



Mold Remediation Part 7: Cleaning Inside Containment

DM

David Myrick

0:00

The mistake that most people make is the visible mold. And so, so many homeowners, they go, "Well, I don't see the mold anymore, and I'm done. And things must have been done well." And, no, no, that's half of the battle, right? The other half is cleaning up all the microscopic stuff, because you're not having health reactions from the visible mold colonies. You are having health reactions from the spores and the fungal fragments that come off of that colony.

KS

Kendra Seymour

0:33

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Hello everyone, and welcome back to part 7 of our Change the Air Foundation remediation, 101, series. My name is Kendra Seymour, and today we're going to jump into the most important, or one of the most important, but overlooked parts of the remediation process. and that's cleaning of everything inside the containment...and I do mean absolutely *everything*. Now this is one of the most time consuming and labor-intensive steps, thus it's costly to implement correctly. And as a result, it's the step that companies tend to skip or take shortcuts on, and you don't want that to happen. So, David Meyer is back to tackle this critical part of the process. Hopefully you've seen him speak on our previous episodes, but if not, he is a mold remediator in Northern Virginia, DC area for over 17 years. And he is the owner of Valor Mold Remediation, and so he's going to take us through this part. David, thank you so much for joining us again today,

David Myrick

2:04

Absolutely. And this episode, I mean, this thing is so...this thing is so critical. It's...I can't stress that enough, it's so critical. So let me jump in. So, this is part seven, cleaning, and it's such a little word, but it means so much to me. It's like saying a doctorate or a bachelor's degree. It's a little word, but that means a lot dedication, and time, and effort, and energy. So, I'm trying to think, how should I phrase this? In the previous episode was demolition, right? And so, demolition is, we're tearing out moldy materials. But why are we tearing that stuff out is like kicking the hornet's nest. And so, mold spores, and fungal fragments. and mycotoxins. and stuff are just going everywhere, right? And so, on a...I was documenting a project we were doing (many, many moons ago), and I just happened to catch this. And I don't know if you could hear us in the background, but we're like, grab our mask on...and we're like, "Oh!" This is we're tearing out some moldy tack strips. And that right there...and I revisit this. Look. Right there. You actually can see the mold. There's so many mold spores coming off of that surface, that you can actually see it with the naked eye, which is something you never can do. Right? It's almost hardly ever can you actually see the mold spores release with the naked eye. But in that case, there's trillions of them. There must have been trillions to actually see a little cloud come off, as we're hitting that with the crowbar. Absolutely amazing, right? It's cool from a nerd science standpoint, right? But it's abhorrent to see that...that's in your house, right?

So, so anyway, so part 6 was demolition. That is removing the actual visible mold colonies. This is part 7, and this is cleaning up all the microscopic mold spores, and the fungal fragments, and everything. So, I use this picture here of a dust storm, right, coming across the landscape. And that's almost how you have to think of this from a cleanliness standpoint, because the mistake that so many people make, (let me see if I can bring up my little laser pointer again. Yeah, there it is.) The mistake that most people make is the visible mold. And so, so many homeowners, they go, "Well, I don't see them all anymore, and I'm done. And things must have been done well." And, no, no, that's half of the battle, right? The other half is cleaning up all the microscopic stuff, because you're not having health reactions from the visible mold colonies. You are having health reactions from the spores and the fungal fragments that come off of that colony, that you're breathing in and being exposed to, right? The mycotoxins and everything. And cleaning is absolutely the most poorly performed part of most remediations, but is so critical to get done, right? So again, if you're doing this remediation from a from a health stance, right? You have CIRS, you have Lyme, you have PANS, PANDAS, what have you...cleaning is critical? Just absolutely critical to doing this right. You know, why is this not done well? And the problem is, you have to be almost OCD to do it right? It's very meticulous. It's very, very tedious.

This is a big one. Homeowner's insurance doesn't pay well, or they don't they pay very little to have it done well. And homeowners insurance, you have to realize, most restoration companies...most remediators, are water damage, fire damage companies first...and mold remediation, they do on the side. And, so homeowners insurance, and how they pay these... how these insurance companies pay has a tremendous impact on what these companies focus on, what their standard procedures are. And so, homeowners insurance, they have a

program called Xactimate. And this is what nearly every company in the country uses, both insurance and restoration companies, to price out their projects. And we used to use it many, many years ago. I didn't like it, so we got away from it and switched to flat-rate pricing. But point is, I know how to use it and what's in it. And basically, it has one line item for, I think it's HEPA vacuuming/detailed. You can charge that once; the adjuster will pay for it *once*. But the problem is, when it comes to cleaning, you have to do multiple rounds of that in a remediation. Well, good luck having an adjuster pay for that, right? They're going to look at their company like they're nuts, like, they're trying to, you know, screw them over kind of thing (excuse my French.) And so, anyway, you know, again, follow the money, right? Follow the money. This a lot of times, has an impact on how things are done.

The other thing is, is not sexy. And I say that from a marketing standpoint, right? If we did kitchen remodeling, I could show you beautiful pictures of new countertops, and cabinets, and whatever, right? But how do I as a business owner sell cleaning to you, right? I'm clean....I'm selling you the absence of stuff. And furthermore, these are job sites that just got demolition, right? So, these are missing walls and wall framing. You're looking at this thing going, "Oh my gosh, look at all this stuff I got to put back together." Right? And so, it's very hard to convince people of the merit of having really, really good cleaning done. And then the other thing is, during PRV sampling, it gets overlooked, right? When you're dealing with low quality remediators and they're running air scrubbers in the containment, right? There's that saying, "A broken clock is right twice a day." Eventually you're going to pass, right? You might fail two or three or four times, but eventually that air scrubber is going to take enough of the mold out of the air, that it's going to pass airborne sampling.

Most remediators, most testers, do not do surface sampling, right? They might do tape sampling of like a spot here—or a spot there. They might do it for areas that look discolored, right? Where they suspect there might be residual mold growth on, like wood framing. But that's it, right? They're not doing random tape sampling of different surfaces that look clean, because also, too, they're going to be accused of by the client, possibly ripping them off, and raising up the charges, and all that kind of thing, right? And I love this cartoon, you know, again, this is, you know, people talk about cleaning and people think we're all on the same page. They think this...matter of fact, Kendra, you have the analogy of the McDonald's, I think, with buying a hamburger across the US, and everything's the same. And so, you know, again, this is a small word. I say cleaning. And when I'm talking to a client in their face, you know, "We're going to do a cleaning." And I know what that means, but the client doesn't. So, the client goes on, they talk to other companies, and they go, "Oh yeah, we do cleaning too." Well, it's not the same. We're not talking about the same thing.

KS

Kendra Seymour

9:21

Yeah, you have to ask, what does that look like?

DM

David Myrick

9:24

Yeah, exactly. What does that exactly look like? List that out to me. Now, I had this diagram created. This thing is, this is...I'm going, I'm going to go into this with the assumption that

you've already watched part 6, right? You've already watched part 5, part 4. You've already watched this whole series, right? If you haven't, please go back and watch it. I'm not going to explain the basics to you again. You need to go watch that video. So, after the demolition is done, even though we've had negative air pressure running inside our containment this entire time, that negative air does not actually clean the chamber itself, right? It's meant to keep the mold and spores in the chamber, but it doesn't actually clean the chamber. And so, as a result, there's billions of spores that have settled onto all the surfaces in that containment. So, it's all over the ceiling, all over the walls, all over the floor...especially the floor...and it's just basically like a just a pig pen, right, of spores. And so, the cleaning process to address that is—we basically have to clean every square inch of that containment. And so, step one is a HEPA vacuuming. Step two, is damp wiping. Step three, is HEPA vacuuming, again. Now this is called the HEPA-sandwich (I'll get into this later, because there's also two people that like the HEPA-pizza and things like that, and that's totally fine.) But, point is, this is what we do. It's been effective. And these little dots here, they mean something. So, the red dots represent mold spores, the blue dots represent mycotoxins. And so, as we do the first round of cleaning, the HEPA vacuuming, that's meant to get up all the mold spores, because what's left over are mycotoxins (and I have another slide later to explain mycotoxins.) But essentially, mycotoxins are sticky, and so HEPA vacuuming alone is not going to remove them. So, if you imagine the spore is a bowling ball, and then the mycotoxins are like a tarp coating on the outside of that bowling ball. Wherever that little bowling ball goes, it leaves a little, at least a little trail of sticky mycotoxins behind. And so, the first step is, you want to clean up the mold spores. The second step, is damp wiping (and again, I'll get into that later about what exactly we damp wipe with.) But that is meant to what's called denature the proteins in the mycotoxins, which basically, in layman's terms, means we're making them unsticky. And then, the third round of cleaning is to remove those mycotoxins. Now, again, we like to HEPA vacuum, but also to have some techs who they like to do a third instead of HEPA vacuum, damp wipe, HEPA vacuum. They'll do HEPA vacuum, damp wipe, damp wipe. And that's fine. Point is, it's a multi-round cleaning process. You don't just do one initial vacuuming, just to clean up the debris, the loose drywall, or carpet fragments, or what have you...and think you're done, you're not, right? This goes very detailed.

DM

David Myrick

12:12

These next couple slides are boring, because I don't have pictures. But the I really want to get this data down right about how exactly this is done, because I've done past presentations where I'm like, "Okay, I detail that step," but I don't actually get into meticulously exactly how that's done. So, so the first round of HEPA vacuuming, you're vacuuming the ceiling, then the walls, then the floor in the whole containment, right? You're not doing room by room. You know, you don't do one room, and then stop. And then, you know, start damp, wiping...you're HEPA vacuuming the whole thing. And then you're damp wiping same thing, ceiling, then walls, then floor. And then the third round is again, HEPA vacuuming, or Swiffering, or another round of damp wiping—but the whole thing, right? Ceiling, walls, floor...whole thing. Now, if you're doing this yourself, I will say this, if you can only pick one surface to clean, then clean the floor. That's going to be the most bang for your buck. You...we do the ceiling of the walls, because, again, you're paying us.

We're professionals, right? We're going to clean all the surfaces, right? That's what you pay us for. But, if you're doing something where you're, you're, you know, you're doing it yourself, or your neighbors helping you out, or something like that, and they don't have the patience for it, then okay, at least clean the floor, right? Do the three rounds of cleaning on the floor. That's going to be the most bang for your buck. Now, I talk about this, because this has come up in recent topics, right? Recently, HEPA-sandwich versus HEPA-pizza. And people are getting into this raging debate over which one, you know, "Pizza is the way to go—the sandwich is the old way." And to explain this, for people who aren't aware, the HEPA-sandwich is vacuum, damp wipe, vacuum. The HEPA-pizza is vacuum, damp wipe, Swiffer. Both are effective. We've done both, right? But one of my mentors, who passed away a few years ago, he would have us do Swiffering, right? Vacuum, damp wipe, Swiffer, He would change it depending on the project. But we've done both, and both are effective. So, to me, it's like this debate, right? People getting into this raging debate, "Oh, this pizza is the way to go." It doesn't matter, right? What matters is how meticulous the person is that's doing the cleaning. That's what matters. That's what matters. This whole debate about with a method, is barking up the wrong tree. If you're doing the HEPA-pizza, but you're doing some...but the person who's doing it is somebody who's very sloppy, and they're missing strokes and stuff, then it doesn't matter. It doesn't matter. The point is you need to be a little OCD when you do this.

Now, the guidelines, as far as HEPA vacuuming go, you want to use a true HEPA vacuum. These are some examples...These are some examples of commercial brands. Yes. Now I'm not saying go buy a master craft. Any model you buy is going to be good. I'm not saying that, right? Some are regular vacuums. Some are true HEPA vacuums. But this is very important. Residential brands I'm not too familiar with. There's gonna be others watching this. They're gonna know way more about this than I do, but I do know this German manufacture Miele, they make one. (I think it's the C series. Is their version of a true HEPA vacuum.) And this is very, by the way, this is very misleading, because right now in the US economy, when you got to buy a vacuum, *all* the vacuums say they're HEPA vacuums, all of them, and they're not lying. There is a HEPA filter in the vacuum, but it is not a *true* HEPA vacuum, because it matters where the filter sits in relation to the motor doing the pulling, right? The impeller.

And so, in this case, I believe the filter has to sit in front of the impeller. So, you know, you just don't know that, unless you're gonna break the vacuum apart or something. Now, as far as actually doing the vacuuming, you when you're doing the walls, you start at the top, and you work your way down to the bottom, and you're doing overlapping strokes, right? So, if I'm vacuuming here, my next stroke is going to be here. It's going to overlap. Damp wiping to get into the actual procedures, you...I don't want to say it doesn't matter too much what you actually use for damp wiping? We've used rags. We've used paper towels. Right now, we use microfiber cloths. Again, this gets into the person actually doing the cleaning. Now, if you're going to use microfiber cloths, like it's not unusual for us to go through 50, 200, 500 microfiber cloths in a project, it adds up, right? And microfiber cloths, by the way, you can't wash them. If you stick them in a washing machine and use soap, what happens is the soap clogs up the little pores, right, that make their microfiber cloth effective at picking up debris. So, you can't wash them. So yeah, you want to go ahead (and let me go back.) You

want to go ahead and pick something that is within your budget if you're going to do this yourself, right?

KS

Kendra Seymour

17:03

Right, again. Disclaimer, this is not a do-it-yourself series, and we do not recommend to do-it-yourself remediation. You should always consult with the appropriate professional.

DM

David Myrick

17:15

You're right. Thank you. Thank you for keeping me out of the courtroom, Kendra. And same thing, when you do vacuuming, right? You're going to go top to bottom, and you're going to go with the overlapping strokes. Now, the difference is, with each wipe you're going to use a new surface on the cloth, right? So again, this is how meticulous this gets, of, you know, every wipe, you're using a new surface. And so, it's a giant pain in the butt to do it the right way, and I get it, right? But again, this is how it has to be done to be effective. And you have to clean all the ducks, the pipes, and the wires in that containment area. This is why unfinished rooms are the bane of our existence. You're talking about utility rooms, or a crawl space, or a room that we just tore the ceiling out, right, even walls, right? There's electrical lines, and pipes, and wires that run through that. All that stuff has to be cleaned by hand. And so, there is something called a "white glove test" where, you know, some of the testers will do that, they'll just walk through the white glove and go wipe things. Now, some surfaces you're just never going to get clean. They're always going to have like, a discoloration to it. But point is, if you're wiping it, you're picking up dust. Well, if you didn't clean...if you didn't clean the dust off, if you didn't clean all the dust out of the containment, then how in the world could you have cleaned all the mold spores out? Think about that, right? You know, mold spores are microscopic, dust isn't. The dust particles are bigger. And so anyway, going back to this, (I go off on tangents all the time.) But, what you don't want to do when you're doing the damp wiping, is you don't want to do the whole scrubby Mr. Miyagi thing. This is not Karate Kid, right? I'm dating myself. I know this movie came out in the 80s, but he has the whole 'wax on—wax off', right? You're not doing that, right? This is not Molly Maids. This is not your local cleaning service where we're trying to clean things for appearances. We're not. We're trying to clean it for health. We're getting up mold spores and mycotoxins and so again, if you do the whole scrubby thing—if you do the circular motion—all you're doing is smearing it everywhere.

KS

Kendra Seymour

19:19

And this is where the advantage of those microfiber cloths, they really are more effective than, say, your paper towel. So, from a health perspective, that's not an area where I would recommend people cut corners. But to your point, you know, the process is important, right?

DM

David Myrick

19:35

Well? And just play the devil's advocate, I would be more...like if I had...if you put a gun to my head and said, "What about somebody who's super meticulous, but they have paper towels versus somebody who is sloppy, but they have microfiber cloths?" I would say meticulous person with paper towels, right?

KS

Kendra Seymour

19:51

Right? Absolutely. The process is important. Who's doing the work and how they're doing it exactly.

DM

David Myrick

19:57

Now, names are important for communication, right, between us as people. The problem that is confusing in this industry...and probably in construction in general. Is there's a million different names of what this is called. So again, this cleaning can be called a 'HEPA-sandwich' or a 'HEPA-Pizza'. They could be called a 'fine particle cleaning'. I've in the recent years, I've taken to calling it a 'mold spore and mycotoxin cleaning', only because I like to identify exactly what it is we're doing....help it make more sense to people. But there's also two other names, right? 'Immaculate cleaning'. You'll notice in the previous slide I made that in 2016. And so back then, we called it 'immaculate cleaning'. So again, this is a very confusing thing. Of...to me, all these mean the same thing. But, who knows the remediator you're talking...to them, they might think it's different, right? Their standard procedure might just be doing one round of vacuuming and leaving. But if you say, "Can you do a fine particle cleaning?" Maybe the light bulb goes off and they go, "Yeah, okay, I know what you're talking about." Maybe, maybe. Now, to get into the mycotoxin debate. First of all, I'm going to say some things that are going to ruffle some feathers in this video, and I'm sorry for upsetting you (that I'm talking to the viewer), right, who's going to disagree with me on this. But, I'm just being, being honest, right? This is my platform, in terms of, it's my video, right? I get to speak freely.

So, for the people who don't know, you know, mycotoxins themselves. They're a chemical which, again, remember my example with the spore and the tarp coating, right? It's a chemical that's very sticky, and so they stick to surfaces mainly. Of course, they coat the outside of spores, but also, too, they could stick to dust and things like that. And so, this bullet point right here is very...there's a lot of people that would...there's a lot of companies trying to sell you stuff that would just bristle at this. But, I'm gonna go all in and say, you know, our gold standard in this industry, by the way, because most of our industry, is total hogwash, right? Marketing fluff...and 95% of our industry just total marketing fluff. It's ridiculous to stuff that companies try to sell to the American public. But anyway, our gold standard in our industry is independent University research, right? Where they're independently funded—they're not funded by companies, right? And so, they're just out there for the sake of science and research. Does this work? What does this do? Right? And

so no, to my knowledge, at least, no independent University research has shown that mycotoxins go airborne on their own.

Now I will agree with the people who say, “Well, they're attached to spore, dust, and that goes airborne.” Yeah, I agree, right? But I'm trying to remove that particle. I'm not trying to remove mycotoxins that are floating in the air. And so again, I'm very, very skeptical when people are buying fogging and what's the other one? Candles, right? And they're like, “It's going to remove mycotoxins.” And I'm...in my head, I'm thinking, I have oceanfront property in Arizona to sell you, right? And I'm sorry, I'm just, this is, you know, they got sold a bag of goods, right? Now, I put in parentheses “yet”, because we are still a very young industry. This industry has only been around for 20-30, years, right? This is not like buying a car that, you know, cars have been out since 1880. You know, there's a lot of research that goes into this in the future. And so, in another five, or 10, or 20 years. I might watch this and go, “Man, I was totally wrong.” right? And so, I reserve the right to be completely wrong in the future, right? But first, today, this is, this is what we know. And so, again, this is another one I talked about the industry. You know, again, I'm trying to be very diplomatic and not curse. But the bag of goods that are sold people, to my knowledge, mycotoxins cannot be fog, sprayed, or treated out of existence, right? I'm sure you went to high school, right? And you've heard this before in science class, right? Matter can't be created or destroyed. “Hey, man, there's no magic fufu juice, right, that you spray, and then all sudden, things just disappear. But I like this Far Side cartoon, right? Hey, look what Zog do. So, this is me going there might be advances in the future. We don't know. But for today, there isn't. But again, you always hope that things progress and things improve.

KS

Kendra Seymour

24:39

So, for today, it's about removal, right about removal, not killing or covering up. We're removing mycotoxins, and fragments, and spores, etc, from your environment.

DM

David Myrick

24:53

Oh, matter of fact, if, again, if you skipped around, now I'm talking to you, viewer, if you skipped around, I get...I go into that in the previous segment, right, in the demolition. So actually, quote verbatim, what comes out of the S520, what the S520 says, we're not trying to kill staff. That's never the goal. That's actually a red flag that the person you're talking to has no idea what they're talking about from a health perspective when it comes to mold. So, but yes, thank you, Kendra, for bringing me back, back to the point. So damp wiping (and I can't see the top of my slide...so I think this is), so the goal of damp wiping is, again, to make them unsticky—to make the mycotoxins unsticky. There's only certain things that are that are effective when it comes to removing mycotoxins. Now, I'm going to show a chart here on the right. So, just know that whatever your solution you're going to use for damp wiping, you're going to add 2% dish soap to that. Now, we like to use a Seventh Generation unscented dish soap, right? Because, again, dealing with mold-sensitized having multiple chemical sensitivities. You don't want to use scented products, so, but you know, if you want to use Dawn or whatever's on your...whatever's available, is fine.

KS

Kendra Seymour

26:12

Can I jump in for a second David? For those interested, we just released a series with John Banta, and he goes into great detail. It's the Deep Cleaning Blueprint series, and he talks about surfactants, and how they work, and why they work, and why they're important. So, the chemistry gets unpacked in that episode. For those who are interested.

DM

David Myrick

26:30

Yeah, that's true. You don't want to use just water. You know, you have to add their surfactants in there, because they change the angle of penetration...I think it is...in the water. So, four main things that we know have been proven to remove mycotoxins. Now this is not the end all be all list, right? Don't crucify me if you go, "Well, this and that." Hey, maybe, right? But for today...

KS

Kendra Seymour

26:56

And David, you're not saying in this list that you're recommending what...you're just sharing options that are out there for people. So, he's not endorsing any of these specifically,

DM

David Myrick

27:06

Right? So, there's 70% rubbing alcohol. And before you ask, what's the other 30% the other 30% is water, right? So, if you're buying 70% rubbing alcohol, that means the other 30% is water. So, you're not adding water to this. It's already pre-mixed, right? If you're going to use hydron peroxide...we like to use 6% I'm not, I'm fuzzy on this. It's been a long time since I looked into this, but I think you can use 3%, but don't quote me on that. But you know, we stick with 6%. This is an old school method, but it does work, Everclear, right? AKA the Mind Eraser. That stuff is brutal. I've always fully had it couple times, and I mean, it is, oh, anyway, we won't get into those stories.

KS

Kendra Seymour

27:53

But you can drink it and clean your wall with it.

DM

David Myrick

27:58

Not at the same time, you're not going to do it well. I would say, use it at full strength, because you can dilute it, right? I would treat Everclear the same as the isopropyl, right? So if you're using it at 70% strength...but you have to realize, Everclear, I want to say, is 191 proof, or 200 proof, or something. So, it's so...191...what's half of that? What, 95% or something like that? Yeah. So, yeah, there's a way to mix it and dilute it. But I would just go...unless you're a wiz at volume, right? I don't know if you remember those math

problems that you had to deal with in high school, but, you know, let's hear what at that, I would just keep it a full strength.

KS

Kendra Seymour

28:35

Well, and it's your remediation company doing this, so let...they'll do the math the point. Yeah. You don't even have to worry about it. So, you're asking, you know, what solution are you damp wiping? And they may come back to you with some of these options, right?

DM

David Myrick

28:47

And then the fourth one is Quaternary Ammonia cleaners, aka Quats. This is a broad group category. This is a broad group of products that are out there. There are many, many, many products that are Quaternary Ammonia cleaners. It's so vast. How you want to list them all right, but it would easily be 50-100-150 different products that are Quat cleaners. Now, as far as we go, we use one of these two, because I like to keep it simple. And again, for our clients that we have, that have the multiple chemical sensitivities...they haven't reacted. We haven't had a client yet who reacted either one. So, to us, these are safe. These have, again, proprietary blends from companies and things. I don't know what's in them. They have odors. I just don't trust them, right? Because the last thing I would do is do remediation for a client, and then we're introducing a chemical that then they react to. Because that...we're trying to make the house better for them, not introduce new things that they could react to.

KS

Kendra Seymour

29:54

And for those listening, David's just touching on this briefly, because we actually have an upcoming episode with Michael Pinto, and it's just on chemical use and remediation. And he's going to unpack the different options there. So, I appreciate you though, just giving kind of a high-level overview here of what you're hand wiping with.

DM

David Myrick

30:11

Absolutely. Yeah, not to step on Pinto's toes. I love Pinto. Now, this is, this goes back to the debate of HEPA-sandwich versus HEPA-pizza, and what's effective in all this? There is DNA testing for surfaces, and it is not caught on in the industry at all. Right? It...everybody bristles at this, right? Testers, remediators, everybody just absolutely says they won't do it, and they have reasons for it, and they're good reasons. The big one is this is how bad our industry is. It's hard to enough to get a remediator to pass PRV testing with traditional sampling, with traditional spore trap airborne sampling, with traditional tape sampling, right? They came and passed that, right? I think the average passing rate, I want to say, is 50% in our industry on the first try. I mean, it's really bad. And if anybody's curious, ours is 96%. And so, anyway. We had a client, she was out in Maryland, and we'd actually done quite a few remediations for her. So, she had, you know, as a progression, right? She taught herself, and she learned a lot, and she really got up on things. And so, she was to the point where she knew the differences between the different mold tests that were out there, and the pros and cons of each, right? And so, she said, "Hey, I would like to do my own DNA

sampling.” Right? Not ERMI, but just raw DNA sampling. I think was called CAP 15, from, from, I want to say, Assured Bio Labs. Can I mention companies? Or is that...

KS

Kendra Seymour

31:50

You can. We don't.

DM

David Myrick

30:51

Okay, gotcha. But it's just a resource, right? This is just the company that she used. And so, she would take her own samples, and she kept a very clean house. Because, again, mold-sensitized client, she knew how things should be done. And so, she took her own dust samples. Now she still had a third-party tester, because in our contract, we only guarantee passing with traditional sampling. So she still had a third-party tester come in to verify, and do the whole PRV bit, but she took her own samples. And the thing was, I didn't warn my crew. I didn't want to give them any heads up that she was going to be doing this, and I wanted to see for myself how effective we are at just our normal everyday routine, day in, day out. This is just a random Tuesday job, right? So, I didn't want to give them any heads up. And I really think that this is where things should go for the mold-sensitized crowd. Because, again, I said this in a previous slide. You could fool airborne sampling, but you cannot fool DNA raw counts, right? You're going around doing...and they're little samples. I mean, you're only testing like, I think, a square centimeter at a time—then you're doing a composite. So, if you're testing one room, you're doing, I think, four samples in that room, but, you know, it's a good cross-representation. But anyway, you can't fool that, right? If you suck at cleaning, at surface cleaning, you can't fool the DNA raw count.

Now, at the risk of putting ourselves out on a limb here, these are the levels. So, the first project we did, she tested us after we remediated the master bathroom, and the *Chaetomium globosum* came back as not detected. Now, after we were done, she brought in her remodeler, who promptly tore out some sub flooring. And what they uncovered was a mold colony that nobody knew was there, there was a slow leak and old leak. And so anyway, what happened was they tore out some subfloor, and they revealed a mold colony on the backside of the ceiling drywall—of the room below. And so, the remodeler, thinking that they were doing good by this client, sucked it up with the shop vac. And so, she took DNA sampling in that room and found that the *Chaetomium* shot up to 47,000. And so, needless to say, she was like, “Yep, you guys have to come back.” And we were able to roll it into another project we had to do down the road. But point is, when we did the re-cleaning, that *Chaetomium* came back is not detectable. So again, this was the HEPA-sandwich. And I'm not touting the HEPA-sandwich, saying the HEPA-sandwich is better than the HEPA-pizza. I'm not saying that. I'm just saying the multi-round cleaning is very effective. And then this was the subsequent project down the road. So, we actually did multiple rooms on multiple levels. And so, her...the level before for *Penicillium/Aspergillus* was 62,000 in her in one area that she was testing. And then after cleaning, it came back at 27 so again, these are DNA fragments, right? And the reason to go into why the industry doesn't really want to get into this is because I'm told these are unusual. That if you had 62,000 before, and then

you had remediation done even after the cleaning, that it wouldn't be unusual for this number to be 300,000 or 3 million, right? And so, it's like kicking the hornet's nest.

And so, but again, this comes back to multi-round cleaning. It's so critical. So now this gets into the hall of shame. So, some easy ways to tell remediators good, remediators from bad. Obviously, you don't want to have any visible mold remaining after the remediation is done. That is a bad sign. Another one is baseboards, a door trim not torn out, right? Because if you have drywall behind the baseboard, well, baseboards are, like, ground zero for growing mold, especially if you're talking about flooding, and water leaks, and things like that. But you'll see a lot of companies will leave it behind. I don't know why. These are examples of poor cleaning, right? So, *right here*, you have visible mold growth, right? That's still there. And then, also to all this crap, man, look at all this dust and debris. And I mean, this is terrible...this is atrocious cleaning, right? But you'll find this more often than not, right? All this debris very easily accessible, right? Very easy to be cleaned up. Again, just the people doing the cleaning, either they don't care, or they don't know any better. Here's another one, right? This is after...this isn't our work, right? This is after a remediation was done. But, here you have visible dust and debris in the corner.

Now, granted, these corners are hard to clean, but look, man, that's the remediator that needs to do that, right? You have it here, you have it there, you have it there. It's all over the place. It's just poorly done. Another red flag is when companies want to do encapsulation before PRV. This is what it looks like, right? Everything's white, everything's been painted, everything's been encapsulated. The Mold Standard addresses this. They say, clear as day, if you're going to put on encapsulation...which, by the way, fungicidal coatings—mold resistant coatings, right? (This encapsulation is kind of a generic name for them.) But if you're going to do that, you do it *after* testing—after the PRV has been done. You don't do it before. But yeah, you'll see a lot of companies do this, because—I'll be honest, it's more profitable. Because if I go in and encapsulate a project before testing, I know I'm going to pass surface sampling of that wood framing. I know it. Because what's the mold tester testing? They're going to be taking tape samples of the paint I just put on. They have no idea how good the mold was stripped out of that wood underneath, right? So, sorry, I get very passionate.

So yeah, the translation is, once the job passes testing, you can encapsulate anything you want. Because the encapsulations and the mold inhibiting coatings, they are effective. They will give you a little bit of buffer time, where, if you don't fix the water issue that grew the mold in the first place. It can be a little bit of time that it will prevent the mold growth on those surfaces, not forever, not forever...but for a little bit of time. But at this point, I go, "Well, if we pass mold testing..." I tell this to people all the time, "If we pass mold testing, why are you paying us mold remediation prices to do something that a painter can apply? You don't need us." So, and furthermore, we don't like to do them, because, again, we're adding chemicals to the client's house. And going back to the fundamental thing, matter of fact, I totally forgot to mention this, if you fix the water issue that grew the mold in the first place, mold will never reappear in a million years, right? Mold only grows because of water. So again, why add this man-made thing? There's nothing manmade that's going to hold

back Mother Nature. So, you address the water issue, you'll never see mold again. So again, why are we encapsulating it? Makes no sense.

KS

Kendra Seymour

38:47

That's good. You *must* correct the moisture source. And I have a flag on the bottom of all these, but yeah, you *must* correct the moisture source.

DM

David Myrick

38:57

Yeah. The other one is fogging, right? You'll see this a lot. This was actually on a downward trend in our industry, and then what brought it raging back was COVID. Because it made sense, if you're dealing about...you're talking about a operating room theater or something, you're trying to kill a virus. Fogging is effective, but with mold, it's not effective at all. And again, I talked about this in the...part 6 in the demolition, right? About what the actual Mold Standard says, but this is what it looks like, right? This is fogging. This is what you'll see most times, right? These wet foggers. And we used to do it, right? Don't say, don't think we walk on water. I did this for the first two years we were in business. We'd come in and fog, and it was horrible. You had to wear a respirator because you would hack your lungs out. That's why it's called fogging. It's so thick it actually makes a fog in the air. That's how much chemicals in the air. What does the Mold Standard say? Says, "Don't do it." I can't get any clearer than this. "Should not fog in lieu of source removal." But, I was talking to a client two weeks ago, right? They had a company come by, "Oh, you don't have to do all this demolition and cleaning and stuff. We're just going to spray this stuff in the air, and we'll charge you \$5,000, and we'll do your entire house." And so, again, if you don't know any different, right? You think this is the way it's done. It sounds very attractive, but, yeah, this is not...this is total snake-oil salesman. So that's my presentation.

KS

Kendra Seymour

40:22

David. I have a couple follow up questions, of course. So, just to help people understand how time consuming the cleaning process is, if you had, like, a three-day job, and I know this is a bit of a loaded question...what percentage of the time spent on a job is dedicated just to that last step?

DM

David Myrick

40:39

Typically, if you have a three-day project, I mean, it just, it depends. It is a loaded question, because obviously a crawlspace, utility room, is going to take more time, right? But let's say, we're talking about a basement where we just did blasting. The blasting may take two days, and the cleaning would take two weeks. And so, if we're doing the cleaning, because we'll see...we'll get this too, right, clients go, "Okay, do a fine particle cleaning in my entire house." And if you're talking about a regular, let's say 2,000...well, I say regular. Let's just say 1,500-2,000 square foot house. It's not unusual for that process to take 2-3-4 weeks to do, right? Weeks, right if not, months. It's very time consuming. So again, if a company says that they're going to do a fine particle cleaning, you'll hear this all the time. "We'll do a fine

particle cleaning in the house, and we'll get it done in two days, and we're gonna do your entire house." Unless you're coming in with an army of mold, top notch, Navy SEAL version of mold remediation technicians. It's not happening. It's not happening. So, yeah, it's very time consuming.

KS

Kendra Seymour

41:47

Yeah, this has been really helpful. I want to flag a few things for listeners, because we brought it up—that post-remediation verification. We have an upcoming mini episode on that as well, with Michael Pinto talking about that, testing. What it should look like? What it should include? Who should do it? So, you'll want to check that out. And then we actually have Michael Rubino. He's going to be doing an episode talking about cleaning the rest of the home, and what that looks like...and he's going to be going into a deeper dive. So, you'll want to check that one out for sure. So, if you've listened to these before, you've heard the spiel before, if you want to make sure that you don't miss an episode like this, head on over to [ChangeTheAirFoundation.org](https://www.ChangeTheAirFoundation.org), sign up for our newsletter, because it really is the best way to get great information like this directly to your inbox. We'll see you next time. Thanks so much.