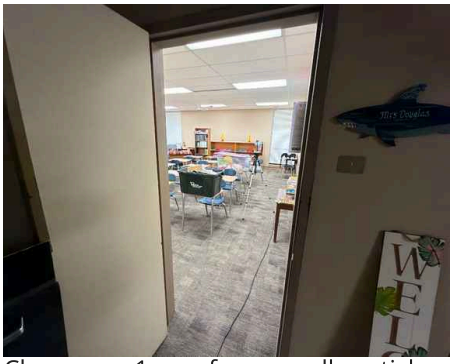


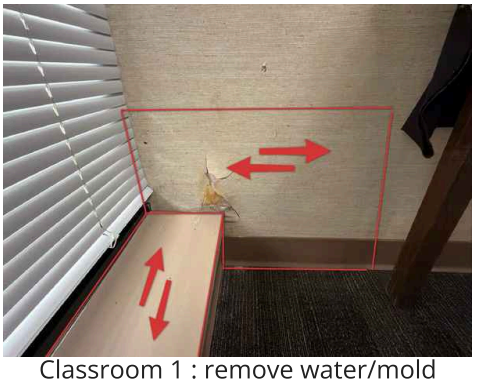
Library Work Room : remove impacted ceiling tiles, inspect for source of water intrusion and repair, perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded

Library Work Room : remove impacted ceiling tiles, inspect for source of water intrusion and repair, perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded



Classroom 1 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded

Classroom 1 : remove water/mold impacted drywall/window sill 2ft beyond any visible impact, clean all exposed framing



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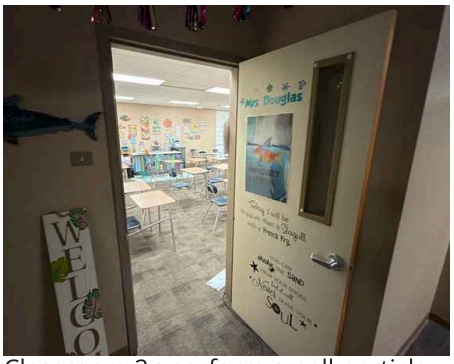
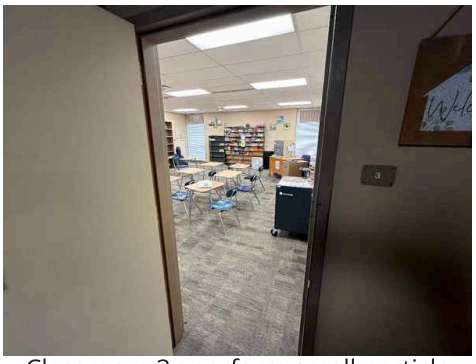
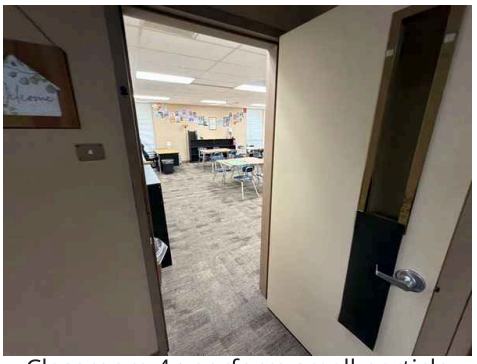


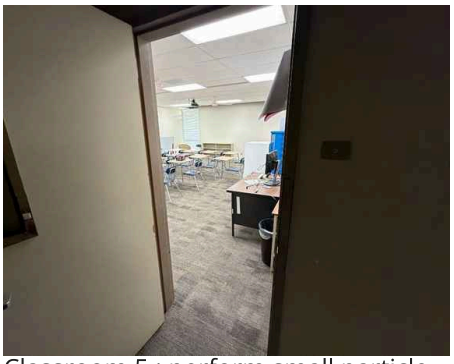
Classroom 2 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



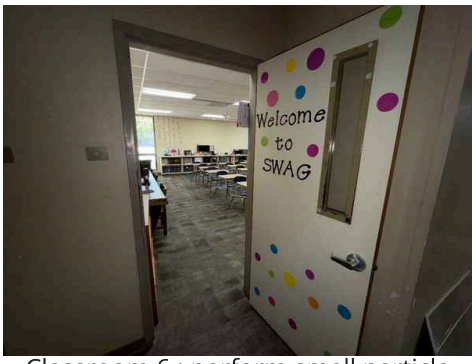
Classroom 3 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



Classroom 4 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded

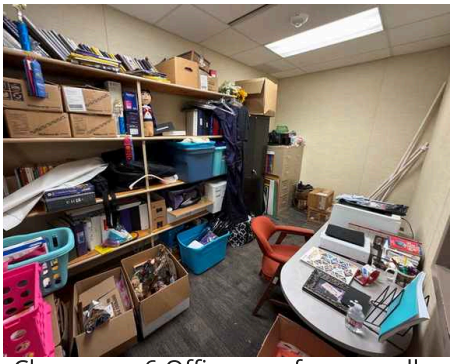


Classroom 5 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



Classroom 6 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded

Classroom 6 Office : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



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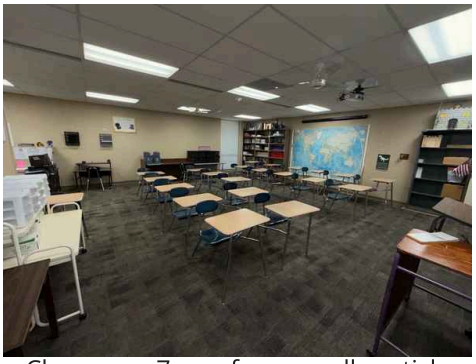
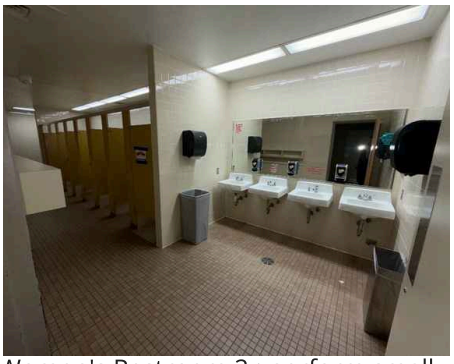
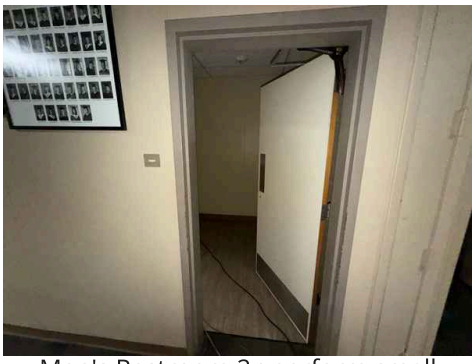


Classroom 7 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded

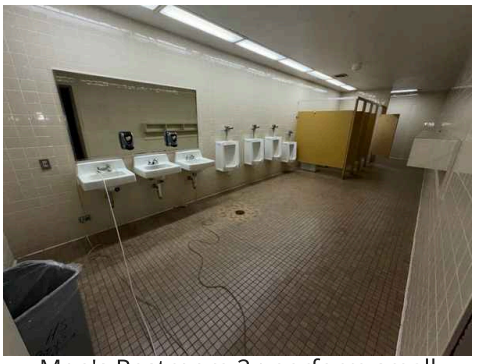
Women's Restroom 2 : perform small particle cleaning on exposed surfaces throughout entire area



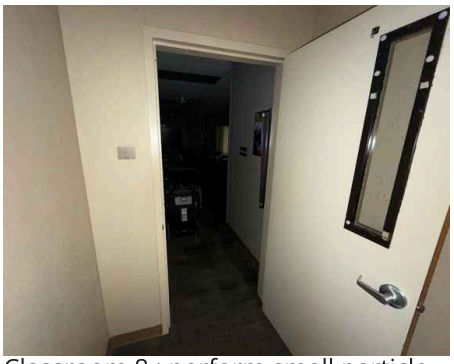
Women's Restroom 2 : perform small particle cleaning on exposed surfaces throughout entire area

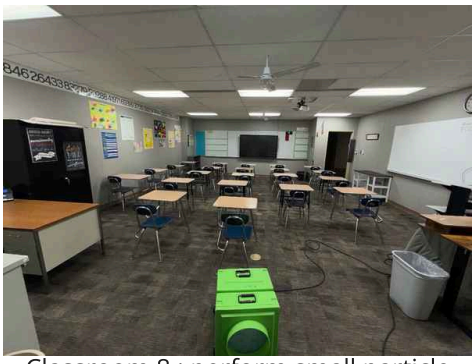


Men's Restroom 2 : perform small particle cleaning on exposed surfaces throughout entire area



Men's Restroom 2 : perform small particle cleaning on exposed surfaces throughout entire area


Classroom 8 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded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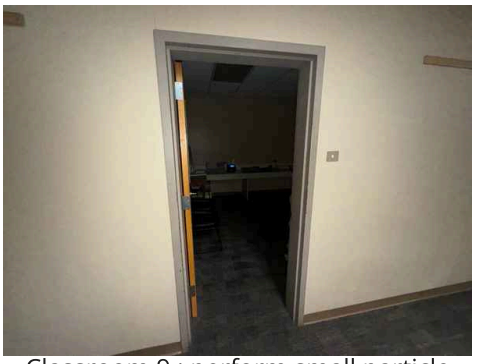
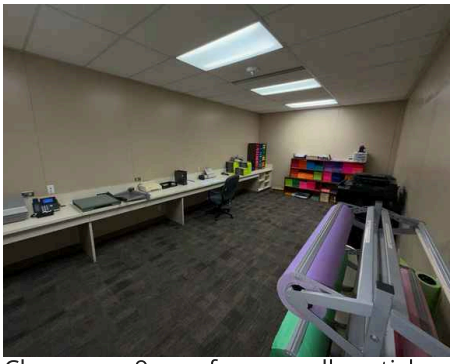
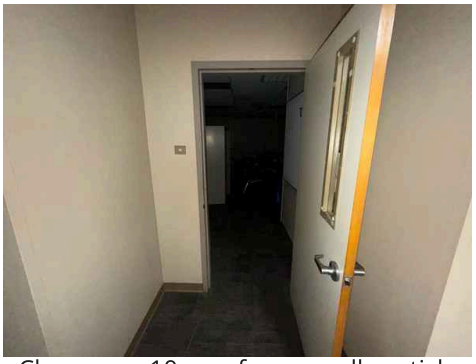
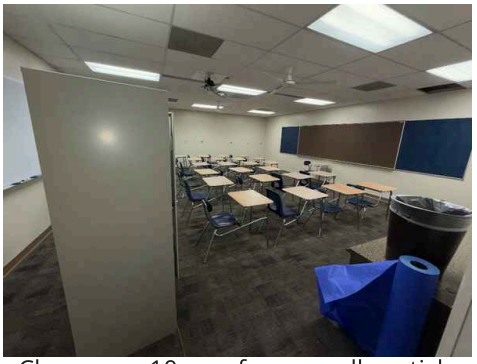
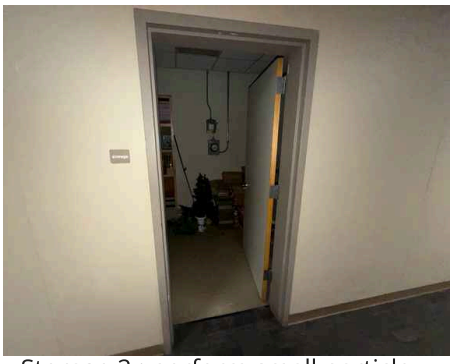

Classroom 9 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded


Classroom 9 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded


Classroom 10 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded


Classroom 10 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded


Storage 2 : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded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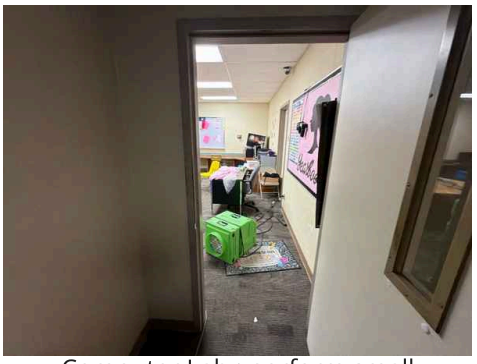
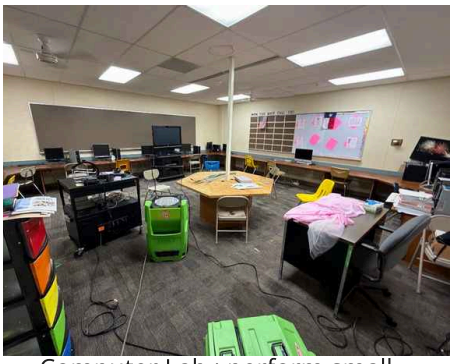
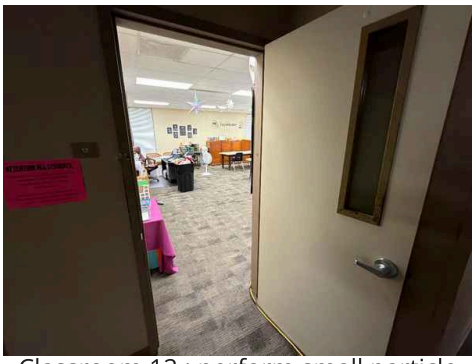
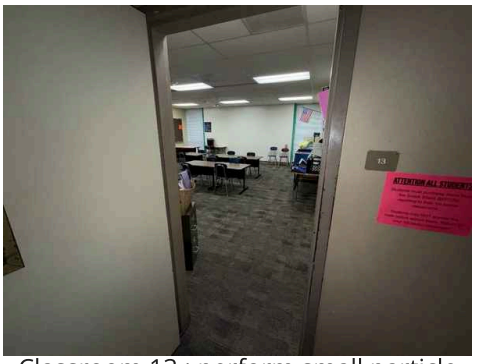

Computer Lab : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded



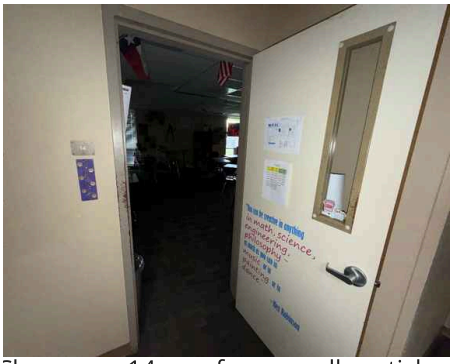
Computer Lab : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded



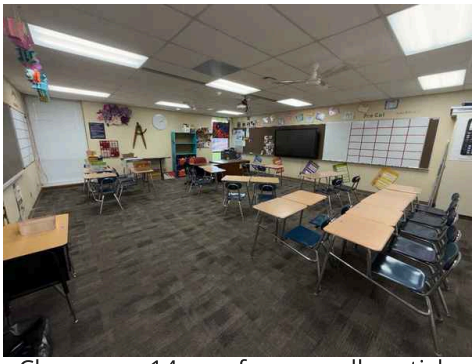
Classroom 12 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



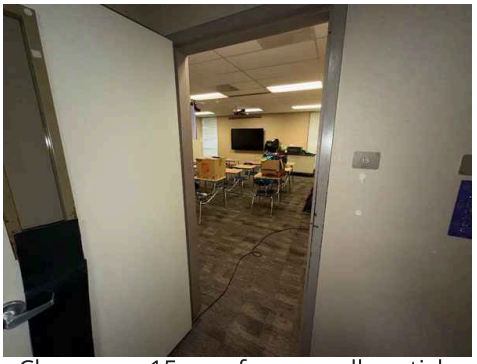
Classroom 13 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



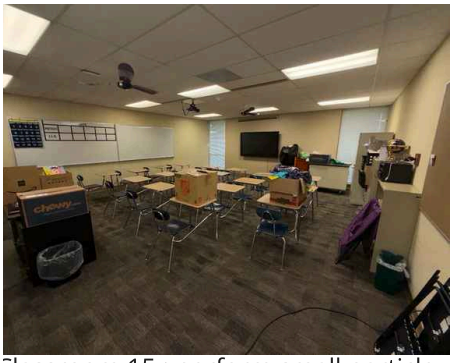
Classroom 14 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



Classroom 14 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



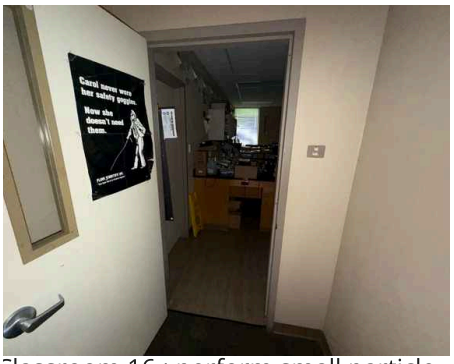
Classroom 15 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



Classroom 15 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded

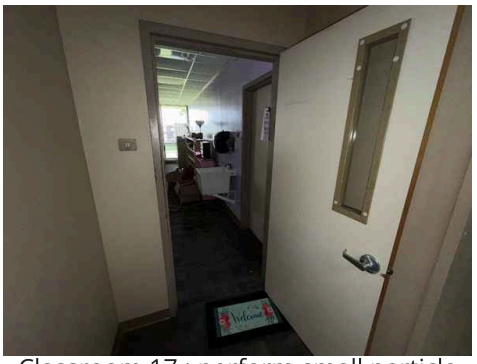
Classroom 15 : remove water/mold impacted drywall from floor to ceiling 2ft beyond any visible impact, clean all exposed framing

Classroom 15 : remove water/mold impacted drywall from floor to ceiling 2ft beyond any visible impact, clean all exposed framing

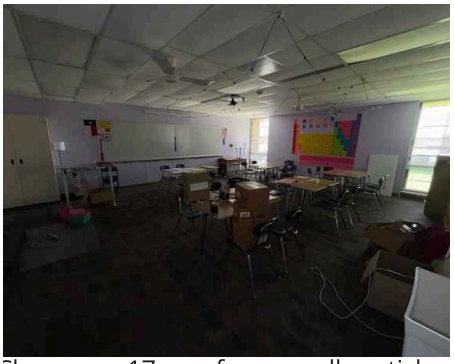


Classroom 16 : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded

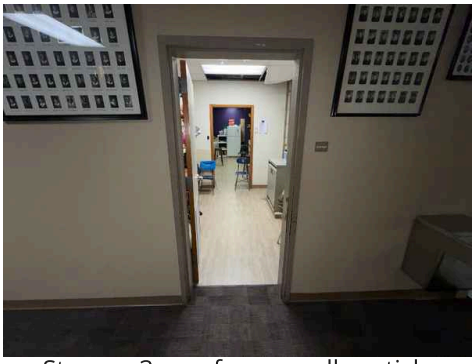
Classroom 16 : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded



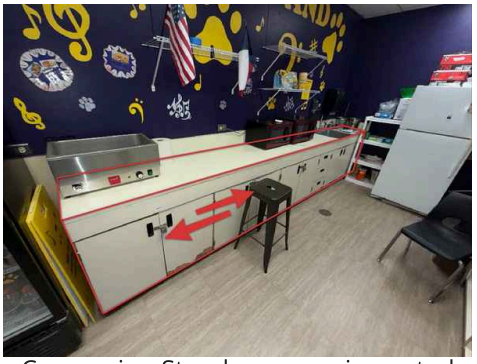
Classroom 17 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



Classroom 17 : perform small particle cleaning on exposed surfaces throughout entire area, steam clean or remove all carpet; porous contents with any visible growth should receive small particle cleaning or be discarded



Storage 3 : perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded



Concession Stand : remove impacted cabinets and drywall behind, clean all exposed framing; perform small particle cleaning on exposed surfaces throughout entire area; porous contents with any visible growth should receive small particle cleaning or be discarded

Storage 3 : remove and replace all visibly impacted ceiling tiles throughout remediation areas, ensure source(s) of water intrusion have been repaired by qualified contractor

Ceiling Tiles : remove and replace all visibly impacted ceiling tiles throughout remediation areas

Ceiling Tiles : remove and replace all visibly impacted ceiling tiles throughout remediation areas, ensure source(s) of water intrusion have been repaired by qualified contractor

Ceiling Tiles : remove and replace all visibly impacted ceiling tiles throughout remediation areas, ensure source(s) of water intrusion have been repaired by qualified contractor

Contents : all non-porous contents with mold contamination shall be detail wiped down – one direction – one surface and the wipe discarded (photo for example)

Contents : porous contents with any visible growth should receive small particle cleaning or be discarded (photo for example)

Contents : porous contents with any visible growth should receive small particle cleaning or be discarded (photo for example)

Contents : porous contents with any visible growth should receive small particle cleaning or be discarded (photo for example)

Contents : porous contents with any visible growth should receive small particle cleaning or be discarded (photo for example)

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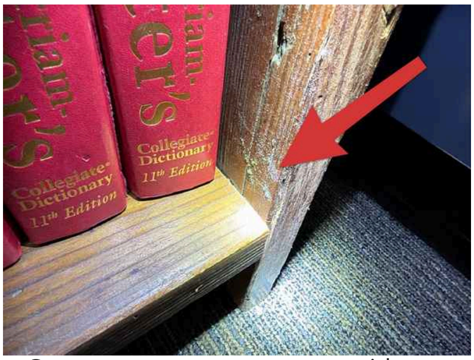
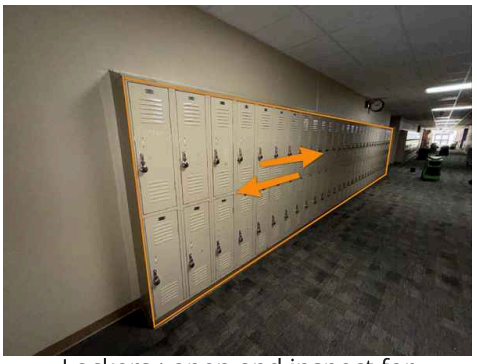
Contents : porous contents with any visible growth should receive small particle cleaning or be discarded (photo for example)



Contents : porous contents with any visible growth should receive small particle cleaning or be discarded (photo for example)

Contents : porous contents with any visible growth should receive small particle cleaning or be discarded (photo for example)

Discard all organic material within remediation area(s)



Lockers : open and inspect for impacted porous materials and perform small particle cleaning if any visible growth is observed within

3: POST-REMEDIATION

3.1	Requirements

Information

Requirements: Removal of Containment

16 TAC § 78.120(g) - Removal of Containment

No person shall remove or dismantle any walk-in containment structures or materials from a project site before receipt by the licensed mold remediation contractor or remediation company overseeing the project of a written notice from a licensed mold assessment consultant that the project has achieved clearance as described under ��78.140.

Requirements: Post Remediation Assessment and Clearance

16 Tex. Admin. Code § 78.140 - Post-Remediation Assessment and Clearance

(a) Clearance criteria. For a remediation project to achieve clearance, a licensed mold assessment consultant shall conduct a post-remediation assessment using visual, procedural, and analytical methods. If walk-in containment is used during remediation, the post-remediation assessment shall be conducted while the walk-in containment is in place. The post-remediation assessment shall determine whether:

(1) the work area is free from all visible mold and wood rot; and

(2) all work has been completed in compliance with the remediation protocol and remediation work plan and meets clearance criteria specified in the protocol.

(b) Underlying cause of mold. Post-remediation assessment shall, to the extent feasible, determine that the underlying cause of the mold has been remediated so that it is reasonably certain that the mold will not return from that remediated cause.

(c) Analytical methods.

(1) The assessment consultant shall perform a visual, procedural, and analytical evaluation in each remediated area in order to determine whether the mold contamination identified for the project has been remediated as outlined in the remediation protocol.

(2) The consultant shall use only the analytical methods and the criteria for evaluating analytical results that were specified in the remediation protocol, unless circumstances beyond the control of the consultant and the remediation contractor or company necessitate alternative analytical methods or criteria. The consultant shall provide to the client written documentation of the need for any deviation from the remediation protocol and the alternative analytical methods and criteria selected, and shall obtain approval from the client for their use, before proceeding with the post-remediation assessment.

(3) Where visual inspection reveals deficiencies sufficient to fail clearance, analytical methods need not be used.

(d) Passed clearance report. An assessment consultant who determines that remediation has been successful shall issue a written passed clearance report to the client at the conclusion of each mold remediation project. The report must include the following:

(1) a description of relevant worksite observations;

(2) the type and location of all measurements made and samples collected at the worksite;

(3) all data obtained at the worksite, including temperature, humidity, and material moisture readings;

(4) the results of analytical evaluation of the samples collected at the worksite;

(5) copies of all photographs taken by the mold assessment consultant; and

(6) a clear statement that the project has passed clearance.

(e) Final status report. If the mold assessment consultant determines that remediation has not been successful and ceases to be involved with the project before the project passes clearance, the consultant shall issue a written final status report to the client and to the remediation contractor or company performing the project. The status report must include the items listed in subsections (d)(1) - (5) and any conclusions that the consultant has drawn.

Requirements: CMDR Criteria

The purpose of the clearance investigation is to ensure that remediation activities have been completed as outlined in the Remediation Protocol, containment has been maintained, all dust and debris have been removed from the containment areas, and no malodors or visible mold is present.

Clearance testing consists of a visual assessment for mold problems in area(s) of remediation activities and the collection/analysis of a tape lift sample and an air quality test in these designated area(s). Clearance is defined as tape and air samples collected indoors being quantitatively equal to or less than outdoor samples, and qualitatively similar. There are no exposure limits for the swab or tape lift sample.

Clearance of air sampling consists of sampling all containment areas using the ACGIH air sampling protocol, which requires one (1) indoor air sample be collected in each containment area. In addition, each containment area requires a swab or tape lift surface sample. The samples are sent to an accredited laboratory, which will analyze them for the presence of mold. The lab will then issue a report detailing the presence and types and quantities of mold as per sample analysis protocols.

If the containment area has dust, debris, breached containment, lack of quality control related to remediation specifications the inspector will not conduct further clearance activities. The client will be informed of observed project deficit concerns for communication with the mold remediation contractor. In addition, if visible mold is present, a tape lift and swab sample is collected for lab analysis.

Clearance microbial sampling protocols and remediation specifications are based on numerous sources including: USEPA (2001), Mold Remediation in Schools and Commercial Buildings (EPA Pub. No. 402-K-01-001). Washington, D.C.: USEPA; New York City Department of Health (2000) Guidelines on Assessment and Remediation of Fungi in Indoor Environment, New York, NY; and the American Conference of Governmental Industrial Hygienists (1999). Bioaerosols: Assessment and Control. ISBN: 882417-29-1, Cincinnati, OH: ACGIH.

Requirements: Visual Inspection

A thorough visual inspection of all containment and remediation areas will be performed as part of the clearance process. The inspection will include all exposed framing, structural components, wall and ceiling cavities, subflooring, sheathing, and any other remaining building materials within the remediation area. Particular attention will be given to identifying any remaining mold growth, microbial contamination, water damage, wood rot, moisture-related deterioration, or other conditions associated with past or ongoing water intrusion.

All remediated areas shall be left dry and visibly free of mold growth, water-damaged materials, mold-impacted materials, wood rot, and materials exhibiting compromised structural integrity. Exposed framing and structural materials shall be thoroughly inspected to verify that all affected materials identified within the scope of remediation have been properly removed, cleaned, or otherwise remediated in accordance with the remediation protocol.

In addition to addressing mold and water-related conditions, all surfaces within the remediation area shall be free of excessive dust, settled particulate matter, and remediation debris. The presence of visible dust, debris, or cleaning residues may indicate incomplete remediation and may require additional cleaning prior to clearance. Particular attention shall be given to framing members, horizontal surfaces, ledges, corners, cavities, penetrations, and other areas where dust and debris may accumulate.

Containment barriers and engineering controls shall remain in place until the visual inspection has been completed and final clearance criteria have been verified by laboratory analysis, as applicable. Clearance shall not be considered achieved until both the visual inspection and laboratory results confirm that remediation objectives have been successfully met.

Requirements: Air and Surface Sampling

Air Sampling Clearance Criteria
Indoor airborne mold spore concentrations should be generally equal to or lower than outdoor levels and should be qualitatively similar in the types of fungi identified. As a general guideline, the fungal genera detected indoors using Air-O-Cell™ sampling should not exceed those found outdoors. Marker fungi associated with indoor mold growth, such as *Chaetomium* or *Stachybotrys*, should not exceed 2 spores. Other water-damage-associated fungi, including *Aspergillus/Penicillium*-like spores and similar indicator organisms, should not be present at elevated concentrations and should generally remain below 1,000 spores per cubic meter of air. It is recommended that air filtration equipment operate continuously for at least 48 hours prior to clearance testing to help ensure representative results.

Surface Sampling Clearance Criteria
Surface samples collected from remediated areas should reveal no mold growth or elevated fungal presence indicative of remaining contamination. Sample results should not identify active mold growth or conditions suggesting the need for additional remediation. Any evidence of residual mold contamination may require further cleaning or removal of affected materials before clearance can be achieved.

IICRC S520 Clearance Standards apply:
- One air sample from inside each containment or work area where mold was previously detected (one per area).
- One indoor control air sample from inside the property outside of the containment(s) or work area(s), or outside the dwelling if no such area exists.
- One to two surface sample(s) per affected area where mold growth was previously observed.
- At least one outdoor air sample required as a baseline for the Lab.

4: REGULATIONS, NOTICES AND PERTINENT INFORMATION

4.1	Regulations and Notices

Information

Regulations and Notices: Consumer Mold Information Sheet (CMIS)

The Consumer Mold Information Sheet is an informational document required under the Texas Mold Assessment and Remediation Rules that must be provided to property owners or occupants during mold assessment or remediation activities. It outlines basic facts about mold, the function of the mold remediation industry, and general recommendations for preventing and addressing mold growth. The document is intended for educational purposes only and does not serve as a substitute for professional assessment or medical advice, and it also provides information on how consumers can file complaints or seek assistance through the appropriate regulatory agencies if concerns arise regarding mold-related services.

TEXAS DEPARTMENT OF LICENSING & REGULATION
P.O. Box 12157 • Austin, Texas 78711-2157
www.tdlr.texas.gov

CONSUMER MOLD INFORMATION SHEET

State rules require licensed mold assessors and remediators to give a copy of this Consumer Mold Information Sheet to each client and to the property owner, if not the same person, before starting any mold-related activity [16 TAC 78.70].

How does Texas regulate businesses that do testing for mold or that do mold cleanup?
The Department of Licensing and Regulation (TDLR) regulates such businesses in accordance with the Texas Occupations Code, Chapter 1958. Under the **Texas Mold Assessment and Remediation Rules (rules)** (16 Tex. Admin. Code, Chapter 78), all companies and individuals who perform mold-related activities in Texas must be licensed by TDLR unless exempt. (See Page 2 regarding owner exemptions.) Individuals must meet certain qualifications, have required training, and pass a state exam and criminal history background check in order to be issued a license. Applicants for a mold remediation worker registration must have training and pass a criminal history background in order to be registered by TDLR. Laboratories that analyze mold samples must also be licensed and meet certain qualifications. The rules set minimum work practices and procedures and also require licensees to follow a code of ethics. To prevent conflicts of interest, the rules also prohibit a licensee from conducting both mold assessment and mold remediation on the same project. While the rules regulate the activities of mold licensees when they are doing mold-related activities, the rules do not require any property owner or occupant to clean up mold or to have it cleaned up.

How can I know if someone is licensed?
A licensed individual is required to carry a current TDLR license certificate with the license number on it. A search tool and listings of currently licensed companies and individuals can be found at: https://www.tdlr.texas.gov/LicenseSearch/.

What is "mold assessment?"
Mold assessment is an inspection of a building by a **mold assessment consultant** or **technician** to evaluate whether mold growth is present and to what extent. Samples may be taken to determine the amount and types of mold that are present; however, sampling is not necessary in many cases. When mold cleanup is necessary a licensed mold assessment consultant can provide you with a **mold remediation protocol.** A protocol must specify the estimated quantities and locations of materials to be remediated, methods to be used and clearance criteria that must be met.

What is meant by "clearance criteria?"
Clearance criteria refer to the level of "cleanliness" that must be achieved by the persons conducting the mold cleanup. It is important to understand and agree with the mold assessment consultant prior to starting the project as to what an acceptable clearance level will be, including what will be acceptable results for any air sampling or surface sampling for mold. There are no national or state standards for a "safe" level of mold. Mold spores are a natural part of the environment and are always present at some level in the air and on surfaces all around us.

What is "mold remediation?"
Mold remediation is the cleanup and removal of mold growth from surfaces and/or contents in a building. It also refers to actions taken to prevent mold from growing back. Licensed **mold remediation contractors** must follow a mold remediation protocol as described above and their own **mold remediation work plan** that provides specific instructions and/or standard operating procedures for how the project will be done.

Before a remediation project can be deemed successful, a mold assessment consultant must conduct a **post-remediation assessment.** This is an inspection to ensure that the work area is free from all visible mold and wood rot, the project was completed in compliance with the remediation protocol and remediation work plan, and that it meets all clearance criteria that were specified in the protocol. The assessment consultant must give you a **passed clearance report** documenting the results of this inspection. If the project fails clearance, further remediation as prescribed by a consultant will be necessary.

What is a Certificate of Mold Damage Remediation?
No later than the 10th day after a mold remediation project stop date, the remediation contractor must sign and give you a **Certificate of Mold Damage Remediation**. The licensed mold assessment consultant who conducted the post-remediation assessment must also sign the certificate. The consultant must truthfully state on the certificate that the mold contamination identified for the project has been remediated and whether the underlying cause of the mold has been corrected. (That work may involve other types of professional services that are not regulated by the mold rules, such as plumbing or carpentry.) Receiving a certificate documenting that the underlying cause of the mold was remediated is an advantage for a homeowner. It prevents an insurer from making an underwriting decision on the residential property based on previous mold damage or previous claims for mold damage. If you sell your property, the law requires that you provide the buyer a copy of all certificates you have received for that property within the preceding five years.

How is a property owner protected if a mold assessor or remediator does a poor job or damages the property?
The rules require licensees to have commercial general liability insurance in the amount of at least $1 million, or to be self-insured, to cover any damage to your property. Before hiring anyone, you should ask for proof of such insurance coverage. You may wish to inquire if the company carries additional insurance, such as professional liability/errors and omissions (for consultants) or pollution insurance (for contractors), that would provide additional recourse to you should the company fail to perform properly.

How is my confidentiality protected if I share personal information about myself with a company?
Under the code of ethics in the rules, to the extent required by law, licensees must keep confidential any personal information about a client (including medical conditions) obtained during the course of a mold-related activity. Further, you may be able to negotiate a contract to include language that other personal information be kept confidential unless disclosure "is required by law." However, licensees are required to identify dates and addresses of projects and other details that can become public information.

How do I file a complaint about a company?
Anyone who believes a company or individual has violated the rules can file a complaint with TDLR. For information on this process, call 1-800-803-9202, or complete the online complaint form at https://www.tdlr.texas.gov/complaints/.

Can property owners do mold assessment or remediation on their own property without being licensed?
Yes. A homeowner can take samples for mold or clean it up in the home without a license. An owner, or a managing agent or employee of an owner of a residential property is not required to be licensed, **unless** the property has 10 or more residential dwelling units. For non-residential properties, an owner or tenant, or a managing agent or employee of an owner or tenant, is not required to be licensed to do mold assessment or remediation on property owned or leased by the owner or tenant, **unless** the mold contamination affects a total surface area of 25 contiguous square feet or more. Please refer to 16 TAC §78.30 for further details on exceptions and exemptions to licensing requirements.

For more information about mold and the Texas Mold Assessment and Remediation Rules, contact:
Texas Department of Licensing and Regulation
Mold Assessors and Remediators
P.O. Box 12057, Austin, TX 78711
Phone: 512-463-6599 or 800-803-9202
www.tdlr.texas.gov

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Regulations and Notices: Texas Mold Assessment and Remediation Regulations

This Mold Remediation Protocol (MRP) was prepared by a licensed Mold Assessment Consultant (MAC) to obtain a Certificate of Mold Damage Remediation (CMDR). The work outlined in this MRP must be conducted by a licensed Mold Remediation Contractor (MRC) and workers must be properly registered in accordance with the requirements of the Texas Mold Assessment and Remediation Rules (Rules), 16 Tex. Admin. Code, Chapter 78 as outlined by the Texas Department of Licensing and Regulation (TDLR).

Regulations and Notices: Texas Asbestos Health Protection Rules for Single Family Homes

Single family dwellings, that are to remain single family dwellings, do not fall under the definition of a “public building” as defined in the Texas Asbestos Health Protection Rules (TAHPR). Therefore, TAHPR does not require suspect materials to be sampled prior to disturbance or removed. However, federal Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) regulations concerning asbestos do apply, and any contractor that will disturb the material must be advised that it contains asbestos. Materials such as drywall wall and ceiling systems, flooring materials and mastics, and ceiling tiles, are just some examples of materials that could contain asbestos. In these cases, the responsibility to prove or disprove the presence of asbestos falls on the employer.

Regulations and Notices: Notification

The remediation contractor must submit a Mold Remediation Notification to TDLR when mold contamination affects a total surface area of 25 contiguous square feet or more. Notification shall be done no less than five calendar days before the anticipated start date of the mold remediation project.

The Texas Mold Monitor of April 2025 focuses on clarifying when mold remediation projects must be reported to Texas Department of Licensing and Regulation (TDLR), emphasizing the 25 contiguous square foot threshold and reminding licensees that “contiguous” includes adjacent surfaces and all cleaning or removal activities. It stresses that even smaller jobs must follow many regulatory requirements if a licensed contractor is involved, including proper protocols, worker licensing, insurance, and safety standards. The overall theme is to reinforce compliance, reduce misunderstandings about what counts as remediation, and encourage contractors to err on the side of notifying TDLR to ensure projects are handled within the Texas Administrative Code (TAC).

Regulations and Notices: Workplan

The Mold Remediation Contractor shall prepare a workplan before starting the remediation project which is to be given to the owner for approval. This workplan will contain the rooms to be worked in, quantities of materials to be removed, methods of cleaning, and timeframe for proposed completion of the project. A copy of the MRP must be kept on site at all times.

Regulations and Notices: Certificate of Mold Damage Remediation (CMDR)

The Certificate of Mold Damage Remediation is a formal document issued upon completion of mold remediation activities, verifying that the work has been performed in accordance with the applicable remediation protocol and regulatory requirements. Under the Texas Mold Assessment and Remediation Rules, the Mold Remediation Contractor is responsible for preparing and providing this certificate to the property owner or owner’s agent following completion of the project. The Certificate requires the signature and license number of both the Mold Remediation Contractor and Mold Assessment Consultant.

The certificate serves as official documentation that remediation was conducted within the defined scope and in compliance with state standards. The Texas Administrative Code further requires that the Mold Remediation Contractor assign a unique certificate number to each Certificate of Mold Damage Remediation they issue, ensuring traceability and accountability for the work performed. This certificate may also be required for recordkeeping, disclosure, or verification purposes in future property transactions or regulatory reviews.

Regulations and Notices: Consumer Complaints

If you would like to file a complaint, you can do so online through the Texas Department of Licensing and Regulation:
https://www.tdlr.texas.gov/complaints-and-enforcement/
Intake@tdlr.texas.gov
(800) 803-9202

COMPLAINTS

Complaints can be filed by mail to:

Texas Department of Licensing & Regulation
Attention: Enforcement Division
P.O. Box 12157
Austin, Texas 78711

or email to:
Intake@tdlr.texas.gov

or file online at:
www.tdlr.texas.gov/complaints

Toll-free (in Texas): (800) 803-9202

5: CONTRACTOR RECOMMENDATIONS

5.1	Mold Remediation Contractor (MRC)

Information

Mold Remediation Contractor (MRC): SERVPRO of Bastrop, Fayette County

Howard Environmental LLC recommends the following TDLR Licensed Mold Remediation Contractor:

ServPro of Bastrop, Fayette County
Brandon Paine
737-302-1373
bpaine@servprobastrop.com

STANDARDS OF PRACTICE

Regulations, Notices and Pertinent Information

It is critical that licensed, trained, and qualified mold remediation professionals perform the clean-up work. Mold Remediation should be performed to the standards found in IICRC S520, Standard and Reference Guide for Mold Remediation, and in accordance with the laws of the state of Texas. In accordance with the Texas Mold Assessment and Remediation Rules (Rules), 16 Tex. Admin. Code, Chapter 78, if licensed Remediation Contractor is performing the mold remediation, a Mold Remediation Protocol is required. In addition, state notification requirements are triggered if more than 25 contiguous square feet of mold contamination material is affected in any one area. These requirements require 5-day notification prior to remediation. Contaminated materials should be removed using appropriate containment and removal practices in accordance with the Rules. Proper engineering controls must be in place to prevent the further spreading of airborne mold spores.

Remediation work should be conducted following industry practices and guidelines, including the following.

“Standard and Reference Guide for Professional Mold Remediation – S520”, Institute of Inspection, Cleaning and Restoration Certification (IICRC), Vancouver, Washington, December 2003.

“Mold Remediation in Schools and Commercial Buildings”, Publication No. 402-K-01-001,

U.S. Environmental Protection Agency (EPA), Washington, D.C., March 2001.

"Guidelines on Assessment and Remediation of Fungi in Indoor Environments," New York City Department of Health, April 2000.