

MICROBIAL REMEDIATION
STANDARD OPERATING PROCEDURE
FOR PAUL J. SIERRA CONSTRUCTION, INC. &
SIERRA CONSTRUCTION & RESTORATION, INC.

1. Once a possible environmental problem is suspected, the company's environmental project manager is notified for proper identification of type and size of contamination. All normal work in area of possible contamination ceases at that time.
2. The company's environmental project manager must first identify the cause of the moisture infiltration or water reservoir. If the problem is identified as a one time water event, the company's environmental project manager must be assured that the cause of the water event has been repaired. If the problem is more complex, e.g. an HVAC insufficiency or other gradual moisture-intrusion problem, an appropriate engineering firm should be brought in to identify and correct the problem. Under no circumstances should remediation begin without identifying and repairing the moisture-intrusion problem.
3. The company's environmental project manager should identify that a microbial problem exists and the size of the contamination. The actual identification of the microbial species is not important – only that the problem is most likely microbial. If there is doubt, the environmental project manager should request identification that the area is microbial by a qualified professional.
4. Once the company's environmental project manager has identified a problem, he/she must decide if the project is to be considered a microbial remediation project. **See “Addendum A” for parameters.**
5. After the environmental project manager confirms that a minimum microbial contamination exists, a mold assessor must be contacted for confirmation of the type of remediation required and extent of problem.

6. Once work scope (protocol) is received from the mold assessor, environmental project manager plans the job, i.e., documentation, containment strategy, equipment utilization, occupant notification, personnel assignments and a site-specific safety plan.
7. Prior to commencing job, the project manager meets all personnel who will be working on the job, to walk the job and conduct an initial safety meeting.
8. Utilizing the mold assessor's protocol, all work is performed using the guidelines set forth by: **United States EPA's Mold Remediation in Schools and Commercial Buildings**, the **IIIRC S520 Standard**, and **New York City Department of Health: Guidelines on Assessment and Remediation of Fungi in Indoor Environments**.
9. Once remediation is complete, the mold assessor is requested to return for clearance testing.
10. After the mold assessor returns favorable results, reconstruction begins.

ADDENDUM 'A'

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PURPOSE: Determining the extent of microbial contamination and determining if the project will be considered a microbial remediation project.

SMALL – TOTAL SURFACE AREA AFFECTED <10 SQUARE FEET.

Small areas of contamination do not require full microbial remediation status.

Examples of this type of problem may be spots of microbial growth behind a vanity or behind limited amounts of baseboards. The intent of Table 2 in **United States EPA's Mold Remediation in Schools and Commercial Buildings** is to allow property owners and contractors to remediate minimal amounts of microbial growth so as not to create a workplace panic. Items that are easily removed, (drywall, baseboards, cabinets, etc.) should be removed with care so as not to create dust or debris. Wrapping the discarded items in poly or placing in proper disposal bags, then sealing prior to removal from the contamination zone, prior to disposing with care. **Containment** is not required. Minimal **PPE** of N-95 respirator, gloves and goggle are required. More extensive PPE is not required, but the workers should always be provided whatever they request. Nothing is more important than the workers' health and well-being.

MEDIUM - TOTAL SURFACE AREA AFFECTED BETWEEN 10 - 100 SQUARE FEET.

Medium sized areas of contamination may or may not require full microbial remediation status. **Examples** of this type of condition may be microbial growth behind cabinetry or small areas of drywall in assorted areas, typically behind furniture or other areas where air flow may be blocked or corners near doorways, etc. The intent of Table 2 in **United States EPA's Mold Remediation in Schools and Commercial Buildings** is to allow professional judgment as to whether full scale remediation of minimal amounts of microbial growth. **Limited containment** is required. Limited **PPE** is required. **Full microbial remediation may be required** if the growth is observed in several areas of the building. Full microbial remediation is strongly recommended if any occupants are immuno-compromised or any occupant health concerns have been registered. Full microbial remediation should also be called for if any secondary growth is observed or as the affected areas approach one hundred square feet. If the company's environmental project manager observes any conditions that would indicate a full-scale environmental remediation is appropriate, the project should take on all the characteristics of a large area remediation, as listed below.

LARGE - TOTAL SURFACE AREA AFFECTED >100 SQUARE FEET.

Large-sized areas of contamination should be referred to a certified mold assessor for work scope, protocol and clearance testing. All recommendations by the mold assessor are the only procedures we should follow.