



IAQ RADIO+

Show Number: 737 Final Blog

Joe Spurgeon, PhD

Write a Mold Assessment Report Not a Data Report

Good day and welcome to IAQ Radio+ episode 737 Blog. This week we welcomed Dr. Joe Spurgeon to demonstrate how to write legally defensible mold reports.

If you ever write a mold report and it goes to court Dr. Joe Spurgeon could well be the expert on mold.com that reviews your report. Dr. Joe has retired his CIH and does not get out in the field much these days, but he still reviews reports and testifies in mold related cases on a regular basis. This week he has volunteered to tell us what makes a quality report and how to write a mold assessment report and not a data report. If you don't know the difference this is the show for you. In addition to the presentation he put together for us this week Dr. Spurgeon has put up a special free link <https://expertonmold.com/product/iaq-radio-presentation-free-digital-download/> with his IAQ Radio presentation plus 38 new slides, copies of field sheets, "Notes on Writing a Mold Report", an example mold report and a mold site inspection list. You can also order any of Dr. Spurgeon's books from his website expertonmold.com.

Another great show for continuing education credits, learn more here <https://www.iaqradio.com/ce-credits/>

Joe Spurgeon, Ph.D.

Joe Spurgeon, PhD has a multidisciplinary doctorate degree in Analytical Chemistry and Environmental Health from the University of Pittsburgh; and was a Certified Industrial Hygienist from 1993 – 2013. His career has included working as a research chemist on the NBS Lead-Paint Poisoning Program, directing the FAA's Combustion Toxicology Laboratory, performing Health Assessments for CDC/ATSDR, implementing US EPA's Laboratory Exposure Assessment Project, and working as a consultant specializing in microbial indoor air quality for US PHS. He has performed numerous residential and commercial investigations involving water intrusions and microbial contaminants; has taught courses on mold investigations,

sampling, and data interpretation methods; and has served as an expert witness in numerous mold cases. His books are available at <http://expertonmold.com/>

Nuggets mined from today's episode:

Let's start with your work as an expert witness. You commonly review mold reports, are they getting any better? No, they have not improved over time.

What is an objective of your Presentation today? Show some new ways of thinking about – Mold Inspections – Mold Sampling – Mold Reports. Most importantly, to encourage a broader discussion of the quality of mold reports within the industry.

How do you define an expert? Education and training are important. But an expert in their field is someone who knows what their options are and how and when to use them.

Why is the mold report important? The mold report is the only evidence of the quality of the site inspection, and the only part of the inspection that is evaluated and judged. We need a broader discussion of the report within the IAQ community.

What are the primary objectives of a mold inspection? Determine either Building Related Contamination or Occupant Exposure Potential.

- We are not looking for indoor mold, we are looking for excessive concentrations of indoor mold.
- We need either implicit or explicit criteria for detecting excessive concentrations of indoor mold.

Do we need a definition for a quality mold assessment report?

- The report is the only evidence available to judge the quality of the inspection.
- How can we define a quality report? "You know it when you see it" may not be true.
- A quality report is based on a reliable inspection that sufficiently characterizes the indoor environment – Can be difficult to judge by simply reading the report
- Need a more objective definition of a quality report

What Makes It a Quality Report? Basis: Federal Rule of Evidence 702 Criteria for Qualifying as an Expert Witness

1. Report demonstrates the inspector's scientific and technical knowledge and their ability to understand the collected evidence.
2. Opinions, conclusions,

and recommendations are the product of reliable principles and methods. 3. Inspector has reliably applied those principles and methods to support conclusions and recommendations. 4. The report is based on sufficient facts or data to support those opinions, conclusions, and recommendations.

What are the most common issues when reviewing mold reports? Some of the following issues are related to the above four factors.

Sufficient Facts or Data

- The basic elements of a mold inspection were not included in the project report – A visual inspection – But no site characterization, occupant interview, incident history
- Inadequate documentation of the inspection, conditions, sampling methods, sample collection, and conclusions – No use of Field Sheets
- Conclusions and recommendations were not associated with specific findings and results – No use of Data Tables in the body of the report
- Unsupported opinions, conclusions, and recommendations

Do you commonly cite industry standards in your reports? No, because nobody complies with everything in an industry standard. When an industry standard is cited in an inspection report the inspector opens themselves up to agreeing with and being queried about everything in the standard.

Reliable Principles and Methods

Does sampling “work”? Sampling “works”. Not sampling misses about 30% of problem houses. Sampling does work, it’s the sampling methods that we currently use that don’t work.

Reliable Application of Principles and Methods

- Inspector did not understand their sampling options or when and how to apply those methods – Total airborne spores when assessing Occupant Exposures
- Inspector assessed and discussed raw spore counts rather than standardized spores/m³

- The inspection was not sufficiently complete to determine the significance of the results – Two outdoor airs and one indoor air, **who is teaching this nonsense?**

What is the sampling Rationale? The: Where? Why? How?

No statement of project objective/s – Building-Related Contamination? Occupant Exposures? – Objective needed for rational assessment of the results

- Most residential reports are data, not assessment reports – Simply report the data
- No assessment (significance) of the sample results – Only “Interpretation” of results was made by the mold lab. A problem for discussion?
- Inspector referenced guidance documents (AIHA, ACGIH, IICRC) in the report – Then contradicted those guidance documents during the inspection
- Recommendations that occupants vacate based upon insufficient findings and results that had been adequately assessed.

Why was the carpet dust sampled? To Assess Building-Related Contamination – Objective: Clean vs Discard • Total Fungi • Assess Occupant Exposure Potential – Basis: Occupant Interview

More Recommendations to improve your reports:

- Use Field Sheets to document samples and conditions.
- Use Data Tables to convert findings and results into useful information that is understandable to clients and MIPs and actionable.
- Do not “interpret” directly from lab reports. Transfer the results to Data Tables and then Interpret. Demonstrates patterns and concentration gradients in the data.
- We can and should ask if the data are consistent with observations.
- Limitation of sampling: We can ID contaminated air, we cannot ID uncontaminated air based on low airborne mold concentrations.

REFERENCE MATERIALS:

<http://expertonmold.com/> Dr. Joe Spurgeon’s website, more info is available for FREE at Joe’s website.

[file:///C:/Users/Owner/Downloads/Write%20A%20Mold%20Assessment%20Report%20\(5\).pdf](file:///C:/Users/Owner/Downloads/Write%20A%20Mold%20Assessment%20Report%20(5).pdf) Link to download slide presentation.

Z-Man signing off

Trivia Question:

What is Paraskevidekatriaphobia?

Answer: Fear of Friday the 13th

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