

Instructions: Complete the Mold/Microbial Remediation Plan Template below. Ensure that site specific aspects are addressed and incorporated into this plan.

Project Title:
Plan Author (print name):
Project Location:

Contract #:
Date:

Description

In some individuals, exposure to mold can cause a variety of health effects and symptoms, including allergic reactions. This site specific mold remediation plan template presents the means/methods for the remediation/cleanup of mold and moisture problems specific to this project as well as measures designed to protect the health of building occupants and remediators.

Mold can be found almost anywhere; it can grow on virtually any organic substance, as long as moisture and oxygen are present. There is mold that can grow on wood, paper, carpet, foods and insulation. When excessive moisture accumulates in buildings or on building materials, mold growth will often occur, particularly if the moisture problem remains undiscovered or not addressed. It is impossible to eliminate all mold and mold spores in the indoor environment. However, mold growth can be controlled indoors by controlling moisture indoors.

Assess the size of the mold or moisture problem and the type of damaged materials before planning the remediation work. When planning remediation efforts, the following should be addressed:

1. Repair/Remove the water or humidity problem. Complete and carry out repair plan, if appropriate. Revise remediation plan, as necessary, if more damage is discovered during remediation.
2. Completely clean up mold and dry water-damaged areas. Select appropriate cleaning and drying methods for damaged/contaminated materials. Carefully contain and remove moldy building materials. Use appropriate Personal Protective Equipment (PPE). Arrange for outside professional support, if necessary.

Describe work area/mold contaminated area and materials below:

Use the check boxes below to indicate mold contaminated areas:

Yes	No
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Small (10 square feet of visible mold): The work area shall be unoccupied; removing people from adjacent spaces is not necessary but is recommended for infants, persons recovering from surgery, immune suppressed people or people with chronic inflammatory lung diseases (e.g. asthma, hypersensitivity pneumonitis or severe allergies). Containment of the work area is not necessary.

Use dust suppression methods (e.g. misting (not soaking) surfaces prior to remediation). Clean and/or remove materials as noted in the approved mold remediation plan. Seal materials being removed in plastic bags. The work area and areas used by remediation workers for egress shall be cleaned with a damp cloth or mop and a detergent solution. Leave area clean, dry and free of visible debris.

Yes	No
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Medium (10-30 contiguous square feet): The work area shall be unoccupied; removing people from adjacent spaces is not necessary but is recommended for infants, persons recovering from surgery, immune suppressed people or people with chronic inflammatory lung diseases (e.g. asthma, hypersensitivity pneumonitis and severe allergies). Containment of the work area is not necessary. Cover surfaces in the work area that could become contaminated with secured plastic sheets to contain dust and debris and prevent further contamination. Use dust suppression methods (e.g. misting (not soaking) surfaces prior to remediation). Clean and/or remove materials as noted in the approved mold remediation plan. Seal materials being removed in plastic bags. The work area and areas used by remediation workers for egress shall be cleaned with a damp cloth or mop and a detergent solution. Leave area clean, dry and free of visible debris.

Yes	No
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Large (30-100 contiguous square feet): If abatement procedures are expected to generate significant amounts of dust (e.g. abrasive cleaning of contaminated surfaces, demolition of plaster walls) or the visible concentration of mold is heavy (i.e. blanket versus patchy coverage) follow the extensive contamination procedures below. Consult with industrial hygienists or other environmental health and safety professionals with experience performing microbial investigations and/or mold remediation before beginning remediation. The work area and areas directly adjacent to it shall be unoccupied. Cover surfaces in the work area and adjacent areas that could become contaminated with secured plastic sheets to contain dust and debris and prevent further contamination. Seal ventilation ducts/grills in the work area and areas directly adjacent with plastic sheeting. Use dust suppression methods (e.g. misting (not soaking) surfaces prior to remediation). Clean and/or remove materials as noted in the approved mold remediation plan. Seal materials being removed in plastic bags. The work and surrounding areas shall be HEPA vacuumed and cleaned with a damp cloth or mop and a detergent solution. All areas shall be left dry and free from contamination and debris.

Yes	No
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Extensive (more than 100 contiguous square feet): For remediation of extensive contamination (greater than 100 contiguous square feet in one area), the plan shall address: work area isolation, the use of exhaust fans with HEPA filtration and the design of airlocks/decontamination rooms. Consult with industrial hygienists or other environmental health and safety professionals with experience performing microbial investigations and/or mold remediation before beginning remediation. The work area shall be unoccupied. If the containment practices listed below will keep mold spores from leaving the contained area, then it may not be necessary to remove people from surrounding areas. However, removal is still recommended for infants, persons recovering from surgery, immune suppressed people or people with chronic inflammatory lung diseases (e.g. asthma, hypersensitivity pneumonitis or severe allergies). Before beginning work, cover and seal other surfaces in the work area that could become contaminated with mold spores using plastic sheeting and duct tape; this will help contain dust and debris and prevent further contamination. Contain the affected area. Completely isolate the area to be evaluated and remediated from occupied spaces using plastic sheeting or other particulate barrier, sealed with duct tape. Use air locks at entry/exit points and provide a sealed decontamination room that is connected to the containment where mold remediation workers shall remove all PPE and protective clothing before exiting. Shut off the HVAC system and seal ventilation ducts/grills in the work area and adjacent areas to prevent the spread of spores. Keep the work area under negative pressure to minimize the spread of spores to adjacent areas. Use an exhaust fan equipped with HEPA filtration to maintain negative pressure. Use dust suppression methods (e.g. misting (not soaking) surfaces prior to remediation). Clean and/or remove materials as noted in the approved mold remediation plan. Seal materials being removed in plastic bags; wipe down or HEPA vacuum the outside surface of the bags of material being removed. Before removing isolation barriers, HEPA vacuum the contained area and the decontamination room and then clean or mop it with a detergent. Leave area clean, dry and free of visible debris.

Note: If multiple areas or rooms of a structure/building are contaminated with mold, a plan drawing must be submitted as an attachment to this plan which indicates the contaminated areas as well as the condition of mold contamination as detailed above.

Additional Notes:

Assessment

Has a mold assessment been conducted for suspected contaminated areas?

Yes	No
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If yes, who conducted the assessment (explain):

Source of Mold

Refer to 3rd party hazardous mold assessment indicated above.

List all areas or building components/materials in which mold was discovered:

Area #1:	
Area #2:	
Area #3:	
Area #4:	
Area #5:	
Area #6:	
Area #7:	

Additional Notes:

Clean up / Removal Methods

Indicate below the removal methods that will be implemented (select all that apply):

Yes	No
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Wet Vacuum: *(in case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried). Steam cleaning may be an alternative for carpets and some upholstered furniture.*

Yes	No
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Damp-wipe surfaces: *with plain water or with water and detergent solution (except wood - use wood floor cleaner); scrub as needed.*

Yes	No
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High-efficiency particulate air (HEPA) vacuum: *after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.*

Yes	No
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Discard: *remove water-damaged materials by hand and place in a sealed plastic bag. This method is usually conducted when inside of a containment. Dispose of as normal waste. HEPA vacuum after the surface/material has dried. Double-wrap/bag all demolished and removed materials in 6-mil polyethylene sheeting/bags. Seal wrapping "goose neck" bag securely and HEPA vacuum before removing from the site. Dispose of contaminated materials in a landfill authorized to receive construction debris.*

Yes	No
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Bleach / Chlorine Solution: *Thoroughly wash with a 5% Chlorine solution. Scrub and HEPA vacuum to remove chlorine residue and oxidized (dead) fungal spores. Re-clean any areas with visible fungal colonies/mold. See Chlorine/Bleach SDS to reference PPE required for use.*

Describe in detail the tools/equipment that will be used to remove contaminated mold material (this section is to include moisture and relative humidity control, waste packaging and disposal procedures, and cross contamination controls):

Containment

Will remediation methods generate excessive dust or airborne mold particles?

Yes	No
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- OR -

Will building/structure be occupied? Will other trades/employees potentially be exposed to airborne mold?

Yes	No
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If yes in either of the above questions, containment will be required. Please indicate below the type of containment that will be implemented. Also reference requirements in the description section above.

Yes	No
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Limited: Use 6-mil polyethylene sheeting ceiling to floor around affected area with a slit entry and covering flap; maintain area under negative pressure with HEPA filtered fan unit. Block supply and return air vents within containment area.

Yes	No
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Full: Use two layers of fire-retardant polyethylene sheeting with one airlock chamber. Maintain area under negative pressure with HEPA filtered fan exhausted outside of building. Block supply and return vents within containment area.

Describe in detail the construction barriers and warning signs that will be implemented:

If applicable, describe in detail below, the HVAC shut down and start up procedures as well as the HVAC evaluation and remediation procedures:

A minimum pressure differential of ~5 Pa (0.02 inches w.g.) shall be maintained for negatively pressurized contained areas. Pressure differentials shall be monitored and documented at regular intervals and that a minimum of four air changes per hour be maintained for ventilation and contaminant dilution.

Note: Stop all work if there is a break in the containment barriers, such as unscheduled removal of material from an uncontained side of a wall, and sample for possible dispersion of fungal spores by using a laser particle counter (as a surrogate for direct counting of fungal spores) and by collecting samples with spore traps or sticky tape for analysis by microscopy.

Area Clearance Criteria

Prior to reconstruction activities, a final visual inspection and clearance sampling shall be performed to verify the completeness of the remediation activities. Visual inspection shall be completed using ASTM Designation E-1368-2005 as a general guideline. Visual inspection shall be considered acceptable when no visible viable colonies or dust are present within the work area.

Final air clearance and surface samples shall be collected and submitted for analysis. Clearance samples may consist of the following samples:

- Viable and non-viable air samples using air-o-cell sampling cassettes; and
- Surface samples using tape lifts, swabs or other media the analytical lab requests.

Upon notification that clearance has been achieved, determine whether it is necessary to apply a coat of fungicide enhanced primer to all exposed framing to include the surface of plywood sheathing.

Area clearance conducted by (qualified person, name):

Organization / Company:

Personal Protective Equipment (PPE)

Molds are known allergens and may be toxic. Investigators shall use Personal Protective Equipment (PPE) while investigating as well as during remediation/clean-up situations.

The minimum PPE for mold investigation includes but is not limited to:

N-95 respirator

Gloves (Nitrile Glove)

Eye protection

The minimum PPE for remediation includes but is not limited to:

Respiratory protection (type determined during the investigation)

Non-vented goggles

Protective clothing (e.g. disposable coveralls) to prevent cross contamination and skin contact with mold and chemicals. For areas greater than 100 square feet, ensure that protective clothing covers entire body including head and feet

Long gloves made of material that will protect user from chemicals handled for surface cleaning (Nitrile Gloves)

If applicable, list the type of respiratory equipment to be implemented:

Make:

Model:

Protection Factor:

Make:

Model:

Protection Factor:

Make:

Model:

Protection Factor:

Note: Any employee who intends on using a sealed respirator must first complete a medical evaluation to determine if he/she is physically able to wear a sealed respirator and second, a respirator fit test must be conducted to ensure proper fit and seal of the respirator. Fit tests are conducted for each specific respirator. If the employee wishes to use an alternate style/make/model of respirator, an additional fit test will be required. Records of fit tests and medical evaluations must be kept available at the project site.

Personnel

Competent Person for mold remediation:

Name

Title

Mold Remediators / Workers (please print):

Name

Name

Name

Name

Name

Name

Remediation Worker Training

Contractor personnel and subcontractors are required to be trained regarding the hazards and control methods of mold remediation. All involved personnel shall review this Mold Remediation Plan and become familiar with the information therein. Further, the Contractor shall maintain a competent person at the site during all mold remediation activities.

The following individuals have been trained on this remediation plan regarding the hazard and controls of mold remediation. Print Name Below:

Name

Name

Name

Name	Name	Name

Date:

Competent Person Signature:

Centennial Rep Name:

Centennial Rep Signature:

Date:

This plan is to be kept on site during mold remediation activities