

2011 CMP Domains of Knowledge



Typically the term **Domains of Knowledge** is used to describe information which is valid and directly used for a specific endeavor or an autonomous activity. In the cleaning and restoration industry there will be a number of domains of knowledge with some elements of information common to multiple domains. For the Certified Mold Professional (CMP) the following domains of knowledge are presented in the three classes that lead an individual to certification as a CMP.

1. **Background and history of mold and remediation**
 - a. How mold remediation activities developed as a specific industry from efforts related to indoor air quality investigations, water restoration, industrial hygiene, medical studies, legal cases, and regulatory guidance.
 - b. The interconnectedness of different aspects of mold remediation work including the close connections between project specific work plans, selection of personal protective equipment, implementation of engineering controls, and quality control measurements is stressed.
 - c. The basic philosophy underpinning professional conduct in the industry (protection of self and crew, protection of the occupants, protection of the structure and the contents).
2. **Biological Contamination**
 - a. Main categories of biological contaminants that are typically encountered in mold remediation situations (virus, bacteria, fungi, insects, arthropods, plant and animal residue).
 - b. Basic growth and transport mechanisms for fungal constituents such as spores and hyphal fragments are covered in detail.
 - c. Physical properties of fungal contaminants that contribute to health concerns (production of microbial VOCs, creation of allergenic particles, development of mycotoxins, and ability to grow on or in other living organisms)
3. **Potential Health Effects Related to Fungal Exposure**
 - a. information regarding basic anatomy, particularly the respiratory system.
 - b. Information regarding toxic and allergic responses that can be caused by mold is presented so that an understanding of possible short-term and long-term effects from fungal exposure is clear.
 - c. Concepts of sensitization and synergy
 - d. Potential treatment options for individuals impacted by mold.
4. **Industry Standard of Care**
 - a. Information explaining that the mold remediation industry currently is controlled by an industry standard of care.
 - b. Understanding of the various documents that define the current industry standard
 - c. Key points of consensus between multiple documents which illustrates that there are significant controls on the industry.
 - d. Understand the similarities and differences between the key documents that frame the industry standard so that an overall approach to mold remediation can be developed and applied to project specific decisions.
5. **Sampling Basics**
 - a. Mastery of concept of sampling as a tool for collecting and evaluating information related to mold contamination projects.
 - b. Proper selection and implementation of sampling techniques that could be useful for fungal projects is presented in detail.
 - c. Design of sampling plans, sample analysis techniques, and data interpretation.

2011 CMP Domains of Knowledge

6. Risk Assessment

- a. Recognition of the three major classes of hazards present at mold remediation project sites (physical, chemical, biological).
- b. Methodologies for efficient collection, organization, and interpretation of critical information
- c. The ALARA (As Low As Reasonably Achievable) approach to developing mold-related risk assessments is explored which allows the candidates to apply theoretical concepts to actual work situations.

7. Risk Reduction with Personal Protective Equipment

- a. Control of risks through the use of personal protection equipment (PPE).
- b. Basic comprehension of applicable OSHA regulations
- c. Understand proper selection and use of PPE for fungal contamination work
- d. Identify critical criteria for the proper selection of PPE.
- e. Master specific details about PPE such as the difference between fit factor and protection factor, rating system for respirator filters, selection criteria for body suits, and respirator fit test procedures.

8. Remediation Equipment and Supplies

- a. Basic function and proper operating parameters of equipment most commonly used in mold remediation projects such as items for constructing isolation areas and decontamination units, negative air machines, HEPA-filtered vacuums, pressure monitors, and specialty removal tools such as a Kett saw.

9. Engineering Controls

- a. Familiarization with the underlying principles and various techniques that can be utilized to isolate mold remediation work areas.
- b. Selection of appropriate decontamination chambers in an effort to control cross-contamination of fungal contaminants undergirds all of the specific product and application information.

10. Remediation Work Practices

- a. Understanding of evaluation and remediation of contents, removal or cleaning of building materials with fungal contamination, and cleaning of impacted mechanical systems
- b. Categorization of mold-impacted surfaces and contents by type of contamination and material porosity is provided along with specific techniques for remediating drywall, ceiling tiles, support studs, and carpets impacted by fungal contamination.

11. Chemical Use During Mold Remediation

- a. Terminology of chemicals for fungal remediation related to the products designed for the industry.
- b. Appreciation for the limitations and restrictions on various chemicals commonly used for mold projects.
- c. Major arguments against the use of chemicals for mold work and areas of consensus surrounding the use of chemicals

12. Post-Remediation Activities

- a. Understanding of the importance of having a clearly defined endpoint before a project begins. This will emphasize that a poorly conducted mold remediation project can cause more problems than no remediation at all.
- b. Recognition of the importance of both internal evaluation and external verification of project success
- c. Existing points of consensus regarding post-remediation activities.
- d. Complexities involved in fungal remediation projects that are also impacted by sewage or other hazardous contaminants.

2011 CMP Domains of Knowledge

13. General Safety and Health Concerns

- a. Information on commonly cited safety and health violations (electrical safety, ladders and scaffolds, slips/trips/falls, fire considerations, bloodborne pathogens, heat disorders, hazard communication, etc.).
- b. Identification of appropriate precautions that can be utilized when safety and health hazards are recognized during the risk assessment as well as basic steps for dealing with emergencies on the job site.

14. Project Management Skills

- a. Master appropriate management techniques to balance efforts related to workers, equipment, supplies, and customers.
- b. Awareness that there may be a battle for control of the project which is impacted by limitations in the work scope, schedule, and estimate
- c. Importance of continual inspection and leading by example while staying focused on the twin goals of efficiency and effectiveness.

15. Liability and Insurance Considerations

- a. Basic legal and insurance terms
- b. Evaluate strategies that firms use to protect themselves from lawsuits
- c. Recognize the primary factors that impact liability in both the US and other countries.