



FREQUENTLY ASKED QUESTIONS (AND ANSWERS) ABOUT THE BIG PICTURE OF WATER-DAMAGED BUILDINGS

Part 2 — Source Removal

Q 7. Is there an accepted approach to conducting a mold remediation project?

A 7. In a general sense, yes, but the specifics will vary from project to project. Unlike many regulated contaminants such as asbestos and lead, the hazards associated with water-damaged buildings are not necessarily controlled by government rules. Although a small number of states have enacted laws which require mold remediation projects to incorporate certain mandatory steps, most states have not yet moved in that direction. In addition, few, if any, regulations exist that deal with the other types of microbial contaminants that are present in water-damaged buildings.

Despite the mixed up status of the regulatory environment, there is a standard of care that has emerged from professionals involved with such work across the globe. While there is an amazing level of consensus on remediation work practices, the standard of care is constantly evolving because it draws on multiple documents for its basis.

Anyone proposing to do work in a water-damaged building that is occupied by sensitized individuals needs to make sure that they understand the standard of care and are familiar with the key documents that industry experts agree are foundational to the proper understanding of remediation. Some of the primary guidance comes from the EPA, OSHA, IICRC S520, NYC Department of Health, Health Canada, ACGIH, AIHA, and the Texas Department of State Health Services.

When viewed as a whole, the standard of care includes such core elements as:

- Treating all physical mold contamination with the same care, regardless of the species of mold present
- Physical removal of fungal colonies rather than attempting to kill it in place with chemicals or oxidizers such as ozone
- Careful use of anti-microbial chemicals in conformance with manufacturers' directions

- Removal of porous materials colonized by mold or water damaged beyond reasonable repair
- Specific engineering controls such as isolation barriers and negative pressure inside the work zone to minimize the potential for cross contamination
- Remediation practices that minimize dust generation, such as shrouded cutting tools connected to a HEPA vacuum
- Use of personal protective equipment that protects workers and helps prevent cross contamination

Q 8. Do sensitized individuals need to have remediation projects completed in a way that is “beyond normal”?

A 8. Generally that is the case. However, the first step is to have the work for such individuals conducted in conformance with the standards that are already in place for the remediation industry. Too often reports of work done in homes and workplaces where occupants are suffering with a biotoxin illness fail to even come close to industry-accepted recommendations. Moldy walls removed without isolation barriers, shop vacs used in place of HEPA vacuums, and remediation horror stories are, unfortunately, quite common.

Q 9. What key points do contractors need to observe when completing projects for sensitized individuals?

A 9. As noted in the bullet points for question 7, there are a number of important steps that should be taken for all mold remediation projects. These same steps should be followed when dealing with water-damaged materials, even if there is no visible fungal growth, since other microbial contaminants and hidden mold colonies are likely to be encountered any time wet building materials are disturbed. This is especially true for common structural members and finish materials that contain cellulose, such as wooden studs, paper-faced gypsum board, ceiling tiles, OSB sheathing, etc.

Beyond those general considerations, contractors must be meticulous in regards to the quality and integrity of their temporary isolation barriers. Mechanical means of supporting plastic sheeting—such as spring poles and furring strips rather than painter’s tape or duct tape— should be utilized to secure the barriers. While some guidelines allow small amounts of moldy materials to be removed without the use of isolation barriers and negative pressure, projects conducted for sensitized individuals should always segregate the remediation work area from other areas of the structure.

Keeping the work area under negative pressure throughout the removal and cleaning process is also a critical step. Such a process is extremely difficult without a

decontamination chamber at the entrance to the work area, which moderates the fluctuations in air pressure that occur when people and materials pass through a single entrance to a work area. Adding an air scrubber—in addition to the HEPA filtered exhaust unit that creates negative pressure—has been shown to keep airborne spore concentrations low during the demolition phase.

Q 10. What is the proper way to evaluate the effectiveness of source removal work in buildings occupied by sensitized individuals?

A 10. The consensus of the guidance documents that form the standard of care is that every project should be evaluated by conducting a thorough visual inspection. If the remediation area doesn't look clean, it probably isn't clean. Nevertheless, since much of the contamination being addressed in remediation projects is of microscopic size a visual inspection cannot guarantee that the job was completed properly. Therefore, sampling that can detect particles invisible to the unaided eye should supplement the visual evaluation.

Extensive experience has shown that remediation projects conducted for sensitized individuals should be evaluated using a combination of air samples and surface samples. While the details of the sampling process can vary based on the type of work being conducted, it is absolutely crucial that all parties agree to the endpoints before the work begins. Feel free to contact Wonder Makers at 269-382-4154 or info@wondermakers.com for specific recommendations regarding post-remediation evaluation criteria that would be appropriate for any particular type of project.