

MOLD: CLEANUP IN CONFINED SPACES

INTRODUCTION

Mold loves areas where there is plenty of moisture and organic material to feed on. Due to these conditions, mold can grow in confined spaces, homes, and other buildings without anyone knowing about it for weeks, months, or years. Once mold has been discovered in these areas, it will have to be cleaned up or remediated to assure everyone's safety and health in the building. However, remediation can potentially expose employees to hazards. This lesson will cover topics such as the definition of a confined space and the hazards of mold remediation in a confined space, along with personal protective equipment and safe work practices.



DEFINITION

OSHA defines a confined space as meeting the following criteria:

- It is large enough and so configured that an employee can bodily enter and perform assigned work.
- Has limited or restricted means for entry or exit (i.e., tanks, vessels, silos, storage bins, hoppers, vaults, pits, etc.)
- It is not designed for continuous employee occupancy

Depending on the conditions and hazards present, a confined space may be either be deemed a permitrequired or non-permit required area.

HAZARDS

When performing mold remediation in a confined space, you could potentially be exposed to one or more of the following hazards:

- Exposure to low oxygen environments. This may also be caused when you seal off areas to keep mold spores from moving into other areas.
- Exposure to toxic atmospheres from natural gases and solvents that may be in some confined spaces.
- Exposure to asbestos in older buildings; Buildings containing asbestos will date from 1970 and before because asbestos was commonly found in building materials during those periods.
- Respiratory irritation or illness from exposure to mold spores. People with compromised immune systems and a history of respiratory illness such as asthma are especially at risk.
- Eye and skin irritation from exposure to mold spores or chemicals that you may be working with.
- Exposure to fungicides and other chemicals
- Injuries from not being able to see in poorly lit areas. Many confined spaces do not have lighting available. They may contain obstacles that you may not see without having a source of light.

PERSONAL PROTECTIVE EQUIPMENT

You can protect yourself from hazards by wearing the appropriate personal protective equipment (PPE). PPE may include:

- Safety glasses or goggles (Non-vented models are recommended)
- Face shield
- Gloves
- Respirator
- Protective clothing





CLEANUP IN CONFINED SPACES

Closed-toed shoes

PPE should be based on environmental and chemical hazards that you are exposed to. Remember to inspect all provided PPE for damage. Do NOT wear damaged PPE and report them to your supervisor.

SAFE WORK PRACTICES

Before you begin working in a confined space, air testing of the area should be conducted. Air testing will tell you about the atmosphere and if there are any toxic substances present. Once testing is completed, the site should either be deemed a permit or non-permit confined space based on the test results. Air testing should be periodically conducted throughout the remediation to verify that there is no change in the results. If results change, then an area designation may have to be changed depending on the results' reading.

If an area must be sealed because of the concern of spores moving into other areas, the confined space should be re-tested after sealing to help assure that oxygen levels will be acceptable. Please refer to our "Confined Space: Air Testing" lesson for more information on air testing.

Only trained and authorized employees should perform any remediation in confined spaces. Confined space teams should consist of an entrant, an attendant, and a supervisor. For more information on confined spaces, please refer to our "Confined Space" lesson.

Additionally, you should become familiar with all chemicals that you will be using. If you have any questions about a particular chemical, please read the manufacturer-provided safety data sheet (SDS) or speak with your supervisor.

All confined space work should be conducted by following your company's Confined Space program.

When performing remediation in a confined space, you should do the following:

- Follow all instructions given by either your attendant or the assigned supervisor.
- Inspect all tools and equipment for damage and report the items to your supervisor. Do NOT use damaged products.
- Make sure that the area is lit enough for your work to be completed safely. Use all lighting equipment according to the manufacturer's instructions.
- Be aware of your surroundings.
- If possible, remove any obstacles (i.e., ducting) that could make movement difficult.
- If a space needs to be sealed off to help prevent the mold from spreading, seal it using industrystandard methods.
- Use all cleaning chemicals according to the manufacturer's instructions. This includes mixing at manufacturer-recommended concentrations. Do NOT mix incompatible chemicals, such as bleach and ammonia. The mixing of such chemicals could result in the creation of toxic fumes.
- Use all equipment and tools according to the manufacturer's instructions. Do NOT modify tools and equipment. If anything has been modified, report it to your supervisor.
- If you must vacuum the area, use a vacuum with a HEPA filter to help filter mold spores from the air.
- Take all provided breaks when performing repetitive motions such as waving wands or when scrubbing.
- When possible, use a negative pressure or air filtering machine to minimize the spread of or concentration of mold spores.





MOLD: CLEANUP IN CONFINED SPACES

CONCLUSION

To conclude, when performing mold remediation in a confined space, you should always follow your company's confined space procedures. Working in a confined space could potentially expose you to more hazards than just mold spores, so remember to work safely. Additionally, the space should have air testing completed before entering the confined space to verify that oxygen levels are good and that there are no toxic atmospheres. Remember that everyone has a personal responsibility for safety on the job site.





Safety Meeting Report

<u> </u>	Employer
Builders' Exchange of Santa Clara County	Date
	Location
	Meeting Supervisor
Safety Meeting Subject:	
Accidents Reviewed	
Accidents Reviewed.	
Suggestions:	
Employee's Attending	
1,	
2	
7	
8	
9	
10	
11	
12	
13	
14	
15	