

Ken Lawson, Secretary

Rick Scott, Governor

MOLD RELATED SERVICES LICENSING PROGRAM

RULES WORKSHOP AGENDA

**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
1940 NORTH MONROE STREET
TALLAHASSEE, FLORIDA 32399**

The Telephone Conference Number is (888)670-3525 and the Participant Passcode is 7489217568 then #

SEPTEMBER 5, 2014

10:00 A.M.

- I. Call to Order**
- II. Opening Remarks**
- III. Rule Discussion**
 - **Chapter 61-31.701 Minimum Standards and Practices for Mold Assessors.**
 - **Chapter 61-31.702 Minimum Standards and Practices for Mold Remediators.**
- IV. Closing Remarks**
- V. Adjournment**

THE **DRAFT** TEXT OF THE PROPOSED RULE IS:

61-31.701 Minimum Standards and Practices for Mold Assessors.

(1) A mold assessor shall prepare a Mold Assessment Evaluation to include a document; prepared by a licensed mold assessor, for a client, that specifies the estimated quantities and locations of materials to be remediated and the proposed remediation methods and clearance criteria for each type of remediation in each type of area for a mold remediation project.

The Evaluation must specify:

(a) The rooms or areas where the work will be performed;

(b) The estimated quantities of materials to be cleaned or removed;

(c) The methods to be used for each type of remediation in each type of area;

(d) The PPE to be used by remediators. A minimum of an N-95 respirator is required during mold-related activities when mold growth could or would be disturbed.

(e) The suggested types of containment to be used during the project on each type of mold in particular areas; and

(f) The proposed post-verification procedures and criteria for each type of remediation in each area.

(2) A Mold Assessment Evaluation which includes a visual inspection of all surfaces inside the building, hidden areas where moisture sources may be present, such as but not limited to, crawl spaces, attics, and behind vinyl wallpaper, baseboards, carpets, and wallboard must be done to identify the presence of visible mold and/or excessive, unplanned moisture intrusion (past and present).

(a) Specific indicators that shall be reported in the evaluation during the visual inspection include; at a minimum:

1. Suspect mold growth;

2. Musty odor;

3. Moisture damage; and

4. Damp building materials and/or conditions.

(b) Personal protective equipment such as gloves and respiratory protection (e.g. N-95) shall be used if performing a visual inspection will disturb mold.

(3) Mold Assessment Evaluation Sampling must be performed following the recommendations of the [Occupational Safety and Health Administration](http://www.osha.gov/) (OSHA) published March 16, 2010 and found online at <http://www.osha.gov/>.

(a) Preservation methods shall be implemented for all samples;

(b) Proper sample documentation, including the sampling method, the sample identification code, each location and material sampled, the date collected, the name of the person who collected the samples, and the project name or number must be recorded for each sample;

(c) At every stage, as samples and data move through the chain of custody, documentation must follow what is exchanging hands, who is responsible for having custody, and where the samples and data are located.

(d) Mold sample analysis must be performed by laboratories following the International Organization for Standardization (ISO 17025).

(4) Containment must be specified in a mold remediation evaluation when the mold contamination affects a total surface area of 10 contiguous square feet or more for the project. Containment is not required if only persons who are licensed or registered as mold assessors or remediators occupy the building in which the remediation takes place at any time during the project unless cross contamination is a concern. The containment specified in the remediation evaluation must prevent the spread of mold to areas of the building outside the containment under normal conditions of use. If walk-in containment is used, supply and return air vents must be blocked, and air pressure within the walk-in containment must be lower than the pressure in building areas adjacent to the containment.

(75) An assessor who suggests in an evaluation the use of a disinfectant, biocide, or antimicrobial coating for 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. If such products are used the assessor must

inform the client and the building occupants of the use of such products before remediation begins due to the potential for occupant sensitivities and possible adverse reactions.

(8) Post-Verification Procedures and Criteria. In the evaluation for the project, the assessor shall specify:

(a) The method by which the remediation is deemed complete and adequate;

(b) The criteria to be used for evaluating analytical results to determine whether the remediation project passes post-remediation verification;

(c) The post-verification shall be conducted while walk-in containment is in place, if walk-in containment is specified for the project.

(d) Provide written documentation confirming success or failure of the post-verification. If the post-verification results indicate failure of the site specific remediation plan criteria, the Florida-licensed mold assessor will provide to the building owner and/or responsible party, a written report identifying the deficiencies noted during the evaluation. (This is new. Moved from 61-31.702(14)).

Rulemaking Authority 468.8424 FS. Law Implemented 468.8424, 468.842(1)(j) FS. History—New .

61-31.702 Minimum Standards and Practices for Mold Remediators.

(1) Mold Remediation Work Plan (MRWP). The remediator shall prepare a written MRWP consistent with the Mold Remediation **Evaluation (MRE)** created by the assessor, that is site specific for each project, and provides specific instructions and/or standard operating procedures for how the mold remediation project will be performed. A MRWP **shall** include a method to find and stop the source of moisture intrusion and/or humidity within the building (which may require an appropriate building moisture expert, plumber, roofer, air conditioning/mechanical contractor and/or drying contractor/tradesperson to identify and repair the moisture intrusion problem). The MRWP **should shall** also outline steps to physically remove the mold while protecting the health and safety of the building occupants and remediation workers. The following conditions **shall** be evaluated in preparing the MRWP:

(a) If a mold assessment **evaluation (MAE)** has not been performed, and the project qualifies as a mold remediation project, a mold assessment based upon current site specific conditions **must be performed.**

(b) If the remediator determines the MAE and/or the MRE is incomplete or inadequate, the remediator **shall** seek clarification from a Florida-licensed mold assessor.

(c) A mold remediator shall inform the client and building occupants of mold-related activities that will disturb or will have the potential to disturb areas of mold contamination before remediation begins.

(d) Evaluate HVAC system operations, on/off impacts, and/or isolation requirements.

(e) Determine requirements for building containment area(s) and/or isolation requirements.

(f) Identify various mold remediation/cleaning methods, equipment, and techniques consistent with the MRE.

(g) Determine remediation worker personal protective equipment (PPE) requirements.

(h) **If a post-verification is requested by the client, it must be performed by** an independent Florida-licensed mold assessor.

(2) Prior to initiating remediation activities, special attention must be given to the building HVAC system(s). A person who performs mold remediation on HVAC/ventilation systems must be licensed under section 489.105, F.S.

(3) HVAC System(s). Prior to performing remediation activities, the mold remediator **shall** determine whether or not the building HVAC system(s) should be shutdown and/or isolated/sealed-off from the remediation work area(s).

(6 4) Containment. The primary purpose of containment during remediation is to control/limit the dispersion of mold during remediation activities thereby limiting exposure to building occupants and remediation workers.

(a) Limited Containment is for areas between 10 and 100 ft² of contiguous visible surface area mold contamination and **shall** be constructed as follows:

1. Prepare the containment area by protecting environmental surfaces/contents with a single layer of 6-mil fire retardant polyethylene sheeting and/or enclosing the remediation area with the layer of 6-mil, fire-retardant polyethylene sheeting on the walls and floors,

2. If remediation activities involve and/or expose a space above the ceiling used as a return air plenum (i.e. mold impacted ceiling tile removal), the containment area should be installed from the floor to the roof deck accordingly,

3. When using a remediation work area enclosure, install an entry/egress slit opening with a cover flap on the outside of the containment area.

4. Shutdown and/or isolate HVAC system(s) operation within the containment area.

5. When using a remediation work area enclosure, seal all HVAC supply and return air vents, exhaust systems, doorways, chases and risers within the containment area with a single layer of 6-mil fire-retardant polyethylene sheeting, and

6. Maintain containment area under negative pressure (i.e. recommended 0.02" H₂O) relative to the surrounding area outside containment. This can be accomplished with a HEPA-filtered air filtration device (AFD) as a negative air machine (NAM). General industrial hygiene practices recommend a minimum of four (4) air changes per hour for containment ventilation and dilution. *Note:* utilizing negative-pressure differentials within building structures can create unintended airflow hazards in both

hot/humid and cold climate conditions, therefore the remediator should exercise caution in an effort to prevent/minimize these unintended airflow hazards.

7. Notice Signs. Signs advising that a mold remediation project is in progress shall be displayed at all accessible entrances to remediation areas. The signs shall be at least eight (8) inches by ten (10) inches in size and shall bear the words "NOTICE: Mold remediation project in progress" in black on a yellow background. The text of the signs must be legible from a distance of ten (10) feet.

(b) Full Containment is for areas greater than 100 ft² of contiguous visible surface area mold contamination and shall be constructed as follows:

1. Form the containment area by enclosing the remediation area with a double layer of 6-mil, fire-retardant polyethylene sheeting on the walls and floors.

2. If remediation activities involve and/or expose a space above the ceiling used as a return air plenum (i.e. mold impacted ceiling tile removal), the containment area should be installed from the floor to the roof deck accordingly.

3. Construct a decon chamber (i.e., with dirty and clean side airlock rooms) for entry and egress.

4. Decon chamber entryways (i.e. remediation area and clean room side) should consist of a slit entry with covering flaps on the outside surface of each slit entry.

5. The decon chamber dirty room side should be large enough to hold a waste container and allow for the removal of protective clothing (i.e. disposal coveralls, gloves, head and foot coverings). All PPE except respirators should be removed and placed in the waste container while in this chamber.

6. The decon chamber clean room side should be large enough to allow remediation workers to put on and remove PPE as they enter and exit the dirty room.

7. Shutdown and/or isolate HVAC system(s) operation within the containment area.

8. Cover with a single layer of 6-mil fire-retardant polyethylene sheeting all HVAC supply and return air vents, exhaust systems, doorways, chases and risers within the containment area.

9. Maintain the containment area under negative pressure (i.e., recommended 0.02" H₂O) relative to surrounding area outside containment. This can be accomplished with a HEPA-filtered air filtration device (AFD) as a negative air machine (NAM). General industrial hygiene practices recommend a minimum of four (4) air changes per hour for containment ventilation and dilution. Note, utilizing negative-pressure differentials within building structures can create unintended airflow hazards in both hot/humid and cold climate conditions, therefore the Remediator should exercise caution in an effort to prevent/minimize these unintended airflow hazards.

10. Notice Signs. Signs advising that a mold remediation project is in progress shall be displayed at all accessible entrances to remediation areas. The signs shall be at least eight (8) inches by ten (10) inches in size and shall bear the words "NOTICE: Mold remediation project in progress" in black on a yellow background. The text of the signs must be legible from a distance of ten (10) feet.

(5) The remediator shall consider possible additional site-specific conditions during the final selection of appropriate remediation procedures. Remediation procedures shall be determined based upon the project.

(a) When remediating areas between 10 and 100 contiguous square feet):

1. The work area should be unoccupied. Removing people from areas adjacent to the work area is not necessary, but is recommended for infants (<12 months), persons recovering from recent surgery, immune-suppressed, or people with respiratory diseases.

2. Respiratory protection (for example, N-95 disposable respirator) is required. Gloves and eye protection are also required to be worn.

3. Limited containment of the work area is required. Surfaces within containment that could become contaminated shall be covered with 6-mil, fire-retardant polyethylene sheeting before remediation to contain dust/debris and prevent further contamination.

4. Cover environmental surfaces with a single layer of 6-mil fire retardant polyethylene sheeting, ventilation ducts/grills within the containment area with 6-mil, fire-retardant polyethylene sheeting before remediation to contain dust/debris and prevent further contamination. Properly cover HVAC system ducts/grills, the HVAC system(s) that services the containment area may need to be turned off during remediation. Humidity control may be required.

5. Remediation practices that create excessive dust such as cutting, grinding and/or resurfacing of materials require the use of wet methods and/or High-Efficiency particulate Air (HEPA) vacuum-shrouded tools; or using HEPA vacuum equipment at the point of dust generation.

6. Mold contaminated materials that can not be cleaned in-place shall be removed from the building in sealed impermeable plastic bags and/or wrapped in 6-mil, fire-retardant polyethylene sheeting for either disposal or off-site cleaning.

7. Upon completing remediation activities, the work area and access/egress shall be HEPA vacuumed and then cleaned with a damp cloth (or mop) and a detergent. There are no special requirements for disposal of mold impacted materials.

8. Surface covers shall be placed in sealed impermeable plastic bags and removed from the building for disposal. There are no special requirements for disposal of mold impacted materials.

9. All areas and surfaces shall be left dry and visibly free of contamination and debris.

(b) When remediating areas greater than 100 contiguous square feet:

1. The work area must be unoccupied.

2. Personal Protection Equipment (PPE) which includes respirators, gloves, eye protection and full body coveralls with head and foot coverings are required.

3. Full containment of the work area is required. Surfaces within containment that could become contaminated must be covered with 6-mil, fire-retardant polyethylene sheeting before remediation to contain dust/debris and prevent further contamination.

4. Cover environmental surfaces with a single layer of 6-mil fire retardant polyethylene sheeting, ventilation ducts/grills within the containment area with 6-mil, fire-retardant polyethylene sheeting before remediation to contain dust/debris and prevent further contamination. Properly cover HVAC system ducts/grills, the HVAC system(s) that services the containment area may need to be turned off during remediation. Humidity control may be required.

5. Remediation practices that create excessive dust such as cutting, grinding and/or resurfacing of materials require the use of wet methods and/or High-Efficiency particulate Air (HEPA) vacuum-shrouded tools; or the use of HEPA vacuum equipment at the point of dust generation.

6. Mold contaminated materials that cannot be cleaned in-place shall be removed from the building in sealed impermeable plastic bags and/or wrapped in 6-mil, fire-retardant polyethylene sheeting for either disposal or off-site cleaning.

7. Upon completing remediation activities, the work area and access/egress shall be HEPA vacuumed and then cleaned with a damp cloth (or mop) and a detergent. There are no special requirements for disposal of mold impacted materials.

8. Polyethylene sheeting used for containments or as protective covers shall be placed in sealed impermeable plastic bags and removed from the building for disposal. There are no special requirements for disposal of mold impacted materials.

9. All areas and surfaces shall be left dry and visibly free of contamination and debris.

(6) Containment Requirements

(a) If you know or suspect that the water source is contaminated with sewage, or chemical or biological pollutants, then it requires PPE and containment.

(b) Limited: Use 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.

(c) Full: Use a single layer of fire-retardant polyethylene sheeting with one airlock chamber. Maintain area under negative pressure with HEPA filtered fan exhaust outside of building. Block supply and return air vents within containment area.

(7) The following guidelines shall be followed for cleanup and mold prevention:

Table 1

Water Damage – Cleanup and Mold Prevention

Guidelines for Response to Clean Water Damage within 24-48 Hours to Prevent Mold Growth

Water-Damaged Material

Actions

Books and papers

- For non-valuable items, discard books and papers.
- Photocopy valuable/important items, discard originals.

	<input type="checkbox"/> Freeze (in frost-free freezer or meat locker) or freeze-dry.
<u>Carpet and backing - dry within 24-48 hours</u>	<input type="checkbox"/> Remove water with water extraction vacuum. <input type="checkbox"/> Reduce ambient humidity levels with dehumidifier. <input type="checkbox"/> Accelerate drying process with fans.
<u>Ceiling tiles</u>	<input type="checkbox"/> Discard and replace.
<u>Cellulose insulation</u>	<input type="checkbox"/> Discard and replace.
<u>Concrete or cinder block surfaces</u>	<input type="checkbox"/> Remove water with water extraction vacuum. <input type="checkbox"/> Accelerate drying process with dehumidifiers, fans, and/or heaters.
<u>Fiberglass insulation</u>	<input type="checkbox"/> Discard and replace.
<u>Hard surface, porous flooring (Linoleum, ceramic tile, vinyl)</u>	<input type="checkbox"/> Vacuum or damp wipe with water and mild detergent and allow to dry; scrub if necessary. <input type="checkbox"/> Check to make sure underflooring is dry; dry underflooring if necessary.
<u>Non-porous, hard surfaces (Plastics, metals)</u>	<input type="checkbox"/> Vacuum or damp wipe with water and mild detergent and allow to dry; scrub if necessary.
<u>Upholstered furniture</u>	<input type="checkbox"/> Remove water with water extraction vacuum. <input type="checkbox"/> Accelerate drying process with dehumidifiers, fans, and/or heaters. <input type="checkbox"/> May be difficult to completely dry within 48 hours. If the piece is valuable, you may wish to consult a restoration/water damage professional who specializes in furniture.
<u>Wallboard (Drywall and gypsum board)</u>	<input type="checkbox"/> May be dried in place if there is no obvious swelling and the seams are intact. If not, remove, discard, and replace. <input type="checkbox"/> Ventilate the wall cavity, if possible.
<u>Window drapes</u>	<input type="checkbox"/> Follow laundering or cleaning instructions recommended by the manufacturer.
<u>Wood surfaces</u>	<input type="checkbox"/> Remove moisture immediately and use dehumidifiers, gentle heat, and fans for drying. (Use caution when applying heat to hardwood floors.) <input type="checkbox"/> Treated or finished wood surfaces may be cleaned with mild detergent and clean water and allowed to dry. <input type="checkbox"/> Wet paneling should be pried away from wall for drying.

(8) The following are guidelines for remediating building materials with mold growth:

Table 2 Guidelines for Remediating Building Materials with Mold Growth Caused by Clean Water			
Material or Furnishing Affected	Cleanup Methods	Personal Protective Equipment	Containment
Total Surface Area Affected Between 10 and 100 (ft²)			
<u>Books and papers</u>	<u>3</u>	<u>Limited or Full</u> <u>Use professional judgment,</u> <u>consider potential for remediator</u> <u>exposure and size of</u> <u>contaminated area</u>	<u>Limited</u> <u>Use professional judgment,</u> <u>consider potential for</u> <u>remediator/occupant</u> <u>exposure and size of</u> <u>contaminated area</u>
<u>Carpet and backing</u>	<u>1, 3, 4</u>		
<u>Concrete or cinder block</u>	<u>1, 3</u>		
<u>Hard surface, porous flooring (linoleum, ceramic tile, vinyl)</u>	<u>1, 2, 3</u>		
<u>Non-porous, hard surfaces (plastics, metals)</u>	<u>1, 2, 3</u>		
<u>Upholstered furniture & drapes</u>	<u>1, 3, 4</u>		
<u>Wallboard (drywall and gypsum board)</u>	<u>3, 4</u>		
<u>Wood surfaces</u>	<u>1, 2, 3</u>		
Total Surface Area Affected Greater Than 100 (ft²) or Potential for Increased Occupant or Remediator Exposure During Remediation Estimated to be Significant			
<u>Books and papers</u>	<u>3</u>	<u>Full</u> <u>Use professional judgment,</u> <u>consider potential for</u> <u>remediator/occupant exposure</u> <u>and size of contaminated area</u>	<u>Full</u> <u>Use professional judgment,</u> <u>consider potential for</u> <u>remediator exposure and</u> <u>size of contaminated area</u>
<u>Carpet and backing</u>	<u>1, 3, 4</u>		
<u>Concrete or cinder block</u>	<u>1, 3</u>		
<u>Hard surface, porous flooring (linoleum, ceramic tile, vinyl)</u>	<u>1, 2, 3, 4</u>		
<u>Non-porous, hard surfaces (plastics, metals)</u>	<u>1, 2, 3</u>		
<u>Upholstered furniture & drapes</u>	<u>1, 2, 4</u>		
<u>Wallboard (drywall and gypsum board)</u>	<u>3, 4</u>		
<u>Wood surfaces</u>	<u>1, 2, 3, 4</u>		

Cleanup Methods Key

Method 1: Wet vacuum (in the 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.

Method 2: Damp-wipe surfaces with water and detergent solution (except wood – use wood floor cleaner); scrub as needed.

Method 3: 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.

Method 4: Discard - remove water-damaged materials and seal in plastic bags while inside of containment, if present. Dispose of as normal waste. HEPA vacuum area after it is dried.

(9) Post-Verification on a Level II and III projects must be performed by a Florida-licensed mold assessor. Initial post-verification shall be conducted to evaluate whether or not remediation has been successfully completed in accordance with the MRWP. The initial evaluation of a Post-Verification implements and documents internal quality assurance and quality control procedures that include the following general criteria:

(a) If a walk-in limited and/or full containment system was used during remediation, the post remediation evaluation must be conducted while the containment system is in place.

(b) The underlying moisture problem was identified and eliminated.

(c) Isolation of the work area was appropriate and effective.

(d) Mold removal and remediation/cleanup was performed according to the MRWP.

(e) Any additional moisture or mold damage/impacts discovered during remediation were properly addressed/resolved.

(f) Upon completion of remediation, surfaces are free from visible dust and debris.

(g) Upon completion of remediation, building materials/contents are dry and do not have elevated moisture content or malodors.

(h) Provide corrective measures as necessary to correct identified deficiencies.

(10) A written final remediation project report must be provided to the building owner and/or responsible party from the remediator shall include:

(a) Certificate of completion clearly stating the remediation has been successfully completed;

(b) Documentation of the post-evaluation performed by the remediator;

(c) Documentation of the post-verification performed by an independent Florida-licensed mold assessor;

(d) Present post-verification results to the building owner and/or responsible party.

Rulemaking Authority 468.8424 FS. Law Implemented 468.8424, 468.842(1)(j) FS. History–New _____.