



February 2010



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Message from IBE Executive Director, Michael Conn

Our Natural Healthy Building Seminar is underway as I write this, IBE 213, having drawn students from across the continental USA, Hawaii, Canada, and Mexico. Among the many updates and new technologies added to the curriculum is an inspiring field trip to the historic Chaffey-Garcia House, in Rancho Cucamonga, California. This will be a hands-on experience, as our instructors use that deeply storied, 136 years old territorial home to demonstrate the methods and practices of home inspection, assessment, and remediation.

My special thanks go to our 213 team, who helped make 213 a very cool week of interactive learning: Diana Schwartz, student coordinator, Vicki Warren, programs director, our instructors Paula Baker-Laporte and Stephen Collette, our drop dead wonderful teachers' aides, Kelly Blackstone and Allison Montieth, who are generously volunteering their time, and the tireless support staff at The Frontier Project, the "uber-green" site of 213. Please join me in wishing our students, instructors, and volunteer aides a fulfilling and meaningful week!

Next up, our Indoor Air & Water Quality Seminar, [IBE 211](#), scheduled for 17 through 21 May, in Battle Creek, Michigan. Your instructors will be Anne Stewart, BBEC, B.A., B.A.Sc., environmental health specialist and certified public health inspector, and Mike Weston, BBEC, IAQA-CEI, CMR, CRMI, NEHA-radon instructor, Licensed Builder, and lead and asbestos inspector.

During this engaging week of lively lectures, labs for instrumentation usage, and interactive discussions, learn to detect, identify, and mitigate toxic synthetic chemicals that are present in our indoor air, our tap water, and our building materials. Take advantage now of [early registration](#), and save \$100!

Our new flyer, titled "Free and Easy Ways to Protect Your Family", is available at no charge on the Home page of our [website](#). This compelling, informative guide for almost instantly creating a healthier home was designed and written for IBE by Melody Chan Graves, BBEC, and Alex Stadtner, BBEC, and should be read by everyone on the planet. Do everyone you know a favor: download our flyer, read it, send it along to your family and friends.

Are you an IBE Approved Program Provider (APP)? Are you looking for an IBE Approved Program Provider to speak at your next seminar or conference, or to interview on your upcoming TV, radio, or stage program? APPs are Bau-biology experts whose programs and presentations have been peer reviewed and approved by IBE. You'll find our APPs listed on our website, [here](#). If you're interested in becoming an APP, please contact me at mconn@buildingbiology.net.

Outstanding changes to our website are already in place, along with fluid new practices for supporting our students and alumni, with more to come. Check our [website](#) often, join the over 4,000 unique visitors who cruise our site each month, savor our trove of all-new membership benefits, tour our online and correspondence courses (many at no-cost or low-cost), and our seminars. Choose the path that's right for you.



With your help we can all live in a healthier built environment.

Become an IBE Member

- Basic member \$45
- Advanced Member \$100
- Lifetime Member \$1000

Sign up today on our membership page to start making a genuine sustainable difference.

[Become a Member Page](#)

Calendar of Events:

Ongoing:

SPPI Managing Environmental Illness Research Project. To read more about the study and get involved -- [click here](#) (pdf document)

Upcoming:

IBE 213-[Natural Healthy, Building](#) is underway at [The Frontier Project](#), in Rancho Cucamonga, CA. To see what's happening there, visit the Three Branches Healthy Living blog by [clicking here](#).

April 24-25, 2010
Introduction to Bau-Biologie
[Sacramento Green Expo](#)

May 17 – 21, 2010
[IBE 211 – Indoor Air & Water Quality](#)
Location: Battle Creek, MI

Aug 16 - 20
[IBE 212](#) - Electromagnetic Radiation
Details to be announced in March!

Inside Scoop: IBE Behind the Scenes

There are many exciting changes happening at the International Institute for Bau-Biologie & Ecology and many new projects have been launched.

* Dan Stih, BBEC, will debut IBE's Healthy Home Standard before air quality professionals and the general public at the Indoor Air Quality Association's annual conference in Tampa, Florida, 7 to 9 March 2010. Authored by a research team led by Dan Stih and Will Spates, BBEC, IBE's Healthy Home Standard is the cutting edge authority on protocols and criteria for measuring and assessing how a home may affect the health of its occupants. Following its debut at the IAQA conference, the Healthy Home Standard will be available on IBE's website.

* Alex Stadtner, BBEC, APP, will be conducting Introduction to Bau-biologie®

classes, open to the general public, at this year's [Sacramento Green Expo](#), on 24 and 25 April. Admission to the Expo is free, and the Expo's producers are expecting more than 10,000 visitors over the weekend. For more info, please visit the Expo's [website](#).

* IBE is teaming up with [West Coast Green](#) again this year. Our pre-conference workshop will feature a new offering of unique new networking opportunities, and certified CEU opportunities.

* The Building Biology Healthy Home Standards is currently being finalized and will be launched on the IBE website for public comment.

* Announcing [My Baby's Environment](#), our new low-cost (\$28), online course for young moms (and the moms of young moms), [IBE 101.1](#). Learn easy, low-impact steps to making Baby's environment safer and healthier.

* The IBE videos on this innovative web TV station feature: Larry Gust, President of IBE Board of Directors; Lisa and Ron Beres, of GreenNest; Jeanne McLaughlin of Cleaning with Vodka; Mike Weston IAQ instructor; Vicki Warren, IBE Past Executive Director; Paula Baker-Laport with EcoNest and many more.
<http://www.ibeontv.com>

* You can now join our group on LinkedIn:



* IBE now has a Fan Page on Facebook!



Volunteers Needed:

IBE WEBMASTER:

We're looking for a new Webmaster (PHP expertise required). Fees for our online courses will be waived and free

membership granted in return for your work. Please contact Michael Conn, at: mconn@buildingbiology.net

REVIEWERS FOR IBE COURSE MATERIAL:

We're looking for people interested in reviewing course material currently in development.

Please contact Program Director, Vicki Warren: vwarren@buildingbiology.net

Readers Corner:

Suggested Websites:

<http://www.buildinggreen.com>
<http://www.microwavenews.com>
<http://www.healthandenvironment.org>
<http://www.healthychild.org>

Suggested Book:

[Healthy Living Spaces: Top 10 Hazards Affecting Your Health](#)

By Dan Stih



Suggested Conference:

[13th Annual Meeting \(Indoor Air Quality Assoc.\) & Indoor Air Expo](#)
Tampa, FL
March 7-9, 2010

For more information on
Building Biology
and
The International Institute for Bau-Biologie & Ecology
please visit our website
<http://www.buildingbiology.net>



Invisible Risks of Energy Saving Compact Fluorescent Bulbs

by Diana Schultz, BBEC

Having just discovered the International Institute for Bau-Biology & Ecology only 3 weeks prior to the 2008 IBE Conference in Tennessee, I was as fresh as you could get to the concepts of Building Biology. And to be 'green' I bought more than 40 of the new squiggly compact fluorescent light bulbs and replaced all the regular bulbs in my house. I was so looking forward to sharing about my contribution to a healthy environment! Needless to say as I listened to the presentations about the health hazards of CFLs – I was shocked!

Since that eye-opening IBE conference in 2008, and completing over 400 hours of coursework to become a Bau-Biologie Environmental Consultant (BBEC), I have learned a great deal more about hazardous – and safe - lighting choices, and I share this information with my clients and workshop guests.

Known hazard #1 - Mercury

Compact fluorescent bulbs contain vaporized elemental mercury, (Hg), which will immediately spread through the air if the bulb breaks. If you breathe the vapors, Mercury enters the lungs and can enter the brain directly through the nasal cavity. The [Environmental Protection Agency \(EPA\)](#), states that NO amount of Mercury exposure is safe. The EPA Reference Concentration (RfC) is set at 300 nanograms of vaporized elemental Mercury; exposure levels above that become toxic.

So how much is actually in one bulb? The State of Maine asked that same question. [The Maine Department of Environmental Protection](#) conducted a study where they broke a variety of CFL bulbs and measured the amounts of

Mercury that were emitted into the air. They measured at five feet off the floor and one foot off the floor, to simulate adult and child breathing spaces. They found an average of 50,000 nanograms of vaporized Mercury released from a single bulb.

The EPA website lists directions of what to do if a bulb breaks in your home. First thing to do is – LEAVE. Do not breathe the vapors. Take the children and pets with you on the way out. Turn off any air conditioner or forced air heating to prevent spreading the contamination. Open the windows and ventilate the space for at least 15 to 30 minutes.

To clean up the spill use two pieces of cardboard to scoop up the broken pieces and put them in a glass jar with a gum seal, such as a spaghetti sauce jar. The Maine study showed that zipper plastic bags leak the Mercury. You can't vacuum up the pieces or you will contaminate your machine, and the rest of your house when you use it. You can use sticky tape to pick up the small pieces and then wipe down the area with a wet disposable cloth.

The [Maine study](#) also showed that carpet was the worst surface for a break, and even after 28 days of intensive cleaning of the carpet surface, only one footstep poofed up about 5,000 nanograms of Mercury. They recommend cutting the piece of carpet out completely and disposing of it as toxic waste.

You need to either 1) hand carry bulbs including broken ones to the landfill Hazardous Household Waste location, or 2) hand carry them to Home Depot or IKEA for recycling. The bulbs are packaged up very carefully and shipped to a recycling plant where the Mercury is sucked out of the bulbs to prevent it from going into the atmosphere.

The **health effects** from toxic Mercury exposure can include neurological damage, tremors, learning disabilities, and death. Children are 100 times more susceptible to these exposures. Reports on Chinese workers in factories producing

CFLs state that workers are suffering Mercury poisoning and death from their exposure on the job.

Known Hazard # 2

The additional hazard from Compact Florescent Bulbs (CLF) is the electromagnetic field, or EMF, that is emitted from the ballast. I have measured these fields at up to 5 milliGauss (mG) or more at several feet away from the bulb. The Institute of Bau-Biology & Ecology Standard of "No Concern" is under 1 mG and under 0.2 mG in the bedroom.

Some people can actually feel or see flickering or get headaches or eyestrain from the radiation emitted from all fluorescent lighting. That includes the large tube lighting in ceiling fixtures, under-cabinet task lighting in kitchens, fluorescent flashlights and 'full spectrum' fluorescent lighting (which has more of the natural light color spectrum but still has the same Mercury hazards).

So let's hope, in this process we eliminate not only Mercury hazards in our homes, but also that insidious squiggly light bulb logo that has come to represent "green." I just discovered it showing up on my new Mac Book laptop, the greenest computer on the planet, which has an LED backlit screen. There, representing the energy saving screen saver is – low and behold – the icon of a CFL bulb!

A funny story: after that conference I mentioned, I came home and took out all 40 CFL bulbs and set them carefully in a big basket. I had scheduled an energy audit from my power company, Progress Energy, and the rep, wrapping up, presented me with a gift, beaming as he handed me a box with... two CFL bulbs! As I produced the basket, I said, "We're going to have a conversation!"

Diana Schultz is a certified Building Biology Environmental Consultant and the owner of [Green and Healthy Homes](#) in Orlando. She is an active IBE member and [Program Provider](#).