

# Indiana IAQ

March / April 2012

## About Indiana IAQ:

A new kind of newsletter that addresses the concerns of everyone interested in Indoor Air Quality (IAQ) in Indiana.

From the many questions and concerns received this newsletter and the ones to follow are developed from specific concerns. Information is collected and applied this way to the articles published.

Who can write in? Anyone!  
Contractors, mitigation technicians, restoration and remediation technicians, real estate professionals, banks, doctors, lawyers, insurance professionals, investors, anyone with an interest in IAQ.

To submit an idea for an article, write to:

IndianaIAQ@solutionsiec.com.

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## Inside this Issue of Indiana IAQ:

After the last issue of our newsletter, there were many of you who were questioning the training that you were receiving at work, writing in with questions about mold remediation and various regulations. Several readers described how their “OSHA safety training” at work taught them that all they needed to do was “wipe the mold down with bleach” and that “those companies that charges thousands of dollars for mold remediation are just over-charging people”. Many, of these same people, were surprised to find that their association with some organization or union did not provide them a better understanding of the hazards associated with mold and/or the proper means of remediating mold. As a result, I have decided to touch on a subject that I realize is very controversial and personal to a lot of readers: how they should understand OSHA’s and the Indiana Department of Labor’s perspective toward mold in relation to providing an “employment which are free from recognizable hazards” (Section 5(a)(1) of the OSH Act).

Now, it should be understood that this subject could cover volumes of literature, court cases, standards of care, and other methodologies and research studies, so this is just an introduction. During the discussion, in order not to repeat previous issues of Indiana IAQ, I may site a resource link where you can read more on a particular subject, or I may include some links to further information from various regulatory bodies (like OSHA) or industry standard research and writing bodies (like the Clean Trust and the American Society of Heating, Refrigerating, and Air-conditioning Engineers). In this way curious readers can begin to research this subject further.

As always, you are welcome to contact me directly for more information about this or other articles written at [jasony@solutionsiec.com](mailto:jasony@solutionsiec.com) or [indianaiaq@solutionsiec.com](mailto:indianaiaq@solutionsiec.com). You can also call me at (877) 624-7185 extension 1.

But before I get into this topic, I would like to take a moment to say a short prayer for all of those suffering from the recent natural disasters that struck the Midwestern U.S. I hope and pray that God keeps everyone safe and provides for everyone’s needs with abundant peace, joy and love. And, as with all things, God’s name be praised for His faithfulness in all our times of need—in Jesus’ name. Amen.

Thank you. May God bless.

~ Jason Yost

### About Jason:

Jason has been in the industrial hygiene, indoor environmental quality, and cleaning and restoration industries for twenty years. He has a background in Occupational Safety & Health and Industrial Hygiene Management from Columbia Southern University, and has been peer-reviewed and certified in indoor environmental remediation supervision & consultation, microbial remediation supervision, and structural drying supervision from the American Council for Accredited Certification. For more information write to [jasony@solutionsiec.com](mailto:jasony@solutionsiec.com).



## Formaldehyde and VOC Concerns in Baby Nurseries

Last week, California's KVTU reported on concerns over off-gassing from products and furnishings in newborns' nurseries. The article brought to light the use of volatile organic compounds, including formaldehyde, that are commonly found in furnishing and baby products used in nurseries.

According to the article, "When some parents bring their babies home for the first time, they may actually be harming their newborn children by exposing them to dangerous toxins that can be found in the furnishings of their brand new nurseries." The article references recent test conducted in nurseries that have found dozens of VOCs present.

The Occupational Safety & Health Administration (OSHA) reports that in 2006 the U.S. production of formaldehyde was at 10 billion pounds. This

commonly used chemical is classified by the *National Toxicological program's (NTP) 12<sup>th</sup> Report on Carcinogens* as being known to be a human carcinogen.

Formaldehyde is a colorless, pungent-smelling gas, that can cause watery eyes, burning sensations in the eyes and throat, nausea, and difficulty in breathing in some humans exposed at elevated levels (above 0.1 parts per million). High concentrations may trigger attacks in people who suffer from asthma. There is evidence that some people can develop sensitivities to formaldehyde.

"Reports of VOCs and formaldehyde in newborn nurseries are a concern for parents," reported Joe Frasca, Senior Vice President, Marketing at EMSL Analytical, a leading formaldehyde testing laboratory. "Some manufacturers now produce products with little or no off-gassing, but at this time it is buyer beware. EMSL can help

test products and indoor air quality for parents, retailers, regulators and manufacturers to help determine what levels of VOCs and formaldehyde are present," he continued.

EMSL has sponsored a video about the hazards associated with formaldehyde in indoor environments. It can be seen at: <http://www.youtube.com/watch?v=yD4pTC8GVpE>



For more information on EMSL Analytical call (800) 220-3675 or visit [www.emsl.com](http://www.emsl.com).

## Workplace Training and Mold:

As I stated on the opening page, there were a lot of you with a lot of questions about your workplace training programs after our last issue of Indiana IAQ. In order to help answer your questions I made two phone calls: One to the Occupational Safety and Health Administration (OSHA) in Indianapolis, Indiana and the other to the Indiana Department of Labor. In order to get into a meaningful discussion, I thought that I would share with you some of my interview with these two agencies. You may find them interesting.

I first contact the Indianapolis OSHA office. While they stated that they took issue with mold and put together a website on it for employers (found here: <http://www.osha.gov/SLTC/molds/>) they are understaffed and have passed the labor of enforcement to the Indiana Department of Labor (INDOL). So, I got transferred to the INDOL for more information.

INDOL was very informative and reiterated a stance that I had heard previously (and repeatedly in college) on how a professional undertaking mold assessment or remediation "should be trained in the

*voluntary industry standards*" and be "competent" in the work before them; otherwise, if there were an incident "OSHA and the DOL could investigate these organizations for violative conditions".

What are these voluntary industry standards? INDOL pointed to the same OSHA website on mold and highlighted the section that is entitled "Standards". In that section you will find that OSHA applies many of their own regulations as well as a few voluntary industry standards to their expectations for workplace safety, such as:

- General Industry (29 CFR 1910)
- Shipyard Employment (29 CFR 1915)
- Construction Industry (29 CFR 1926)
- 62.1-2007, Ventilation for Acceptable Indoor Air Quality
- IICRC (Clean Trust) S500 & S520, Standards & Reference Guides for Professional Water-damage Restoration and Mold Remediation

- As well as a lot of assessment and remediation guidelines from the National Institute of Environmental Health Sciences, the U.S. Environmental Protection Agency, and further OSHA documents. (These are found in the section entitled "Control and Clean Up".)

So, according to the INDOL, an employee performing mold assessment and/or remediation should be "trained" and "competent" in these standards and guidelines as well as be equipped to perform the task they are being asked to do—before they are sent to do it. In fact, upon careful review of section 11(c) of the OSH Act employers can review a list of employee rights that include things like:

- Receipt of information about hazards that may be present in the workplace
- Receipt of information on emergency procedures
- Receive safety and health training

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## Workplace Training and Mold:

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- Receive updated information about safety and health issues
- See records of hazardous materials in the workplace
- Review the annual Log and Summary of Work-Related Injuries
- Challenge the abatement period given employers to correct hazards discovered in an OSHA inspection
- And so on. . .

But there are also a list of employee-responsibilities in this section of the OSH Act, including things like:

- Compliance with all OSHA standards
- Compliance with the company safety and health plans, rules and regulations prescribed by the employer, making sure to use required Personal Protective Equipment (PPE) and engineering controls while engaged in work
- Report known or suspect hazards to their supervisor
- Report any job-related injury or illness to the employer and seek treatment promptly
- Cooperate with any OSHA investigation
- And, exercise their rights under the OSH Act in a responsible manner

So, if you are a business owner or manager, it is best to make sure that all employees are trained on known, suspect and potential hazards prior to going into the field of work and documentation be made regarding this training. If you are an employee, you want to be involved in your company's safety and health procedures and plans and cooperate with your managers, supervisors and OSH professionals to help these plans remain relevant and effective.

Now, at this point there may be some of you out there asking, "What does this have to do with me?" Well, if a company does not effectively train and protect its own employees, are you going to trust them to remediate an environmental contaminant, providing for your safety and health? (I wouldn't.) But how do you know who is competent and who is not? Well, you can read a couple of our past newsletters where we address:

1. Who does what on insurance claims, from insurance adjusters to restoration technicians to assessors and consultants. ([http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana\\_iaq\\_19\\_-\\_sep\\_n\\_oct\\_2011.pdf](http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana_iaq_19_-_sep_n_oct_2011.pdf))
2. Who is mold's competent person & what kind of conflict of interests are practiced in the industry today. ([http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana\\_iaq\\_10\\_-\\_april\\_2010.pdf](http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana_iaq_10_-_april_2010.pdf))

There are many ways employers can get help with their training programs and their assessments of workplace conditions. Here are a few things available:

- Industry associations like the American Industrial Hygiene Association (AIHA: <http://www.aiha.org/education/Pages/default.aspx>), Indoor Air Quality Association (IAQA: <http://www.iaqa.org/education>), and American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE: <http://ashrae.org/education--certification/>) provide training and certification for workers. This not only helps with your training needs, but provides a marketable certification for your record-keeping needs, letting OSHA and consumers know that you have that "training" and "competency" that they are looking for.
- There are businesses, like Solutions Indoor Environmental Consulting ([www.solutionsiec.com](http://www.solutionsiec.com)), where you can sub-contract professionals to assess and generate safety scopes and protocols for remediation. These businesses can usually be found in directories like the American Council for Accredited Certification's (ACAC) website (<http://www.acac.org/find/definitions.aspx>) or the AIHA's website (<http://www.aiha.org/consumerinfo/Pages/FindanIndustrialHygienist.aspx>).
- There are professionals that you can sub-contract to perform the mold remediation also. Most of these professionals can be found in directories like the ACAC's (<http://www.acac.org/find/definitions.aspx>), the Restoration Industry Association (RIA: <http://www.restorationindustry.org/content/certification>), and The Clean Trust (<http://www.certifiedcleaners.org/locator.shtml>). One should note, however, that not all of these directories contain certified professionals. Some of these designations are certificates of completion and/or may not be recognized by some guidelines, such as the U.S. Unified Facilities Guide Specifications on Mold (<http://www.wbdg.org/ccb/DOD/UFGS/UFGS%2002%2085%2000.00%2020.pdf>). It is important to understand the differences in these designations.

These directories, certifications and certificates are great ways for consumers to evaluate contractors also. They allow for consumers to know that their contractors are trained in the area of expertise that they (the consumers) require.

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*“Don’t let problems with poor indoor air quality take control of your life. Empower yourself with SOLUTIONS—Indoor Environmental Consulting—today!”*

**(877) 624-7185**

SOLUTIONS IEC is a truly experienced business that, with over twenty years of mitigation, restoration, remediation and hygiene practices, can assist you in determining the Category and Condition of the damaged structure; develop a protocol that is real and specific to the structure; and can provide expertise beyond just an inspector’s role. Our staff of professionals have been recognized in both indoor environmental consulting (Council-certified Indoor Environmental Consultants) and indoor environmental remediation supervision (Council-certified Microbial, Moisture, & Environmental Remediation Supervisors) - holding four of the most prestigious awards in the industry today! Don’t let poor IAQ take control of your life. Empower yourself with SOLUTIONS—Indoor Environmental Consulting—today!

Serving the Indiana and Illinois states!

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And  
www.facebook.com/SolutionsIndoor  
EnvironmentalConsulting



## Workplace Training and Mold:

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Solutions Indoor Environmental Consulting (IEC) is proud to offer our clients some of the most experienced, peer-reviewed, and board- and council-certified professionals in the industry. Recognized by establishments like ACAC, Council of Engineering & Scientific Specialties Board (CESB), the Indoor Air Quality Association (IAQA), U.S. Corp of Engineers, Air Force Center for Engineering & Environment, National Aeronautics & Space Administration, and many others, you can be sure that you are working with a team of professionals capable of providing some of the most trusted service in the industry today. Our staff as been educated, reviewed and designated in such areas as Occupational Safety & Health, Industrial Hygiene Management, Indoor Environmental Remediation & Microbial Remediation Supervision, Indoor Environmental Consultation, and Structural Drying Supervision. To learn more about our back-

ground visit [www.solutionsiec.com](http://www.solutionsiec.com) or contact us at:

[consultants@solutionsiec.com](mailto:consultants@solutionsiec.com), or  
(877) 624-7185 extension 1

To learn more about this subject you can check out some of these additional resources:

- To learn more on biocide usage on mold go to [http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana\\_iaq\\_2.pdf](http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana_iaq_2.pdf)
- To learn more about OSHA’s view of air cleaners on mold clean-ups go to [http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana\\_iaq\\_2.pdf](http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana_iaq_2.pdf)
- To learn more about the EPA’s view on ozone for air processing/cleaning go to PART I of report at

[http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana\\_iaq\\_2.pdf](http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana_iaq_2.pdf) and PART II of report at [http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana\\_iaq\\_2.pdf](http://indiana-iaq.weebly.com/uploads/8/6/3/6/8636798/indiana_iaq_2.pdf)

- To discuss this further with OSHA in Indiana call (317) 226-7290 and in Illinois call (312) 353-2220
- To discuss this with the Indiana Department of Labor you can call (317) 232-2655
- To discuss this article or others listed in this publication call (877) 624-7185 extension 1 or write to:

[indianaiaq@solutionsiec.com](mailto:indianaiaq@solutionsiec.com)

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