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GLOBAL MOLD REMEDIATION GUIDELINES

1. **General Practices.** All work, which may result in the disturbance of mold growth or contamination, should be performed using work practices that minimize the disturbance of affected materials and dispersion of mold spores. Measures should also be taken to protect the health and safety of individuals performing remediation activities. At a minimum, work should be performed in accordance with the following guidelines addressing mold/water intrusion remediation:
 - Environmental Protection Agency. (September 2008). *Mold Remediation in Schools and Commercial Buildings*. EPA 402-K-01-001.
 - New York City Department of Health. (November 2008). *Guidelines on Assessment and Remediation of Fungi in Indoor Environments*.
 - U.S. Department of Labor Occupational Safety and Health Administration (November 8, 2013). *Safety and Health Information Bulletin: A Brief Guide to Mold in the Workplace*. SHIB 03-10-10.
 - American Industrial Hygiene Association. (2008). *Recognition, Evaluation and Control of Indoor Mold*. IMOM08-679.
 - Institute of Inspection, Cleaning and Restoration Contractors. (2015). *IICRC 500 Standard and Reference Guide for Professional Water Damage Restoration*. Fourth edition.
 - Institute of Inspection, Cleaning and Restoration Contractors. (2015). *IICRC S520 Standard and Reference Guide for Professional Mold Remediation*. Third edition.
2. **Material Removal.** In the course of removing building materials, bulk quantities of visible mold growth shall be removed from all wood structural members or other materials. Materials should be cleaned or removed 18 inches past visible mold growth unless otherwise specified.
3. **Regulated Materials.** Prior to commencing remediation activities, building materials that may be disturbed should be assessed for asbestos and lead-based paint hazards per applicable regulations.
4. **Sources of Moisture.** Mold growth is most frequently caused by a failure to adequately control moisture. Thus, whenever mold remediation is performed, measures should be taken to correct the conditions resulting in excess moisture and mold growth.

GENERAL PROCEDURES

M0: General Procedures for De Minimus Mold Remediation

The following procedures are provided for general guidance and may be modified as appropriate to address specific conditions on a case-by-case basis. All work should be performed in accordance the aforementioned guideline publications.

- **Example Applications**
 - Surface cleaning and non-aggressive removal of ≤ 1 ft.² of mold growth.
 - Surface cleaning of areas with light or minimal mold spore deposition/contamination.
 - Typical housekeeping activities.
- **Personal Protective Equipment**
 - May include the use of an N-95 disposable respirator, gloves and eye protection.
- **Containment Provisions**
 - None required.
- **Work Practices**
 - Mist surface and wet-wipe in a manner that minimizes disturbance of growth.
- **Post-Remediation Assessment**
 - Visual confirmation of removal of growth.

M1: General Procedures for Small Scale Mold Remediation

The following procedures are provided for general guidance and may be modified as appropriate to address specific conditions on a case-by-case basis. All work should be performed in accordance the aforementioned guideline publications.

- **Example Applications**
 - Surface cleaning and non-aggressive removal of >1 to <10 ft.² of mold growth.
 - Aggressive removal of materials with ≤ 1 ft.² of dense mold growth, or <10 ft.² of sparse mold growth.
 - General construction dust control for removal of building materials.
- **Personal Protective Equipment**
 - N-95 disposable respirator, gloves and eye protection.
- **Containment Provisions**
 - Cover the immediate work area with plastic sheeting.
 - A floor to ceiling plastic barrier should be erected to further isolate the work area if greater than approximately 5 ft. of material is being aggressively removed (e.g., removal of drywall).
 - Ensure ventilation provisions in the area are turned off.
- **Work Practices**
 - Remediation performed by maintenance/construction personnel with awareness training regarding proper clean up methods, personal protection, and potential health hazards associated with mold.
 - Clean surfaces using a HEPA vacuum or dust suppression methods (e.g., misting).
 - Remove materials using methods to minimize the disturbance of growth and for general dust suppression (e.g., HEPA vacuum positioned at the point of operation/removal and misting).
 - If removal cannot be accomplished without significant disturbance of mold growth or more extensive mold growth is encountered, then work should stop and medium or large scale remediation procedures should be implemented.
 - All contaminated materials should be removed from the work area in a sealed plastic bag.
 - Following removal of mold growth, clean the work area and immediately adjacent surfaces using a HEPA vacuum or wet-wiping.

- **Post-Remediation Assessment**

- Assessment by a designated individual familiar with these procedures and with mold awareness training.
- Visual confirmation of removal of growth and absence of contamination and debris prior to removal of containment provisions.
- Materials should be dried and causes of moisture impact controlled to prevent future growth.

M2: General Procedures for Medium Scale Mold Remediation

The following procedures are provided for general guidance and may be modified as appropriate to address specific conditions on a case-by-case basis. All work should be performed in accordance the aforementioned guideline publications.

- **Example Applications**

- Surface cleaning and non-aggressive removal of 10 to <100 ft.² of mold growth.
- Aggressive removal of materials with >1 to <10 ft.² of dense mold growth, or 10 to <100 ft.² of sparse mold growth.

- **Personal Protective Equipment**

- ½-face respirator with HEPA filters, gloves, disposable coveralls and goggles. Consider the use of HEPA/organic vapor combination cartridges if strong musty odors are present.

- **Containment Provisions**

- Isolate the work area from the surrounding environment using 1 layer of plastic sheeting configured with a slit entry and covering flap.
- Seal all penetrations to surrounding areas using plastic and tape (e.g., outlets, light switches, ventilation grills).
- Negatively pressurize the work area and exhaust out of the work area with HEPA filtration.

- **Work Practices**

- Remediation performed by professional mold remediation contractors with appropriate training and experience in mold remediation practices.
- Clean surfaces using a HEPA vacuum or dust suppression methods (e.g., misting).
- Remove materials using methods to minimize the disturbance of growth to the extent feasible.
- All contaminated materials should be removed from the work area in a sealed plastic bag.
- Following removal of mold growth, clean the work area, immediately surrounding area, and worker egress pathways using a HEPA vacuum or wet-wiping.

- **Post-Remediation Assessment**

- Assessment performed by a professional mold consultant with appropriate training and experience.
- Visual confirmation of removal of growth and absence of contamination and debris.
- Collection and evaluation of air and surface samples as appropriate to support visual inspection.
- Materials should be dried and causes of moisture impact controlled to prevent future growth.
- Containment provisions remain in place until the work areas has passed the assessment criteria.

M3: General Procedures for Large Scale Mold Remediation

The following procedures are provided for general guidance and may be modified as appropriate to address specific conditions on a case-by-case basis. All work should be performed in accordance the aforementioned guideline publications.

- **Example Applications**

- Surface cleaning and non-aggressive removal of ≥100 ft.² of mold growth.

- Aggressive removal of materials with ≥ 100 ft.² of dense or sparse mold growth.
- **Personal Protective Equipment**
 - Full-face respirator with HEPA filters, gloves, disposable coveralls with head and foot coverings and goggles. Consider the use of HEPA/organic vapor combination cartridges if strong musty odors are present.
- **Containment Provisions**
 - Isolate the work area from the surrounding environment using 2 layers of plastic sheeting configured with a decontamination area between two slit entries with covering flaps.
 - Seal all penetrations to surrounding areas using plastic and tape (e.g., outlets, light switches, ventilation grills).
 - Negatively pressurize the work area and exhaust to the outdoor environment with HEPA filtration.
- **Work Practices**
 - Remediation performed by professional mold remediation contractors with appropriate training and experience in mold remediation practices.
 - Clean surfaces using a HEPA vacuum or dust suppression methods (e.g., misting).
 - Remove materials using methods to minimize the disturbance of growth to the extent feasible.
 - All contaminated materials should be removed from the work area in a sealed plastic bag.
 - Following removal of mold growth, clean the work area, immediately surrounding area, and worker egress pathways using a HEPA vacuum or wet-wiping.
 - Mist surface and wet-wipe in a manner that minimizes disturbance of growth.
- **Post-Remediation Assessment**
 - Assessment performed by a professional mold consultant with appropriate training and experience.
 - Visual confirmation of removal of growth and absence of contamination and debris.
 - Collection and evaluation of air and surface samples as appropriate to support visual inspection.
 - Materials should be dried and causes of moisture impact controlled to prevent future growth.
 - Containment provisions remain in place until the work areas has passed the assessment criteria.

MC: General Procedures for Removal of Mold Spore Contamination/Deposition

The following procedures are provided for general guidance and may be modified as appropriate to address specific conditions on a case-by-case basis. All work should be performed in accordance the aforementioned guideline publications.

- **Example Applications**
 - Removal of secondary mold spore deposition from surfaces and contents resulting from the presence of mold growth reservoirs in the shared environment.
 - Note: Areas of light or minimal contamination may be cleaned in accordance with procedure M0.
- **Personal Protective Equipment**
 - Minimum of N-95 disposable respirator, gloves and eye protection. More extensive protective equipment may be appropriate depending on the severity of contamination.
- **Containment Provisions**
 - Not generally required, however conditions of severe contamination may necessitate containment provisions depending on conditions in surrounding environments.
- **Work Practices**
 - Remediation performed by professional mold remediation contractors with appropriate training and experience in mold remediation practices.
 - Clean horizontal and vertical surfaces in place.

- Wet-wipe hard, non-porous surfaces.
 - HEPA vacuum soft, porous surfaces. Disposal of porous materials exhibiting growth may be necessary.
 - Launder or dry-clean textiles.
 - Consider use of HEPA filtered negative air machines to purge or scrub the air in the area.
- **Post-Remediation Assessment**
 - Assessment performed by a professional mold consultant with appropriate training and experience.
 - Visual confirmation of removal of growth and absence of contamination and debris.
 - Collection and evaluation of air and surface samples as appropriate to support visual inspection.

ME: General Procedures for Exterior Mold Remediation

The following procedures are provided for general guidance and may be modified as appropriate to address specific conditions on a case-by-case basis. All work should be performed in accordance the aforementioned guideline publications.

- **Example Applications**
 - Cleaning of ≥ 10 ft.² of mold growth from exterior surfaces.
 - General construction dust control for the exterior removal of building materials.
 - Note: Cleaning of < 10 ft.² of exterior mold growth may be conducted in accordance with procedure M0.
- **Personal Protective Equipment**
 - Minimum of N-95 disposable respirator, gloves and eye protection. More extensive protective equipment may be appropriate depending on the severity of growth or intensity of removal activities.
- **Containment Provisions**
 - Prior to commencing work, close all windows and doors in or adjacent to the work area and seal interior window and door penetrations with tape (easy release or painters tape).
 - If removal of exterior building materials is to occur, seal all wall penetrations (i.e., electrical outlets and light switches) and base of wall on the associated interior wall being repaired with tape (easy release or painters tape).
- **Work Practices**
 - Remediation performed by maintenance/construction personnel with awareness training regarding proper clean up methods, personal protection, and potential health hazards associated with mold. The use of a professional mold remediation contractor may be appropriate depending on the severity of mold growth.
 - Proceed with exterior cleaning or building material removal using dust control methods (e.g., misting).
 - Inspect the back of exposed interior wall systems for evidence of mold growth. If mold growth is observed, proceed with cleaning or removal in accordance with procedures M0-M3 as appropriate.
 - Use a HEPA vacuum to remove excess debris from the wall cavity prior to reconstruction.
- **Post-Remediation Assessment**
 - Assessment by a designated individual familiar with these procedures and with mold awareness training.
 - Visual confirmation of removal of growth and absence of contamination and debris prior to removal of containment provisions.
 - Materials should be dried and causes of moisture impact controlled to prevent future growth.

MT: General Procedures for Invasive Inspection for Mold

The following procedures are provided for general guidance and may be modified as appropriate to address specific conditions on a case-by-case basis. All work should be performed in accordance the aforementioned guideline publications.

- **Example Applications**
 - Removal of building materials in areas where there is the potential for mold growth (i.e., the presence of mold growth has not been confirmed).
- **Personal Protective Equipment**
 - May include the use of an N-95 disposable respirator, gloves and eye protection as appropriate for general construction activities.
- **Containment Provisions**
 - Follow practices for general construction dust control (see M1 above). No special provisions for controlling mold growth are required.
- **Work Practices**
 - Remove a small area of building material from the area in question to facilitate visual inspection (e.g., <1ft.²).
 - In the course of removal, proceed in a manner that minimizes disturbance of potential concealed mold growth reservoirs. For example, cut around and gently remove a section of drywall as a single piece rather than demolishing the area with a hammer. A HEPA vacuum nozzle placed at the point of removal may further control potential releases.
 - Continue removal of materials in a stepwise fashion in order to perform desired construction repairs or to determine if any hidden mold growth exists.
 - If mold growth is encountered in the course of removal, immediately stop and proceed in accordance with mold remediation procedures as appropriate (see M0-M3 above).
- **Post-Remediation Assessment**
 - No assessment is necessary if no mold growth is encountered. If mold growth is encountered, follow the appropriate post-remediation assessment guidelines as discussed in M0-M3 above.