

Pascack Valley Regional High School District

Mold Management Plan

1.0 BACKGROUND

Mold is one of nature's primary decomposers of organic materials. Many different types of mold feed on grass, leaves, wood, deceased animals and other organic materials found in nature. Because of this, mold spores are a naturally-occurring component of the air we breathe. The quantity of mold spores found in the air varies dramatically based upon the availability of nutrients, weather conditions - especially with respect to precipitation/humidity, and by other conditions such as wind, temperature and snow cover. Since mold spores are a component of outdoor air, they are also a component of indoor air. Mold spores enter buildings through open windows and doors, air handling systems and we transport spores that settle on our clothes, shoes, and hair.

It is key to maintain the indoor environment so the conditions are not favorable for mold growth that can increase the spore counts beyond the wide range typically found in outdoor air. Since mold spores are a normal component of the air, dampness/moisture is the most important parameter to control indoors. If building materials or contents become saturated, it is imperative to dry them as soon as possible, and eliminate the source of moisture before mold is given the opportunity to grow.

It is important to recognize that small areas of mold typically associated with minor leaks such as a localized spot on a wall or on a ceiling tile are not likely to result in mold-related exposure beyond that typically experienced outdoors.

The District's policy is to promptly correct the conditions that make the indoor environment favorable for mold growth and remediate mold that is observed indoors.

2.0 PROGRAM OBJECTIVE

The purpose of the Mold Remediation Procedure is to define the responsibilities, methods, procedures, and training required to safely and effectively remove or clean mold-contaminated building materials and contents.

3.0 SCOPE

This procedure covers facilities owned by Pascack Valley Regional High School District.

4.0 DEFINITIONS

- 4.1 **Approved Contractor** - A contractor who has been approved by Pascack Valley Regional High School District / Facilities Dept. to perform mold remediation work.
- 4.2 **Level 1 Mold Remediation Project**- A project requiring the remediation of **less than ten square feet of visible surface mold-contaminated materials**, excluding contaminated moisture sources (ie.

sewage) and HVAC, per the EPA Guidelines. This is typically completed by trained in-house facilities personnel.

Pascack Valley Regional High School District Facilities Department notification is required. Work order documentation is required.

- 4.3 **Level 2 Mold Remediation Project**- A project involving remediation of greater than ten square feet of mold-contaminated materials. The project shall be completed by an approved contractor, unless in-house personnel are trained accordingly in the PPE and containment that may be necessary, per the EPA Guidelines. Building notification is required.
- 4.4 **Moisture Assessment** - Inspection of materials by infrared thermography and/or penetrating and non-penetrating moisture detectors to identify those with elevated moisture content capable of supporting mold growth.
- 4.5 **Mold-Contaminated Materials** - Materials determined to be mold-contaminated through visual inspection, odor detection or other sampling methods should be evaluated as salvageable or unsalvageable in accordance with the EPA Table on water and mold impacted materials.
- 4.6 **Post-Remediation Verification** - A post-remediation inspection performed by industrial hygiene consultants selected or approved by Pascack Valley Regional High School District Facilities Department. The inspection may include a moisture assessment, visual/odor inspection, or sampling as deemed appropriate. The purpose of the verification is to ensure that the remediation has been properly executed and that the area has been restored to what would be considered a normal indoor environment fungal ecology.
- 4.7 **Trained Individual** - An individual who has completed mold remediation training approved by Pascack Valley Regional High School District Facilities Department.

5.0 RESPONSIBILITIES

- 5.1 Designated Person shall be responsible for:
 - 5.1.1 Assessing suspected areas of mold contamination and coordinating the appropriate response.
 - 5.1.2 In conjunction with outside consultants as needed, identify the underlying causes of mold contamination and identify required measures to prevent recurrence.
 - 5.1.3 Performing or coordinating mold remediation project oversight for level 1 projects.
 - 5.1.4 Providing or coordinating appropriate training for Facilities employees who perform mold remediation for Level 1 (less than ten square feet of visible surface mold derived from non-contaminated source on non HVAC materials).
 - 5.1.5 Performing periodic reviews of the overall effectiveness of the Mold Remediation Procedures and updating the program as required.
 - 5.1.6 Maintaining all sampling, training and post-remediation verification documentation.

5.2 **Custodial & Maintenance Dept.** shall be responsible for:

- 5.2.1 Notifying Director of Facilities of observed mold growth of ten square feet or less (as hidden mold can be a concern) and 10 sf and more.
- 5.2.2 Notifying Director of Facilities of leaks or other sources of increased indoor moisture and humidity that could be expected to increase potential for mold growth.
- 5.2.3 Performing or contacting Director of Facilities to obtain an approved vendor to complete moisture assessments.
- 5.2.4 Performing, or coordinating with approved vendor, mold remediation as outlined in this procedure.
- 5.2.5 Working in conjunction with Director of Facilities to pre-qualify remediation contractors for level 2 mold remediation projects.
- 5.2.6 Ensuring that employees participate in the appropriate training and follow the remediation work practices presented in the training.

6.0 GENERAL MOLD REMEDIATION INFORMATION

6.1 General Rules

- 6.1.1 Moisture assessments are an integral part of mold remediation. A moisture assessment of impacted materials should be completed to identify if mold growth is active or the result of a past incident. The assessment should identify all damp materials so that they can be removed or if appropriate, targeted for aggressive drying.
- 6.1.2 Only non-porous (e.g., metals, glass, and hard plastics) and semi-porous (e.g., wood, and concrete) materials that are structurally sound can be cleaned and reused. If a cleaning agent is used, only those that have been reviewed and approved by Director of Facilities shall be used. All materials that will be reused shall be dry and visibly free from mold.
- 6.1.3 Porous materials such as ceiling tiles, insulation, and gypsum board may not be cleaned and should be removed and discarded as described in this procedure.
- 6.1.4 The use of biocides and other chemicals is typically not recommended. The removal of moldy materials and control of the source of moisture that enabled the growth is sufficient to prevent recurrence of mold growth.
- 6.1.5 The use of gaseous, vapor-phase or aerosolized biocides or odor suppressants for remediation purposes is not permitted without specific approval from Director of Facilities.
- 6.1.6 Air sampling for molds is a complex issue. Mold spores are ubiquitous in air. The number of spores captured on a sample cassette during the sampling period can be influenced by numerous factors, which makes meaningful interpretation of the results difficult. Furthermore, there are inadequate recognized health-based standards related to mold

spore counts versus onset of adverse health effects. There is no defined “safe” or “unsafe” spore count value that can be used to interpret the sampling results. In lieu of sampling, in most cases, the appropriate course of action is to perform a thorough inspection documenting that the source of moisture has been controlled and that impacted materials are adequately dry, the ambient relative humidity is maintained below 60% and that there are no remaining visual indications of mold growth or odors of dampness or microbial volatile organic compounds.

Please see the EPA’s positioning statement on Mold Sampling:

<https://www.epa.gov/mold/mold-testing-or-sampling>

“In most cases, if visible mold growth is present, sampling is unnecessary. Since no EPA or other federal limits have been set for mold or mold spores, sampling cannot be used to check a building's compliance with federal mold standards. Surface sampling may be useful to determine if an area has been adequately cleaned or remediated. Sampling for mold should be conducted by professionals who have specific experience in designing mold sampling protocols, sampling methods and interpreting results. Sample analysis should follow analytical methods recommended by the American Industrial Hygiene Association (AIHA), the American Conference of Governmental Industrial Hygienists (ACGIH), or other professional organizations.”

7.0 MOLD REMEDIATION PROCEDURES

7.1 Level 1: Limited Areas of Mold Contamination - 10 square feet or less of mold contaminated materials (when mold is derived from a non-contaminated source and is not present in /on HVAC.

- 7.1.1 Pascack Valley Regional High School District notification per policy.
- 7.1.2 A moisture assessment may be required if the source and extent of moisture that allowed the mold to grow is not known. Director of Facilities can assist with this if needed.
- 7.1.3 Trained Facilities employees may complete the remediation.
- 7.1.4 Personal protective equipment including an N95 respirator, gloves and eye protection shall be worn.
- 7.1.5 Room occupants should not be present when remediation cleaning is conducted,
- 7.1.6 Containment of the remediation area is not required per the EPA guidelines. A polyethylene drop cloth should be installed in the immediate area of the remediation activity, bagged and disposed of when cleaning is complete,
- 7.1.7 Contaminated materials that cannot be cleaned should be removed from the building in a sealed plastic bag or wrapped and sealed in polyethylene sheeting and disposed of in the trash. There are no special requirements for the disposal of moldy materials.

- 7.1.8 Hidden mold - If additional mold contamination is discovered during the remediation project, contact Director of Facilities to reevaluate the project.
 - 7.1.9 At the completion of the remediation project, all surfaces, including carpeting, in the vicinity of the remediation area shall be HEPA vacuumed. Additionally, non-porous surfaces shall be damp wiped, and the floors mopped with a standard cleaning agent.
 - 7.1.10 All areas should be left dry and visibly-free from contamination and dust/debris. A final moisture assessment of building materials in the vicinity of the impacted area may be required to ensure that the materials are adequately dry and not capable of supporting mold growth.
- 7.2 **Level 2: Mid to Large Areas (greater than 10 square feet of mold-contaminated materials)**
- 7.2.1 Director of Facilities must be notified of the intent to remediate as soon as possible.
 - 7.2.2 Remediation shall be completed by an approved contractor selected by the Director of Facilities. Remediation work practices shall be consistent with nationally accepted standards such as the Institute of Inspection Cleaning and Restoration (IICRC) S500-Standard and Reference Guide for Professional Water Damage Restoration and IICRC S520-Standard and Reference Guide for Professional Mold Remediation.
 - 7.2.3 Contractor must submit a work plan detailing methods and procedures used to complete the remediation project to Director of Facilities for approval, preferably at least two working days in advance of the project.
 - 7.2.4 Contractor must submit Safety Data Sheets (SDS) for chemicals used on the project to Director of Facilities for review and approval, preferably at least two working days in advance of the project.
 - 7.2.5 Director of Facilities shall review the work plan and SDSs, request changes if necessary, and authorize contractor to proceed.
 - 7.2.6 Director of Facilities shall perform project oversight to include periodic inspections to ensure that the project is completed in compliance with the work plan and complete post-remediation verification.
 - 7.2.7 Approved contractor shall provide a written post-remediation verification report to Facilities and the occupants of the remediation area.

8.0 TRAINING

- 8.1 Employees involved with mold remediation shall receive training consistent with their duties. Employees will receive training in order to acquire the understanding, knowledge and skills necessary for the safe performance of the duties assigned under this program.
- 8.2 Training shall be provided to each employee who performs mold remediation:
 - 8.2.1 Before the employee is first assigned duties.

8.2.2 Annually, or whenever the employer has reason to believe that there are deviations from the Mold Remediation Procedure, or that there are inadequacies in the employee's knowledge or use of these procedures.

8.3 The training shall establish employee proficiency in the duties required and shall introduce new or revised procedures, as necessary, for compliance.

8.4 Training content shall include:

Prevention: How to identify mold producing conditions.

- How to report leaks, condensation and excessive humidity
- Inspection techniques (what to look for, where to look, how to look) to support mold prevention protocols during school breaks, summer deep cleaning and maintenance activities.

Remediation - Methods & Procedures for mold remediation to include:

- Personal protective equipment including OSHA Respiratory Protection Standard (29 CFR 1910.134).
- Remediation, cleaning and disposal of mold-contaminated materials.
 - **Step 1 - Initial damp cleaning**
 - **Step 2 - HEPA Vacuum**
 - **Step 3 - Wash with mild detergent**
 - **Step 4 - Second HEPA Vacuum**
 - **Step 5 - Place cleaning rags and debris in plastic bag, gooseneck tie and dispose.**
- Final cleaning of remediation area.

9.0 RECORDKEEPING

9.1 Training documentation shall be maintained for all employees who complete mold remediation training. Training rosters shall include the name of the trainer, name of trainee, and the date of training. Pascack Valley Regional High School District Facilities Office shall maintain all training rosters and a copy of the training curriculum. The most current training record shall be maintained for each employee.

9.2 Pascack Valley Regional High School District Facilities Office shall maintain copies of all investigations associated with complaints, and how the complaint was resolved. Work orders complete in association with the complaint should be maintained.

9.3 Pascack Valley Regional High School District Facilities Office shall maintain all work plans.

- 9.4 Pascack Valley Regional High School District Facilities Office shall maintain all sampling data.
- 9.5 Pascack Valley Regional High School District Facilities Office shall maintain all post-remediation sampling reports.

10.0 REFERENCES

- 10.1 Institute of Inspection Cleaning and Restoration Certification - IICRC S500 – Standard and Reference Guide for Professional Water Damage Restoration.
- 10.2 Institute of Inspection Cleaning and Restoration Certification IICRC S520 – Standard and Reference Guide for Professional Mold Remediation.
- 10.3 Centers for Disease Control and Prevention –Facts about Mold & Dampness and Mold Assessment Tool – General Buildings
- 10.4 US Environmental Protection Agency –Mold and Dampness
- 10.5 American Industrial Hygiene Association –Facts About Mold
- 10.6 University of Pennsylvania Environmental Health & Radiation Safety – Mold Information Sheet
- 10.7 New Jersey PEOSH Indoor Air Quality Standard Inspection Checklist
- 10.8 New Jersey Department of Health