PA13-100

HB5908

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percent AmEx card, your charge will $100 plus the card charge of the 3 percent, so you will pay $103. It becomes transparent and clear to everyone.

And if the consumer feels that it's worth saving the $3, they can change cards. They can get down to the cash price or the debit price and the actual cost of transparency becomes more clear and it becomes more of a challenge to raise those costs to our merchants. They found in other countries, it reduces the costs to the merchants and the consumers.

SENATOR KISSEL: Thank you very much, Mr. Chair.

SENATOR DOYLE: Thank you.

Any further questions from the committee?

Thank you.

EDWARD LEVINE: Thank you.

SENATOR DOYLE: Thank you for coming.

EDWARD LEVINE: Thank you.

SENATOR DOYLE: I appreciate your knowledge on this.

EDWARD LEVINE: Any questions please feel free to contact us.

SENATOR DOYLE: Thank you very much.

Next speaker is Jay Zelermyer then Tom Falik, Stan Sorkin, David Bauer, Ken Carney and Scott Ferguson.

Mr. Zelmeyer.

HB5908
HB6453

JASON ZELERMYER: Senator Doyle, Representative

Baram, members of the committee, I am president of Ledgebrook Condominium Association which is in Norwalk, Connecticut. We're a 25-building, 222 unit, 25 acre condominium that was built in the early 1970s and that is an all electric community. It was a great idea at the time, but it costs a lot of money.

And I'm here to comment briefly, although not directly, on Proposed Bill Number 5908, which I understand is in response to the Governor's veto last year of House Bill 5248, which -- which bans certain kinds of insulating materials. There is another bill that was just filed yesterday, Raised Bill Number 6453, which is a repeat of last year's bill with a couple of minor modifications. My concern about this -- this legislation is this, for the last four and a half years, our association has been trying to find a way to reduce energy costs, partly to save money, of course, but partly as a good community trying to save energy, trying to conserve energy.

We have been working closely with the Connecticut Energy Efficiency Fund over that period of time and developed a comprehensive energy reduction program. One of the elements is reinsulating our 40-year old buildings. As you can imagine, that's a very complex undertaking. We studied it for a couple years. Finally with a consultant in the energy business finally decided on the materials that we were going to use for our crawlspaces, our roofs and our walls. We designed an insulating program. We submitted it to CEEF, which was a very -- very supportive and viewed our program very favorably. We're the first of old condominiums in Connecticut to even attempt to think about such things and they after a lot of study, they -- CEEF committed to providing us with very substantial cash incentive if we went

forward with the program.

Naturally, we had to finance this. We -- we went to a bank and arranged financing. We put out RFPs to contractors. We got responses from contractors. We selected a contractor and all of this is going on over a very long period of time and then in January last month we learned that the material that we had selected to insulate our walls, which we thought was the best material on the market in terms of energy conservation -- we were looking strictly that our values -- well, not strictly at our values, but also other kinds of impacts, but our values and costs, and the impact on the existing buildings had suddenly become unavailable in Connecticut unlike the rest of the country and -- where it had been used in Connecticut for many, many years.

Somebody interpreted the existing legislation which bans certain kinds of formaldehyde-based materials as comprehending this material, which is called Tripolymer, which includes water. And water has formaldehyde in it, as I'm sure all of you know, and therefore, today it's banned. Our only option is to use a lower performing material which will cost the same but provide significantly lower cost savings and will conserve significantly less energy. We've decided we need to product -- with the project because we've got deadlines from CEEF. We have deadlines from our bankers. Our contractor won't hold their prices and we are hoping that by the time we get around to doing the walls -- we're going to do the crawlspaces and the roofs first -- but by the time we get around to doing the walls, something will have changed in legislation so that we will be able to use the product that we believe is clearly the best and that everyone that we're dealing with supports as the best. And therefore, I'm

here really to urge you to consider the on the ground need and act quickly. The current proposed legislation 5908 simply directs the Department of Consumer Protection in consultation with the Department of Health and Energy -- the Departments of Health and Energy to promulgate regulations -- promulgate some standards. We're confident that we can meet whatever those standards are and we can proceed with our project in the most conservative, most energy efficient, most cost efficient way possible.

Thank you for your attention.

SENATOR DOYLE: Thank you.

Any questions from the committee?

Representative Baram.

REP. BARAM: Thank you, Mr. Chairman.

Is it my interpretation of your testimony that you favor this bill because somehow you think that passage of a bill like this will revoke prior law that prohibits certain kinds of materials? Is that what you're suggesting?

JASON ZELERMYER: The prior ban, as I understand it, and I'm not a technician. I'm not a scientist. I don't understand all the science that's involved here. But my understanding is that for many, many years Connecticut law did not prohibit the use of this particular product or that's the way it was interpreted and I know -- I've been told that it's been used in many buildings throughout the state including some state office buildings as insulating material. At some point in 2011 someone decided that this material because the water that's used to make the material which flows in -- I mean, it's not

a solid, it's an injectable foam -- contains a certain amount formaldehyde like everything that has water in it has formaldehyde in it, and therefore, it's no longer -- it's no longer usable.

The ban is a -- that is in place is a pretty broad one, but contains exception for urethane foam insulation or styrene foam insulation. It was really aimed at formaldehyde-based insulating materials. This is not a formaldehyde-based material, it simply contains some trace amounts of formaldehyde, or so I'm told by our contractor, our consultant and CEEF. So what our hope is is that standards will get promulgated, our product will satisfy -- the product we want to use will satisfy those standards and we can use it.

REP. BARAM: I'm glad you brought that to our attention because I was unaware that this bill was addressing something that potentially had been banned. So I guess your point is is that by regulating it and coming up with certain controls, there will be no question that this material is usable and won't meet the definition of the formaldehyde in the prior legislation.

JASON ZELERMYER: Well, the prior law -- or existing law in Connecticut does ban very broadly formaldehyde-based insulation. That law which was on -- which was enacted in 1981, Section 29-277 of the General Statutes. Last year, it was the subject of 5548 which repealed it and imposed in its place a regulated structure specifying some -- some particular environmental institute regulations and other ASTM standards. Now, the Governor felt, I guess, at least based on his veto message that those standards weren't adequate. I don't know. I don't pretend to know. Again, my

understanding is that the product that we want to use would have satisfied these standards and the bill that was introduced yesterday 6453 would have exactly the same effect.

The major difference is that the original law contains an exception for urethane foam insulation and styrene foam insulation. 5248 removed those exceptions. 6453 puts them back which was concern of the American Chemical Institute, which urged the Governor to veto the bill, which he did, but on different grounds. So I'm a little perplexed about exactly what's going on, but I want something to happen and want it to happen was quickly as possible and that's why I'm here to again give you some -- some real world implications of what this is about and to hope that I can encourage you to act sooner rather than later.

The bill that's before you right now, 5908, doesn't have any substantive components at all. It simply directs the commissioners of Consumer Protection in consultation with the commissioners of Public Health and Energy and Environmental Protection to develop safety and certification standards. It would seem to me that that's the kind of thing that could be done rather quickly so that we can get -- before regulatory agencies can do what they're supposed to do and we'll see how it comes out.

REP. BARAM: Thank you.

SENATOR DOYLE: Thank you.

Any further questions from the committee?

Seeing none, thank you very much.

JASON ZELERMYER: Thank you.

business. Most contractors cannot effectively estimate jobs, sell jobs, pull permits, order materials, follow all the state and federal rules and work in the field all day.

The supporters of H.B. 5149 have not considered the tradespeople who do not speak English or the people who simply do not do well with testing and paperwork. These people will not attempt to be licensed and the pool of available quality tradespeople will shrink. Some people claim that the licensing works; just look at the numbers of plumbers, electricians and HVAC trades.

And finally, if H.B. 5149 passes it will have unintended consequences that will hurt the public, increase the price of labor, alienate a percentage of existing contractors and terminate the businesses of some contractors -- who bar everyone from the contracting business who does not have the skill to work in the field. From Ken Carney, Baybrook Remodelers.

SENATOR DOYLE: Thank you.

Any questions from the committee? Thank you very much for your patience today.

And the next speaker is Tyler Fiske. Is Tyler Fiske here?

So we've got three people coming up, so hopefully they'll consolidate their comments.

After this group we have Richard Beyer, Robert Heffernan, Rafie Podolsky, Ben Zimmer, Brian Johnson, Peter Foote.

HB5908

RICHARD DUNCAN: Good afternoon. Yes, Chairman Baram, Chairman Doyle and members of the General Law Committee, for the record my name

is Dr. Richard Duncan and I'm with the Spray Polyurethane Foam Alliance, or SPFA.

I'm submitting testimony in regards to House Bill Number 5908, AN ACT REQUIRING SAFETY CERTIFICATION STANDARDS FOR THE SPRAY FOAM INSULATION INDUSTRY.

SPFA is the national 501(c)(6) trade association representing the entire value chain of the spray polyurethane foam insulation industries. Our membership is comprised of manufacturers, distributors, contractors and installers of spray foam both for roofing and insulation systems.

Spray foam insulation roofing is a dramatically growing industry. We've seen such double-digit growth over the past five years basically because of its high performance and value as a insulation and air sealing for buildings and homes, and it saves a considerable amount of energy.

It also provides substantial employment across the U.S. We have tens of thousands of individuals working in small businesses across the United States and hundreds of employees here in the state of Connecticut all working for small business. And it's also important to note that these jobs are not ones that can be exported.

In fact, the use of spray foam is recognized by a number of federal agencies. It's used in all types of government buildings and the like. At the same time we recognize that health, safety and quality are a concern for the industry and the Spray Polyurethane Foam Alliance along with its staff and numerous volunteers have spent thousands of hours working with federal agencies, including the EPA, OSHA and NIOSH to

develop a training program and certification program that is completely compliant with ISO certification standards.

In fact, this certification program was launched just last week at SPFA's national conference in Jacksonville, Florida. And we've gone through a number of test pilot programs and so far over 800 tests have been taken within our program since its launch. We've seen significant interest and we're going to be able to offer this program at many locations, not only across the United States, but in Connecticut as well.

While we have our international certification, or our individual certification program is complete, we're still finalizing some details on contractor as well as distributor and supplier requirements, but we think that this program is going to be an effort that's going to recognize all spray foam stakeholders including homeowners, general contractors, architects, homebuilders, state and federal government agencies, and to provide a baseline on health and safety along with performance and quality.

In the short time that I have today to talk about our training program I'd like to at least orient you to spray polyurethane foam, the work that SPFA is doing on our new certification program. And we are very interested in working with you more closely to fully highlight the aspects of this program, make it a resource to the great State of Connecticut and we applaud your efforts to represent your various constituents.

And again, while we endeavor to finish our work on the program we also look forward to our complete deployment on a reasonable timeline

and manage process with you, your agencies and the business, homeowners and building owners of Connecticut.

Thank you for your consideration.

SENATOR DOYLE: Thank you very much.

Any questions from the committee?

Senator Witkos.

SENATOR WITKOS: Thank you.

I missed the previous testifier on this subject matter, so excuse me if it's a redundant question that has been asked in the room before. As a manufacture, is there anything that, I guess, a company that would install the spray foam, that they would have -- be required to be certified by the manufacturer in order for them to purchase that product in its raw form?

RICHARD DUNCAN: Yes. Several of our manufacturers -- well, all of our manufacturers have training programs to train their specific contractors. Now their training programs involve what we call equipment and materials, they're hands-on training.

Our training goes beyond that. It requires this equipment and materials training from the manufacturer, but it also goes a step beyond to assure proper chemical health and safety, jobsite safety and building science, and just general, you know, application and quality for the industry. So we're setting standards industrywide for that as well.

SENATOR WITKOS: Is there anything in the -- in any other states that you're aware of in the

building codes that require a certification by the, I guess, the applicator to install the spray foam?

RICHARD DUNCAN: Not that I'm aware of, no.

SENATOR WITKOS: Okay. Thank you.

Thank you, Mr. Chair.

SENATOR DOYLE: Thank you.

Any further questions from the committee? Seeing none, thank you very much.

The next speaker is Richard Beyer, Robert Heffernan, Rafie Podolsky, Ben Zimmer, Brian Johnson, Peter Foote, Bill Ethier.

Is Richard Beyer here? Yes, he is.

HB5908

RICHARD BEYER: Gentleman, my name is Richard Beyer. I'm here to testify on behalf of what happened in my home regarding spray polyurethane foam. I brought this argument of training forward for specific reasons. My home was installed in 2010 by the previous speakers, (inaudible) Tyler Fiske company. And it 2010 the gentleman came in and sprayed the foam in my home. Most of the time they were unprotected. They were not wearing the protective equipment. My family was in the home. My children were in the home. My pets were in the home. I had no idea what we were breathing until later when we started having health symptoms.

The foam started cracking and disappearing into the air. I went to industry for answers and they sicked their lawyers on me and told me to be quiet.

I asked the Fiske family, what did they do to

my home? What was my family exposed to? They wouldn't answer me. The product is safe. So they came to me and asked, what did we do? So I said, well, I think you need to get an air-quality test.

So he said, who do you suggest we hire?

I said, well, why don't you go to Mystic Air Quality -- because the only place I knew about it.

Mystic Air Quality came in, performed a test used in a digital meter that was not calibrated specifically for the chemicals that should have been looked for. They looked for chemicals that industry already knew would not be detectable, like MDI, which is methylene diphenyl diisocyanate.

These products are known to disappear after 72 hours and become non-detectable in the air at the home. They knew this, but what industry doesn't know and what industry is not publishing is that B-side component of spray policy polyurethane foam.

Yesterday I had the opportunity to speak with David Marlow with Centers for Disease Control. Apparently industry has been less than cooperative with the government when it comes to these chemical components, flame retardants, glycols and other proprietary ingredients on the B-side that they hide behind. I've talked to homeowners who have told me that their spray foam applicators told them, I can eat the foam. It's that safe. It contains soy, because the soy is part of some spray foam manufacturers on the B-side of the component.

The critical factor here is the A-side of the component, no matter who makes the foam, is the

same. It's isocyanate, MDI. That product is very well known by OSHA to cause irreversible lung damage. Men have died from exposure to these chemicals.

Young men are spraying these chemicals in our home today and the industry has been allowed for years to self regulate. The American Chemistry Council published on their website that the product is heavily regulated by OSHA. Further investigation into this -- there's no regulation. There's no one enforcement at all when we talk about our home. These products need to be regulated and they need to be enforced and licensing needs to be mandatory, not this voluntary basis of self-promotion from SPFA.

SPFA is looking to train. I applaud them for that, but not fast enough. We're not talking about a product that was just introduced into society. Polyurethanes were invented by Otto Bayer back in the 1920s into forties. It's not a new product. This is 2013.

How did this company -- how did this chemical industry get away with this for so many years? Well, there's a reason. Everybody is promoting green energy today. I don't want to pay more for oil, put the foam in. The purpose of the foam going in my home was to save money on oil. Now we may come down with cancer in the next ten years -- or tomorrow. We don't know. There's no medical studies.

Yale University is currently studying the men that install these products. They are the lab rats of today, and that includes Tyler Fiske employees. To give you an example, I gave you a cut sheet of photographs. This is Tyler Fiske employees working in my home, unprotected removing failed spray foam.

When this product was removed from my home it off gassed significantly. I have asthma. The product should never have been put in my home. And you knew this, but you still installed it in my home.

Then the product started cracking and disappearing. And you go to industry and you ask them questions and they tell you, you're crazy. Why is the insulation disappearing? You go to industry, they say, it's not supposed to do that. The product is inert. Well, maybe it is inert.

Well, the definition of inert, it doesn't change once it forms. This product was evaporating for me to breathe and my children to breathe, my wife to breathe, my pets to breathe. And this firm stands their ground hiding behind industry standards, OSHA regulations -- I'm a member of this organization, I'm a member of that organization. That's crap.

These are lives they're playing with, with these chemicals. They are two-part chemicals. Part A, isocyanate; part B, glycols and whatever else they're hiding in those chemicals. The State of California banned fire retardants. These fire retardants are now showing up in human blood. People living in homes, from their children, the adults. Cancer rates are on an all-time high.

The federal government already said that the vast use of polyurethanes in today's market is growing at an astronomical rate with childhood asthma. And we're promote -- we're allowing this in the name of green energy. The EPA issued a bulletin in November of 2011, said, they are looking to propose a ban on all of

these chemicals because they don't have any idea what these chemicals do to our home or what they do to you or your children or your pets, but we're all promoting it because it's big business. It's billion-dollar industry we're talking about here.

Well, we're talking about lives. Forget the price of oil. There's other means to insulate your home. There are safer alternatives out there, not just what these chemicals.

SENATOR DOYLE: Thank you, Mr. Beyer.

Any questions from the committee?

Senator Witkos.

SENATOR WITKOS: Thank you.

And thank you for your well-thought-out -- in testimony, I was kind of flipping through as you were speaking.

Is there anything in OSHA regulations that you're aware of as to how it's applied? I see that the USA EPA is considering a ban or restricting the consumer insulation (inaudible).

RICHARD BEYER: The very last stage, sir, is the CDC investigation as well.

SENATOR WITKOS: Okay. All right. Thank you very much.

Thank you, Mr. Chair.

SENATOR DOYLE: Thank you.

Any further questions from the committee? Seeing none, thank you very much for your time

and your patience.

RICHARD BEYER: Thank you.

SENATOR DOYLE: The next speaker is Robert Heffernan, Rafie Podolsky, Ben Zimmer, Brian Johnson, Peter Foote, Bill Ethier, Tim Phelan, Kevin Pimentel.

Robert Heffernan.

SB 112

ROBERT HEFFERNAN: Thank you. Bob Heffernan, the Executive Director of the Connecticut Nursery and Landscape Association. Our industry is asking the committee for a license for landscapers. It's something that we've been researching for many, many years, consulting with the industry and it's quite well thought out. We have about 1200 members in CNLA and about 75 percent of them are landscapers.

Today anybody can become a landscaper, as you know. There's no qualifications, no testing, no standards. And anyone in this room who's ever hired a landscaper knows that the investment can be substantial. It's not uncommon to see a 5 thousand-dollar landscape job or 10 thousand or 20 and up. But there are, in our estimate, about 1200 to 1800 companies out there who are doing landscaping, grossing hundreds of millions of dollars and their work is very important.

In the past storms that we have suffered through many of you have seen how important that is. For example, if you plant a tree that's going to grow 40 feet underneath an electrical wire you're going to have a problem years down the road. So there's all sorts of public safety and consumer issues with good landscape practices; right tree, right place and so on and so forth.

So we want to make sure that if you come into do basic healthcare services, then you're not then charging people for administering aspirin and stuff like that.

SENATOR WITKOS: Thank you very much.

Thank you, Mr. Chair.

SENATOR DOYLE: Thank you.

Any more questions from the committee? Seeing none, thank you very much for your patience.

BRIAN JOHNSON: Thank you all.

SENATOR DOYLE: The next speaker is Peter Foote. Is Peter Foote here? Yes. Bill Ethier, Tim Phelan, Kevin Pimentel.

Mr. Foot.

PETER FOOTE: Yes, good afternoon, Senator Doyle, Representative Baram and members of the General Law committee. My name is Peter Foote. I am with the Painters Union District Council 11. I'm here today to testify in favor of House Bill 5908, AN ACT REGARDING SAFETY AND CERTIFICATION STANDARDS FOR THE SPRAY FOAM INSULATION INDUSTRY.

We at District Council 11 applaud any effort through legislation to strengthen safety measures in order to protect our members. In our opinion legislation before you, not only protects our members from harm, by requiring respirators and personal protection equipment also protects members working -- other workers working on a job site as well.

We thank the committee for holding this public hearing and I am able for any questions at this

point now.

SENATOR DOYLE: Thank you.

Senator Witkos.

SENATOR WITKOS: Thank you for your testimony.

Just a question. If OSHA showed up on a job site that this application was being performed, there's nothing in their guidelines that say respirators have to be worn; warning signs or anything like that, if you're aware of?

PETER FOOTE: Regarding OSHA, I'm not sure, but the criteria from the manufactures is that respirators are to be worn. We currently have an 18-hour program in place within our union training facility; eight hours of classroom and eight hours of hands-on for safety and giving them a brief overlay of the safety concerns, the products being used and what can happen to you in terms of not using them correctly.

So OSHA, I think they would have to monitor the quality of the air. If it was beyond the levels set by their guidelines they would definitely shut down the job.

SENATOR WITKOS: Thank you.

And do you know if in your building permit or through the process if somebody has to identify that they're using a spraying spray foam application or not?

PETER FOOTE: Not to my knowledge, no.

SENATOR WITKOS: Okay. Thank you.

Thank you, Mr. Chairman.

SENATOR DOYLE: Thank you.

Any further questions from the committee?

Representative Baram.

REP. BARAM: Thank you, Mr. Chairman.

Good to see you, Peter.

PETER FOOTE: Good to see you.

REP. BARAM: I don't know if you've heard the fire testimony. Somebody was suggesting that possibly some of the materials that are used in the spray insulations might be hazardous or may have been banned by fire law. Are you aware of any of that?

BRIAN JOHNSON: I remember back in the seventies it was -- there was issues with formaldehyde, most definitely, and the product was banned for a significant amount of years. The products that are out today are supposed to be safer. That remains to be seen, obviously.

Hopefully with this legislation we can hopefully put the safety first in this instance and this won't be anything that will be an issue. In terms of what that gentleman was speaking to, I really can't speak to that. I don't know about the studies he's referring to.

REP. BARAM: Thank you very much.

Good to see you.

PETER FOOTE: Thank you.

SENATOR DOYLE: Thank you.

Any further questions from the committee?

Seeing none, thank you very much.

PETER FOOTE: A good public speaker. Aren't I?

SENATOR DOYLE: Yes. Brief. Brief. We like that.

Bill Ethier, Tim Phelan, Kevin Pimentel, Abner Burgos.

Is Billy here? Bill.

SB 319
HB 5616

WILLIAM H. ETHIER: Thank you, Senator Doyle, Representative Baram, members of the General Law committee. My name is Bill Ethier. I'm the Executive Director of the Homebuilders and Remodelers Association of Connecticut. We have about 900 member companies across the state that employ tens of thousands of folks. And my members build between 70 and 80 percent of all the new housing in the state each and every your and countless -- conduct countless home remodeling projects.

We're here in opposition to the contractor licensing bills, 322 and 5149, with a basic reason -- and I've submitted written testimony that I hope you read -- that we believe it would be unworkable for the enormous scope and variety of the home improvement contractor industry and it would not solve the issues that most consumers complain about when they do complain about contractors.

I've provided in my testimony some information, background information on information that we provide to consumers. We get a lot of calls in our office looking for remodelers and builders. The information that we provide to them on how to choose a reputable contractor, information about the voluntary certifications that we offer, education so that some contractors can set themselves apart from others in the

Connecticut Heating & Cooling Contractors Association

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TESTIMONY OF
JENNIFER JENNINGS
EXECUTIVE DIRECTOR
BEFORE THE
GENERAL LAW COMMITTEE
FEBRUARY 21, 2013

The Connecticut Heating & Cooling Contractors Association (CHCC) submits the following comments *supporting* **SB-322 & HB-5149**, An Act Concerning Home Improvement Contractors & An Act Concerning Testing & Licensing Of Home Improvement Contractors:

Members of the heating and cooling industry support these bills which would require home improvement contractors to pass a state exam and demonstrate knowledge of their trade before performing work on individuals' homes This is no more burdensome of a requirement than the long established state licensing system that currently exists for all occupational and building trades

State law establishes a licensing system for several occupational trades overseen by the Examining Boards for Heating, Piping, and Cooling Work; Electrical Work; Plumbing and Piping Work; Elevator Installation, Repair, and Maintenance Work, Automotive Glass Work and Flat Glass Work, and Fire Protection Sprinkler Systems Boards Each trade has different levels of expertise—apprentice, journeyman, and contractor Workers must meet education, training, and experience requirements to qualify for each level Some trades also include a mandatory continuing education requirement. Members of the heating and cooling trades who hold unlimited licenses are qualified to perform any and all work related to their trade The occupational licensing boards, which are comprised of both union and non-union contractors as well as the general public, also provide an important mechanism for ensuring the consistent and fair enforcement of the state's licensing laws Because the boards provide balanced representation of the industry, license holders respect their decisions Currently, no such system or requirements exist for home improvement contractors other than a simple registration process Almost anyone can register to be a home improvement contractor, despite lacking any relevant credentials or experience, thus putting homeowners at risk

Passage of this legislation is necessary and desired by all tradespersons in the industry to ensure that homeowners are safe and that work is done only by competent, skilled and trained tradespersons Far too many contractors do not maintain the proper licenses or qualifications, creating public safety concerns. These laws must be vigorously enforced to protect consumers and employees Strong enforcement of the state's licensing and apprenticeship laws relative to the heating and cooling industry along with all licensed trades is paramount Ensuring that individuals performing work are held to high standards helps maintain the highest possible level of safety, training and professionalism for our industry, and for consumers, and home improvement contractors should be no exception

CHCC thanks Committee for its consideration of our comments and urges passage of these bills

CHCC would also like to comment on **HB-5908**, An Act Requiring Safety And Certification Standards For the Spray Foam Insulation Industry As an industry that is engaged in the installation, maintenance and repair of heating and cooling equipment and general climate control measures, the use of spray foam insulation is something we have knowledge of and experience dealing with To the extent that this legislation should move forward and safety and certification requirements are to be developed by DCP, DPH and DEEP, CHCC would ask to be part of that conversation so that we may offer our input and expertise on the matter. Furthermore, we would caution against enacting any requirements that are duplicative, unnecessary or unduly burdensome on licensed HVAC contractors Thank you for your consideration of our comments

CHCC is a trade association whose objectives are to strengthen and further trade relations, attract, educate and train necessary manpower, represent members at all levels of government and review and establish quality standards and procedures The association represents over 125 Heating & Cooling Companies in Connecticut

JOINT
STANDING
COMMITTEE
HEARINGS

GENERAL
LAW
PART 3
580 - 891

2013

P35

energy API

PS: 23
LN. 10

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February 21, 2013

TESTIMONY IN OPPOSITION TO HB-5907, ON CETANE & BIO-FUELS

The Connecticut Petroleum Council objects to the bio-fuel portion of HB-5907, requiring on-road diesel fuel to contain a certain minimum percentage of bio-fuel. Our association represents major oil companies, refiners and terminals that produce, manufacture and distribute fuel.

BIO-FUELS ARE TRADITIONALLY MORE EXPENSIVE THAN DIESEL FUEL.
A law requiring bio-fuel (such as soybean oil, palm oil, yellow grease) to be blended into on-road diesel fuel potentially makes the fuel more expensive for drivers, because bio-fuel historically costs more than diesel fuel in this part of the country. The $1.00 per gallon federal bio-diesel tax credit is scheduled to expire on December 31st of this year, and its expiration will put upward pressure on prices.

MANDATES DON'T WORK.
Mandates---such as requiring bio-fuel to be blended into diesel fuel----typically are sought because a seller finds it difficult to sell his or her product in the marketplace: The price is too high, or the product has deficiencies, or competitive products have advantages, or sales are slow. Drivers should be able to buy the fuel they want, not have it dictated to them. If drivers want bio-fuel, let them buy it. If not, it shouldn't be forced upon them. Let it remain "an option."

CONNECTICUT WILL BECOME A FUEL "ISLAND."
Since the adjacent states don't have a bio-diesel requirement (the MA law was suspended), Connecticut will become a "fuel island." Cross-border terminals in RI, MA and NY may not be willing to make the investment just to supply a boutique fuel to a relatively small customer base that exists in Connecticut. Conversely, fuel from Connecticut terminals, if more expensive, won't be welcome in those states. If the bill passes, Connecticut will have created its own "boutique" fuel, which limits suppliers' options and potentially leads to supply disruptions and price spikes.

TERMINALS WILL BE FORCED INTO EXPENSIVE UPGRADES IN ORDER TO DISPENSE BIO-FUEL.
Since the diesel fuel will have to be blended with some type of "bio-fuel", terminals will have to upgrade their dispensing racks in order to mix the two fuels together, and that is expensive to do (approximately $2 million for a large terminal).

In conclusion, we have no objection to bio-diesel being sold here; we request only that it not be mandated. Therefore, we ask the bio-diesel mandate be stricken from the bill. Thank you for considering our testimony.

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(A)

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HB5908

EPA Considers Ban on Dangerous Chemicals in Spray Foam Insulation

Print this page

WASHINGTON, DC, April 16, 2011 (ENS) - The U S EPA is considering a ban or restriction on consumer insulation and sealant products containing a family of chemicals known as diisocyantes

The chemicals are found in spray polyurethane foam, an effective and widely used insulation and air sealant material for insulating walls, sealing concrete or finishing floors

Exposures to isocyanates such as methylene diphenyl diisocyanate, or MDI, and other SPF chemicals in vapors, aerosols, and dust during and after installation can cause adverse health effects, the agency warns

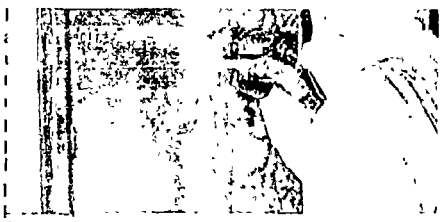
"There has been an increase in recent years in promoting the use of foams and sealants by do-it-yourself energy-conscious homeowners, and many people may now be unknowingly exposed to risks from these chemicals," said Steve Owens, assistant administrator for EPA's Office of Chemical Safety and Pollution Prevention

Diisocyanates are known to cause severe skin and breathing responses in workers who have been repeatedly exposed to them The chemicals have been documented as a leading cause of work-related asthma, and in severe cases, fatal reactions have occurred, the EPA says

The EPA Wednesday released action plans identifying a range of actions the agency is considering under the authority of the Toxic Substances Control Act to address the health risks, including a possible ban on the "uncured" type of diisocyanates

The agency also is considering issuing rules to call in data on any past allegations of significant adverse effects, obtaining unpublished health and safety data from industry sources, and requiring exposure monitoring studies for consumer products

"EPA is working to protect the health of the American people and the environment," Owens said



In protective suit, a worker sprays polyurethane foam insulation on a wall (Photo courtesy EPA)

such as foam mattresses or bowling balls, are fully reacted or "cured," and are not of concern

Some products, however, such as adhesives, coatings and spray foam, continue to react while in use, and

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may contain "uncured" diisocyanates to which people may be exposed, Owens said

To protect worker health, the Occupational Safety and Health Administration regulates workplace exposures through permissible exposure limits

But there is very limited information available about the use and exposure patterns of consumers to products that contain uncured diisocyanates

Owens says the EPA will continue to work with other federal agencies, the polyurethanes industry, and others to ensure improved labeling and provide comprehensive product safety information for polyurethane products containing uncured compounds, especially in consumer products

The EPA gives some quick safety tips for spray polyurethane foam exposure Whether you are an applicator, helper, or building occupant where this product is applied, the agency says follow these tips

- Review label and product information for ingredients, hazards, directions, safe work practices, and precautions
- Ensure health and safety training is completed and safe work practices are followed to prevent eye, skin, and inhalation exposures during and after SPF installation
- Exercise caution when determining a safe re-entry time for unprotected occupants and workers based on the manufacturer recommendation
- If you experience breathing problems or other adverse health effects from weatherizing with SPF, seek immediate medical attention
- Use the appropriate protection and best practices suited for each type of SPF product
- Only workers wearing appropriate personal protective equipment should be present during SPF application

The EPA says, "It is not clear how much time is needed before it is safe for unprotected workers or building/home occupants to re-enter Re-entry time is dependent on product formulation and other factors that affect the foam curing time "

"Some manufacturers estimate that it can take approximately 23-72 hours after application for the foam to fully cure for the two-component high pressure 'professional' SPF system, and approximately 8 to 24 hours to cure for one component foam, typically available in 12 oz to 24 oz cans," but the agency says more research is needed to account for the potential variability of curing rates

Click here for a detailed EPA fact sheet on diisocyanates

Click here for more information on these and other chemical action plans

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(B)

From: Sandin, Kelly (Kelly.Sandin@jm.com)
To: patayastonellc@prodigy.net;
Date: Tue, December 20, 2011 12:56:03 PM
Cc: Brian.Zall@jm.com; Geoffrey.Stephenson@jm.com;
Subject: Re: Insulation

Dear Mr. Beyer:

Thank you for your e-mail response. Johns Manville (JM), however, respectfully disagrees with your continued assertion that Corbond®III Product was installed in your home. Per your request, JM provided the complete laboratory report in the packet you received on December 15, 2011. As we've explained to you repeatedly, our results indicate the presence of an unauthorized mixture/chemical - rendering it a non-JM finished product. Accordingly, JM has completed its response in this matter and is unable to comment further.

Please direct further inquiries to the Original Installer, a Certified Indoor Air Quality Expert, or to the Center for Polyurethanes Industry, (website: http://www.polyurethane.org/s_api/index.asp).

Sincerely,

Kelly Sandin, MPH, CIH
Johns Manville

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(C)

MERCHANTS INSURANCE GROUP
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August 1, 2012

2012 AUG -3 A 8: 0:

State of Connecticut
Consumer Services Division
P.O. Box 816
Hartford, CT 06142-0816

Re:	Complainant:	Byrnes Agency, Inc O/B/O Richard and Monica Beyer
	Dept. File #:	203185
	Insured:	Anchor Insulation Co., Inc.
	Our File #:	CU001360-01
	D/O/L:	8/10/11

Att Carol A. Sarabia, Associate Examiner

Dear Ms Sarabia,

This acknowledges receipt of the above captioned complaint. Please be advised that this complaint is directed against Merchants Mutual Insurance Company (NAIC# 23329) under a commercial umbrella policy.

This loss was reported to Merchants on 5/2/12 by the claimant's agent. Merchants is the excess/umbrella carrier for Anchor Insulation Co. Inc. Upon receipt of the claim notification Merchants made immediate attempts to contact the underlying carrier, Colony Specialty. Merchants policy has a follow form endorsement which limits its excess coverage only to those damages that are covered by underlying insurance. Therefore, Merchants required copies of Colony's investigation and coverage position in order to provide our coverage determination. After many attempts, Merchants was provided with the underlying carrier's initial investigation and coverage position. Colony's investigation revealed that the claimants hired our insured to provide sprayed insulation throughout their home. The insulation product apparently failed due to improperly mixing it. The insured was asked by the claimant to remove the failed insulation from their home. The insured attempted to to so but was unable to completely remove it and in the process damaged sheathing, wires, plumbing and foundation walls. The underlying carrier determined that the cost to complete the removal of the insulation and restore the property to it's pre-application condition would be approximately $150,000.

Colony agreed to continue it's investigation under a reservation of rights and partial disclaimer of coverage. Neither the primary policy nor the Merchants policy cover the insured's work or work product, lead or pollution. Resulting damage would be the only potentially covered damages and they are well below the underlying carrier's policy limit of $1,000,000, as are the total of all damages.

Based on the information provided by Colony, Merchants issued it's own disclaimer of coverage and have closed our file as there is no exposure to our excess policy.

Merchants feels that this complaint is not justified as we are an excess carrier in this matter and have diligently pursued the underlying carrier's investigation and coverage position in order to establish

4

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our exposure and independent coverage position. Merchants has properly disclaimed coverage and determined that there is no exposure to our policy coverage and have closed our file. Attached are pertinent documents in support of our position. Should you have any questions, please contact the undersigned. Also, please note that this is a Rhode Island insured and the policy was written in New York. Merchants has had no direct contact with the claimant located in Connecticut.

Thank you for your consideration.

Sincerely,

Jonathan E. Perkins, CPCU, SCLA, AIM
Claim Manager
716-849-3250

Cc: Robert Fagerburg

(C)

STATE OF CONNECTICUT

INSURANCE DEPARTMENT

Consumer Services Division
Phone: 860.297.3900, Ext. 3885
Fax: 860.297.3872
Carol.Sarabia@ct.gov

August 6, 2012

Alexis Margerelli-Hussey
Byrnes Agency, Inc
6 Consumers Avenue
Norwich, CT 06360

Re: Our File # 203185
Richard and Monica Beyer

Dear Mrs. Margerelli-Hussey.

The enclosed letter was submitted by the insurance company in response to our inquiry

Based on all available information that was provided, our analysis determined that there has been no violation of Connecticut Insurance statutes or regulations in your case. In addition the insurance company has acted within the provisions of the contract as follows:

Colony Insurance Company is currently investigating under a reservation of rights based on the existence of potential coverage limitations under this professional liability policy. On 7/10/12 the company wrote to the claimants requesting they provide the identity of each type of bodily injury and property damage and the estimate of such damages. Upon receipt of these documents, the company will try to settle these claims.

Merchants Mutual Ins. Co. insures this risk under a commercial risk policy. Neither company covers the insured's work or work product, lead or pollution. It appears the resulting damage would be the only potentially covered damages and they are well below the underlying carrier's policy limit of $1,000,000 as are the total of all damages. This company has issued a disclaimer of coverage as there is no exposure to the excess policy.

This Department has no authority to decide a case of disputed liability or the amount of a loss The proper authority would be the courts. It would be helpful if your insureds notify us of the outcome of the litigation to assist us in monitoring adverse trends in the marketplace.

If you wish to write to us again regarding this matter, please include our file number on all correspondence and direct it to the attention of the examiner noted below. Thank you for bringing this matter to our attention.

6

(C)

Sincerely,

Carol Sarabia

Carol A Sarabia
Associate Examiner

Enclosure(s)

STATE OF CONNECTICUT

(D)

DEPARTMENT OF CONSUMER PROTECTION

January 26, 2012

RICHARD BEYER
8 YORK AVE
NIANTIC, CT 06357-3216

File #: 2012-40
Re: ANCHOR INSULATON CO INC

Dear RICHARD BEYER:

Thank you for bringing your consumer complaint to the attention of Consumer Protection Commissioner William M Rubenstein and his staff. Often it is only through letters from concerned individuals that we become aware of consumer problems

Complaints are used to develop information about patterns of business activities that may indicate the need for formal investigation. Complaints often bring early warning of a pervasive scam. Once a pattern is discovered, what originated as a private dispute between consumer and contractor may become a matter of broad public interest and warrant intervention under the state's consumer protection laws

Our staff reviews each written consumer complaint received by this office In instances where there is evidence of a contractor's pattern of repeated or persistent fraud or illegality, we review the situation and may initiate action against that contractor. We must restrict our investigative activities to those complaints which indicate a pattern of unfairness or deception, substantially affecting public interest

Although we have closed your complaint, if a pattern emerges and formal action is taken or culminates in restitution, we have your name and address in our files and will be able to contact you We may also take our own administrative action against a contractor as a result of the material provided in your complaint The contractor will be notified of your complaint

While we are not able to offer direct personal assistance with your problem, we sincerely appreciate your providing us with the information contained in your complaint. You may wish to try to deal with the contractor directly, use the small claims court system for matters of $5,000 or less, or seek private legal counsel to resolve your situation. Please visit our website at www.ct.gov/dcp to obtain the application for the Home Improvement Guaranty Fund.

You can locate court information at the Judicial web site, www.jud state ct us or your area Small Claims/Superior Court phone number in your phone directory under State of Connecticut/Judicial Branch.

Should you have any questions please contact me at (860) 713-6198

Sincerely yours,

Angie Martinez
Consumer Information Representative
Trade Practices Division

165 Capitol Avenue, Hartford, Connecticut 06106-1630
General Information (860) 713-6100
TDD (Telecommunications Device for the Deaf) (860) 713-7240
Internet Web Site http //www ct gov/dcp
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8

(E)

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Emergency Response and Spill Prevention Division
Emergency Incident Report

Case No · 2012-00051
Staff Receiving Call 951 GUZMAN, CARLOS Assigned To. 929 SHULER, ROBERT
Date Reported 01/04/2012 Time Reported 12:42
Date of Release 01/04/2012 Time of Release. UNKNOWN
Town of Release EAST LYME State of Release· CT
Location of Reported Release 34 INDUSTRIAL PARK ROAD, NIANTIC
Reported By· RICHARD BEYER Phone: (860) 460-5434
Representing SELF
Responsible Party: ANCHOR INSULATION Phone
Street Address 34 INDUSTRIAL PARK ROAD, NIANTIC
Town. State. Zip Code.
Does the Responsible Party Accept Financial Responsibility?
Release Type PETROLEUM CHEMICAL
HAZARDOUS WASTE GAS EMISSION
Release Substance. ICYNENE
Media. GROUND SURFACE
Total Quantity 0 Gallons 0 Cubic Yards 0 Cubic Feet 0 Drums 0 Pounds
Emergency Measures. Investigated, per 937 create DEP sils no# and assigned to 929
Has the Release Been Terminated?
Type of Waterbody Affected UNKNOWN
Name of Waterbody Affected. UNKNOWN
Total Quantity Recovered 0 Total Quantity in Water. 0
Corrective Actions Taken· INVESTIGATED

Discharge Class· COMMERCIAL
Cause of Incident. SLOOPY HOUSEKEEPING
Agencies Notified BUREAU OF WASTE MANAGEMENT - EMERGENCY RESPONSE UNIT
Status CLOSED

9

(F)

U.S. Department of Labor

Occupational Safety and Health Administration
450 Main Street, Room 613
Hartford, Connecticut 06103

(860) 240-3152
(860) 240-3155 (FAX)

April 11, 2012

Richard Beyer
8 York Avenue
Niantic, CT 06357

Re. Complaint #207708777

Dear Mr. Beyer:

We have received your notice of alleged hazards against Anchor Insulation. After review of your complaint items, we have decided not to re-open our complaint or conduct an inspection. The items in your letter address hazards to you and your family and problems with the quality of the product used.

OSHA's jurisdiction covers the employer/employee relationship, and the original response we received was determined to be satisfactory. The State of Connecticut Department of Public Health and the Consumer Product Safety Commission (www.cpsc.gov) may be other avenues to persue with regard to your concerns

If you do not agree with this decision, you may contact me for a clarification of the matter. You also have the right to an informal review by the OSHA Regional Administrator, who may be contacted at the following location:

Marthe Kent, Regional Administrator
Occupational Safety and Health Administration
U S. Department of Labor
J F.K. Federal Building, Room E-340
Boston, Massachusetts 02203
Phone: (617) 565-9860

This review may be obtained by submitting a written statement of your position to the Regional Administrator The Regional Administrator will provide the employer with a copy of your statement by certified mail. Your identity will be withheld unless you explicitly request that it be revealed

Section 11(c) of the OSH Act provides protection for employees against discrimination because of their involvement in protected safety and health related activity. If you believe you are being treated differently or action is being taken against you because of your safety or health activity,

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you may file a complaint with OSHA. You should file this complaint as soon as possible, since OSHA normally can accept only those complaints filed within 30 days of the alleged discriminatory action.

(F)

Your interest in workplace health and safety is appreciated.

Respectfully,

PAUL MANGIAFICO
Area Director

11

(G)

December 12, 2012
11 AM, Legislative Office Building
Meeting with Anchor Insulation

In Attendance:

Kurt Riesenberg, Spray Polyurethane Foam Alliance, SPFA
Paul Duffy, Vice President of Engineering, Icynene Inc.
Eric Fiske, Vice President, Anchor Insulation
Tyler Fiske, Spray Foam Manager, Anchor Insulation
Representative Ed Jutila, 37th District
Jason Knight, Legislative Aide

Meeting Summary:

Anchor Insulation Company Background:

Eric Fiske (EF)

- Been in business since 1980
- 130-140 Employees
- Have seen growth in business as more and more building codes require higher energy efficiency standards.
- Is a member of SPFA and the American Chemisty Council
- Have worked with Yale University in developing safety and technology standards for the industry Tyler Fiske (TF)

Icynene Company Background:

Paul Duffy (PD)

- There have been a lot of changes in the industry, moving away from the old Urea-Formaldahyde process of mixing A and B side ratios.
- With the Icynene product there is now a fixed proportion of systems
- Routine maintenance of equipment and replacement of parts is still essential for guaranteeing the installation of a safe and effective product
- Icynene requires that anyone who installs the product receives training and has an understanding of the product before using (minimum standards for online training covers using equipment, handling drums and how to deal with spills).
- Only sell product to licensed Contractors who have received this training
- Icynene, Inc. is ISO 9000 certified, ICC ESR (Product and Plant certified)

12

(G)

Kurt Riesenberg (KR)

- Encourages foam insulation companies to be members of SPFA and CUFCA Canadian Urethane Foam Contractors Association.
- Industry statistic: less than 1/10 of 1 percent of projects cause problems

Subject to:

- Material Installation - Standard 3rd Party Inspection
- ICC quality assurance by ICC Evaluation Service, LLC (ICC-ES),
- Audits on Raw Materials
  (Although there is currently no National requirement for training certification with SPFA)
- EPA/CPSC/OSHA have formed a Federal Interagency task force that has developed ISO Certified Standards that will be available in 2013 (includes Testing and Field Exams that establish minimum qualifications)
- Focuses on Health and Safety as well as performance and proper installation

Health and Safety Concerns:

- MDI chemical has short life and after installed is virtually undetectable
- Proper precautions should be taken for workers when installing and mixing chemicals (masks, suits, etc.)

Moving Forward:

- If the State would look at requiring certification for State and Municipal projects they would not object to training standards too (because it is something they already do).

- Would be receptive to working with State Utilities (to create energy efficiency standards for installation of products)

- Require Evaluation Service Reports (with support of building officials)

Other Areas for exploration:

- Creating a help desk line for answering questions and rectifying disputes when problems arise similar to what the California Energy Commission has. (SPFA Conflict Resolution Training is already offered)

- Possibly require Property Accreditation/Certification to approve work that is done similar to what is done in Louisiana.

(G)

Reasons stated by Anchor for Product Issues at Beyer home

Tyler Fiske (TF)

(1) Too humid in the basement
(2) Two different types of manufactured products were mixed together

Follow up by the company to address the problem:

- Conducted air quality inspection at the expense of Anchor Insulation (test passed)
- Tech. Rep. gave the work upstairs passing inspection.
- 400 man hours spent removing product from the home (including upstairs where they did not see any product failure.)

Work on a National Certification program has been in process for 13 months. Voluntary standards are expected to take effect in February of 2013. EPA, OSHA, etc. have been promoting the national certification program.

Note This summary is based on notes taken during the meeting and is not a verbatim transcript This summary should not be considered a completely full or accurate accounting of the meeting and should not be used for those purposes

(H)

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Foam Spray Application

Testing for Quality Foam Insulation During Field Application

Quality Control Test Procedures for SPF Applicators

By Mason Knowles

Most sprayfoam applicators do a great job installing good quality polyurethane foam With quality installation and a great product the SPF industry continues to grow despite a down economy and construction industry However, like any building services trade, if you do not choose a skilled applicator with proper training and quality control experience, issues with poor quality and future performance can occur For example, improperly installed off-ratio and off-spec foam can result in foam shrinkage and cracking

This is in no way a negative aspect of spray foam SPF is indeed a superior green building and insulating material It is purely a message to both the consumer and the future installers of our industry that just because a company has purchased equipment and claims to be a spray foam installer does not mean they are any good at it

This is purely a matter of selecting good quality foam contractors and installers, checking references and making sure they are properly trained and experienced at the work they are doing Similar performance issues commonly occur with the poor installation of any building material and alternative insulation products such as fiberglass insulation, and Tyvek® housewraps. If they are not installed by trained professionals, they are probably not going to perform as well as they should, or could

I have visited two job sites in the last 3 months where the foam has shrunk back away from the studs - more than 3 inches and has cracked along in other areas The applicators tell me they installed the foam according to manufacturer's instructions and it looked fine to them Within a few days or weeks however, the foam started to shrink and crack

Shrinking SPF pulling away from studs

So what is going on and how does a contractor know if a seemingly good looking foam job will potentially go bad?

In order to understand how to tell good foam from off-spec foam the contractor needs to have an understanding of the physical properties for the different types of SPF SPF manufacturers test their products in laboratories to obtain physical properties that are then reported on their data sheets such as (but not limited to) density, compressive strength, R value, dimensional stability, permeance, water absorption, adhesion, etc

Standards developed by the SPF industry, code bodies and standards organizations (such as ASTM) describe the physical properties required for different SPF types and applications

For example, the following table from ASTM C 1029 provides physical properties required for 4 types of

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15

(I)

SPF products also contain other complex and often proprietary ingredients, such as amine catalysts, flame retardants, blowing agents, surfactants, and other chemical additives

Review label and product information for hazards and precautions

Exercise caution when determining a safe re-occupancy time for unprotected workers and occupants

Ensure safe work practices are followed

- Communicate hazards to building occupants/owners and residents
- Isolate the work area provide access only for protected workers
- Wear protective equipment
- Ventilate the work area
  (http://www.epa.gov/dfe/pubs/projects/spf/spf-ventilation.pdf)

Look for information about SPF at
http://www.epa.gov/dfe/pubs/projects/spf/spray_polyurethane_foam.html

Or search on EPA SPF

000628

17

(I)

Spray Polyurethane Foam is an effective insulation and air sealant material, but exposures to key ingredients, diisocyanates, can cause

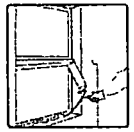
- Asthma
- Sensitization, leading to asthma
- Lung damage or other respiratory problems
- Skin, eye, nose, or throat irritation

Vapors, aerosols, or dust can be found during and for a period of time after installation.

If you experience breathing problems or other adverse health effects, seek immediate medical attention.

Two-Component High Pressure SPF

Two-Component Low Pressure SPF



One-Component Foam

EPA United States Environmental Protection Agency

April 2012
Check EPA's website for the latest information.

000629

(I)

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Health Consequences of Exposure to "Green" Polyurethane Spray Foam

Download. PDF

Summary Statement: This PowerPoint from a presentation at a 2012 CPWR meeting by Carrie Redlich MD reviews the main findings of a NIOSH-funded study looking at health effects from exposure to spray polyurethane foam as part of green construction The results point out the strong relationship between this work and occupational asthma and addresses the medical evaluations needed Case studies are presented of workers who developed sensitivity.
March 27, 2012

Exposure to "Green" Polyurethane Spray Foam

- What's in it
- Potential health effects - isocyanate asthma
- Challenges
- Biomonitoring - Isocyanate-specific IgG / IgE
- CPWR study – preliminary data
- Questions

Chemical Composition of SPF

Part A – Isocyanates

- **Methylene diphenyl diisocyanate (MDI) /pMDI**

Part B – variable / proprietary

- Polyols (petroleum or soy based)
- **Amine catalysts**
- Flame retardants
- Blowing agents
- Surfactants

Mix A + B = POLYURETHANE FOAM
(exothermic reaction)

Major Commercial Isocyanates

HDI - hexamethylene

$O=C=N(CH_2)_6N=C=O$
Paints, Coatings Light resistant

TDI - toluene

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construction solutions

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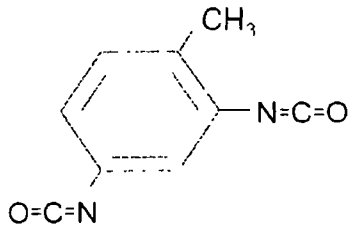
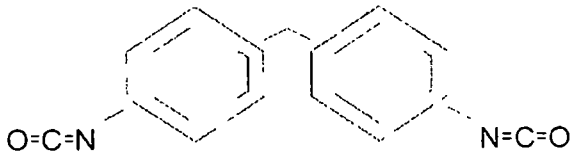


MDI - diphenylmethane or methylene diphenyl



Less volatile – "safe"
Foams, adhesives Coatings, wood products

Uses Isocyanates / Polyurethanes in Construction - Growing

- Foams - soft / hard
  - *Insulation - spray foam*
  - Simulated wood - doors, posts
- Adhesives
- Roofing materials
- Caulking
- Sealants
- Elastomers / coatings
- Woodbinder - composite wood

Health Effects Isocyanates

- Potent sensitizer / allergen
- **Occupational asthma**
- One of the most commonly identified causes of occupational asthma
- Rash / skin irritation - less common, but occurs
- Hypersensitivity pneumonitis - less common

Isocyanate asthma – key features

- Clinically similar to "ordinary" asthma
- Timing- onset months to years after onset exposure
  - Delayed symptoms 6-8 hours after exposure
- Once sensitized, exposures to very low levels trigger asthma
- Diagnosis can be missed - (by patient and doctor)
- Asthma commonly persists after away from exposure
- Poor socioeconomic outcomes - unemployment, reduced income
- Extent problem unknown - especially in end-user settings

Health effects from exposure to other components PU Foam ?

- **Amine catalysts**
  - Sensitizers, irritants - asthma, rash
  - **Blurry vision (halo vision)**
- Flame retardants
- VOCs
- Blowing agents
- Polyols

Routes of exposure / forms

19

(I)

- **Inhalation**
- **Skin** - likely contributes to sensitization and asthma

- Liquid, aerosol, vapor
- Exothermic reaction
- Cut & shave foam → dust, particulates

Case

Healthy 36 y/old construction worker / insulator 1 yr ago started use PU spray foam Past 5 months -- cough after work / evening - wife concerned Chest tightness, SOB, wheeze. Better on weekends Symptoms progress - goes to ER

Initial Medical evaluation
No h/o asthma, allergies Improves with asthma inhalers Continues to work, wears PPE, but progressive symptoms

Further work-up
Spirometry - airflow obstruction - positive BD response MDI-IgG, MDI-IgE positive Told to avoid isocyanates

Health Effects of Exposure to "Green" Polyurethane Spray Foam

- What's in it
- Potential health effects - isocyanate asthma
- **Major challenges**
- **Biomonitoring - Isocyanate -specific IgG / IgE**
- CPWR study - preliminary data
- Questions

Limitations isocyanate exposure assessment and regulation

- Multiple formulations and forms- vapor / aerosol / particulates
- Sampling and laboratory analysis can be challenging
- All methods depend on free NCO - timing critical
- "Snapshot" of exposure - end-user settings esp problematic
- Air sampling does not assess effectiveness personal protective equipment (gloves, respirator)
- Skin exposure assessment methods limited

- Current OELs - Not protective

Limitations diagnosis isocyanate asthma

- Asthma common condition - connection to work frequently missed - especially once asthma more chronic
- No simple specific test for isocyanate asthma Frequently other work (and environmental) triggers
- Most clinicians focus on treatment more than cause / prevention
- Worker may leave causative job / work before diagnosis made, but asthma frequently persists
- No mandatory medical surveillance or reporting for isocyanate asthma

Biomonitoring Approaches

- Direct measurements of isocyanate derivative or metabolite in urine - *currently not useful*

- **Measurements of physiologic response to exposure (antibodies in blood)**

Principles Guiding Isocyanate Serology

Isocyanate chemicals are "man-made" - don't exist naturally.

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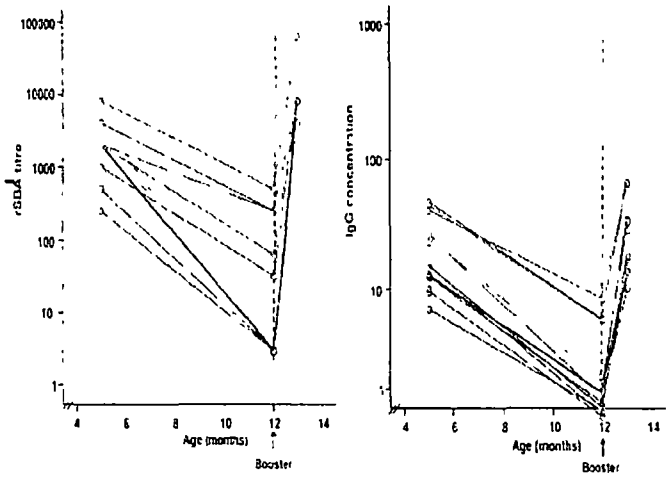
Humans don't normally make antibodies to isocyanate modified albumin; they are triggered by exposure.



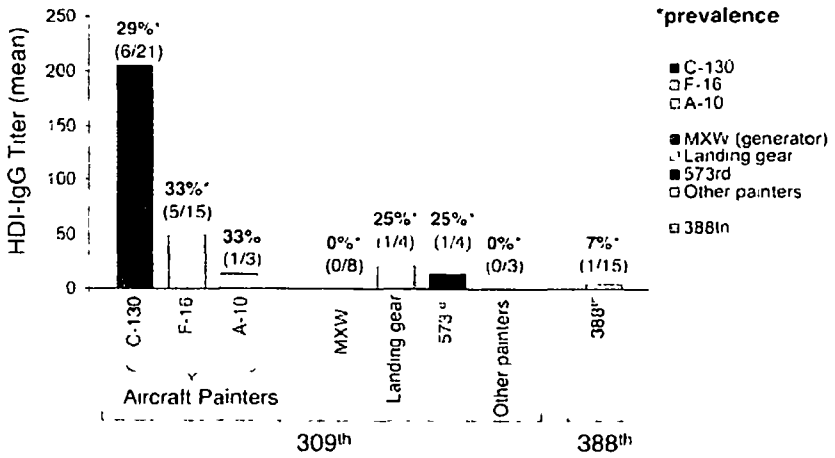
Without ongoing exposure, specific antibodies are cleared from blood in a time dependent manner.

Isocyanate Immunoassays

Measures human response to exposure

- Detect in human serum
- Isocyanate-specific IgG and IgE responses
- Integrated measurement over time
  - IgG serum1/2 life = 30 days
  - IgE serum 1/2 life ~ 2 days
- Response highly specific for isocyanate
- Can vary depending upon form of isocyanate used as the "antigen"

Biomonitoring hexamethylene diisocyanate (HDI) exposure based on serum levels of HDI-specific IgG



Wisnewski. Ann Occup Hyg 2012, 10 1-10

Case: PU spray foam sprayer MDI-IgG over time

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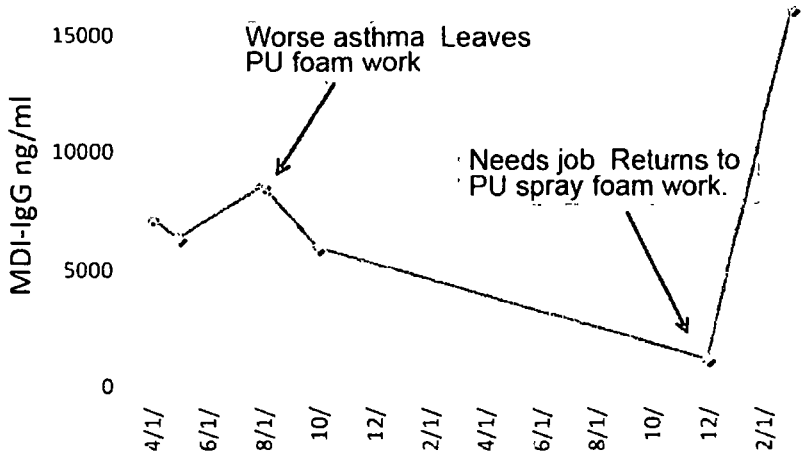

Assessment and Prevention of Isocyanate Exposures in the Construction Industry Funded by NIOSH / CPWR

Aim 1) Assess respiratory and skin isocyanate exposures in the construction industry

Aim 2) Implement a surveillance program for construction workers who work with or around PU products.

Aim 3) implement an intervention program to reduce isocyanate exposures in construction workers

Characteristics Construction Workers Recruited who use Isocyanate Products (n= 60) ***Preliminary Data***

Gender· Male	58 (97%)
Current smoker	22 (37%)
Job Category	
Insulator	20 (33%)
Other	40 (67%)
Glazier / taper	9 (15%)
Energy conservation	7 (12%)
Other construction	24 (40%)
Symptoms	
None	19 (32%)
Non-specific	24 (40%)
Asthma, work-related	15 (25%)
Spirometry - airflow obstruction	16 (27%)

Worker Self Reported Exposure (n= 60) ***Preliminary Data***

Other spray near you	
No	7 (12%)
Monthly or less	14 (23%)
Daily / weekly	39 (65%)

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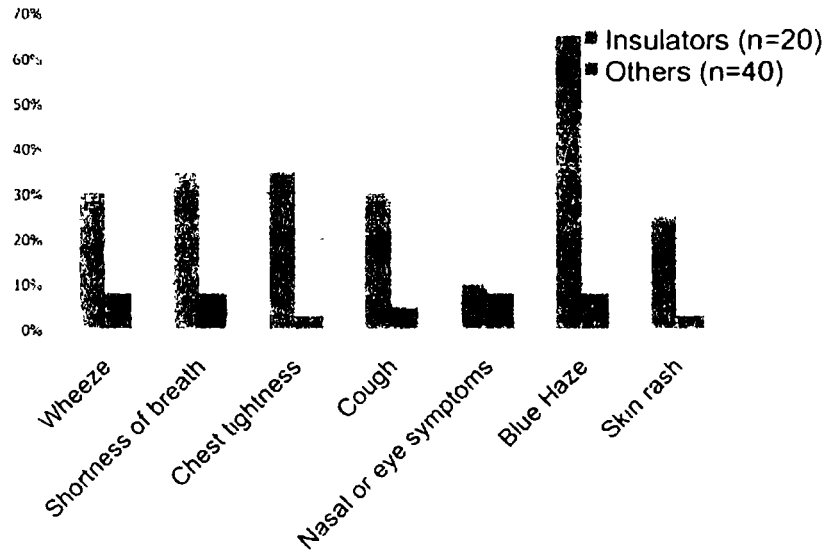
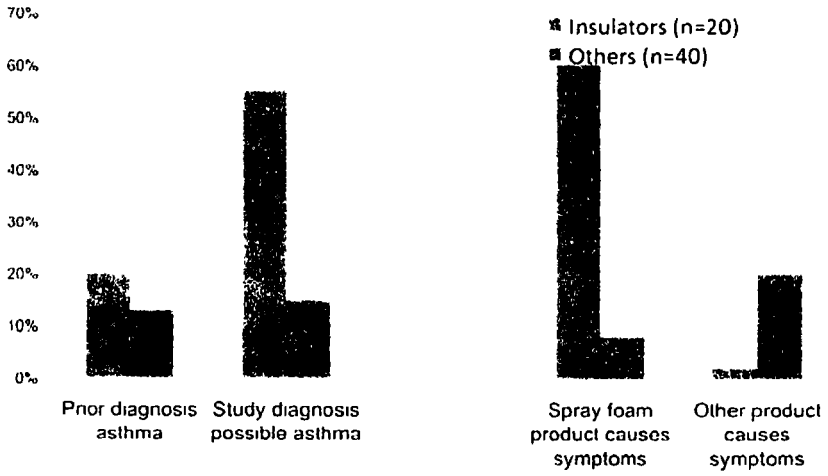
Get Isocyanate product on skin	
Never	4 (7%)
Occasionally	22 (37%)
Frequently	**34 (57%)**
Where on skin	
Hands, arms, wrists	24 (40%)
Head, neck, face	15 (25%)

Work-related symptoms *preliminary data* (n = 60)



Possible Asthma: prior diagnosis vs study diagnosis *preliminary data* (n = 60)



Prevalence of isocyanate-specific-IgG Comparison to autobody workers *preliminary data*

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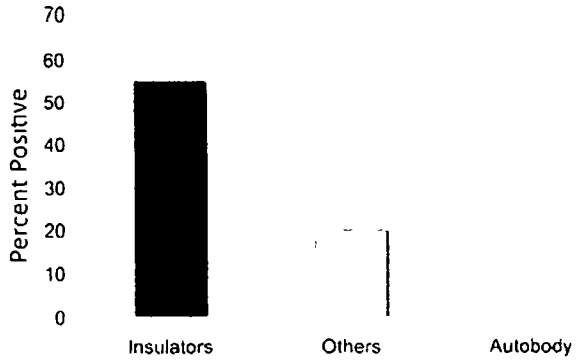
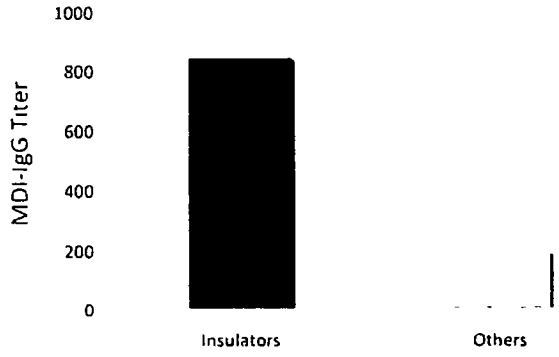


MDI specific-IgG titres (mean) *preliminary data* (n = 60)



PU Construction Worker Project – Initial *Preliminary* Conclusions

- Work-related asthma symptoms are common in the PU spray foam workers – may represent isocyanate asthma
- High prevalence MDI-IgG positive titers in PU spray foam workers
- MDI skin exposure is commonly reported
- Traditional IH monitoring does not appear to be adequate

Health Effects of Exposure to "Green" Polyurethane Spray Foam

- What's in it
- Potential health effects - iIsocyanate asthma
- Major challenges
- Biomonitoring - Isocyanate-specific IgG / IgE
- CPWR study – preliminary data
- **Questions**

Acknowledgements

Yale Occupational and Environmental Medicine Program
Adam Wisnewski, PhD
Meredith Stowe, PhD
Judy Sparer, CIH

UMass
Dhimiter Bello, PhD

Funding
CPWR-NIOSH Construction Center Grant "Assessment and Prevention of Isocyanate Exposures in the Construction Industry"

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ICYNENE

THE ICYNENE® ADVANTAGE

APPLICATION CASE STUDY:

American Lung Association 'Health House' Promotes Tighter Building for Better Indoor Air

Synopsis:

- ✓ Supports Health House program guidelines
- ✓ Creates a superior air-seal to minimize airflow and accompanying moisture
- ✓ Protects home occupants from outdoor allergens and pollutants
- ✓ Uses 100% water-blown technology

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Connecticut Department of Public Health

FACT SHEET

Connecticut Department of Public Health
Environmental & Occupational Health Assessment Program
Environmental Health Section
410 Capitol Avenue, MS # 11EOH, PO Box 340308
Hartford, CT 06134-0308
Telephone: (860) 509-7740 Fax: (860) 509-7785
http //www ct gov/dph/ieq

11-11

Indoor Air Quality Testing Should Not Be The First Move

Many times, office workers, homeowners, renters, teachers, parents, administrators and other school stakeholders want to have their building "tested" to assure themselves of "good indoor air quality". This is usually not the first move that responsible parties should make. Why do health professionals recommend caution and a great deal of thought before testing the air? There are a number of reasons.

♦ There Are No Standards

- There are no appropriate standards for indoor air quality (IAQ) in environments such as schools, office buildings, and residences.
- There are some industrial standards for permissible exposure limits for certain chemicals used in manufacturing and other work place settings, but these standards should not be used for children, sensitive populations such as pregnant women, the elderly, or people with certain illnesses. They should never be used in residential settings.
- There are no standards for indoor levels of molds. This because there is great variability in people's reaction to mold. Also, there is no scientific support for designating a particular mold measurement as "safe" or "unhealthy."
- The most current ventilation guidelines for acceptable indoor air quality are just that - *guidelines*. They are not enforceable unless they are part of the building code. Newer buildings are generally designed according to newer ventilation guidelines, but older ones built to a building code in existence at the time of construction (especially pre-1989) may be outdated.

♦ The Lack Of Enforceable Standards Makes Interpretation A Tricky Business

It is difficult to interpret the results of air testing. This can add to the confusion and create an air of mistrust between the stakeholders and the administration that ordered the testing.

⇒ Testing as a first response does not usually lead to an answer or solution. Very often air testing is conducted as a knee-jerk reaction to a reported IAQ problem. Such testing done in the absence of a hypothesis, or as part of a well-planned investigation, usually produces data that raises more questions that it answers. It can raise expectations that a solution will follow, and subsequently raises suspicions if no answer is found.

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⇒ Background Exposures – Most indoor pollutants (mold, particles, volatile chemicals) are present in all buildings at "background" levels. These contaminants are present in most buildings without causing adverse health effects. Testing indoor air will therefore always find something, usually background levels that have no significance for reported health complaints.

Therefore, DO NOT TEST IF:

- **the results cannot be interpreted**
- **results will add no meaningful information**
- **just because someone wants it done**

◊ What Is The First Step In Creating A Space With Good Indoor Environmental Quality? What Should You Do Before or Instead of Air Testing?

⇒ Walk through the building using your eyes, nose, and common sense to identify potential problems.

⇒ Look at general cleanliness (or lack thereof) in each of the areas you inspect.

⇒ See if building services can substitute cleaning agents that have less of an odor ("low emitters") than the stronger odor-producing ones that may be in use.

⇒ In addition to bedrooms, bathrooms, classrooms, offices, gymnasiums, locker rooms, auditoriums, music rooms, industrial and fine arts rooms, etc, also look at maintenance areas such as janitor closets, mechanical rooms that house ventilation equipment, chemical storage closets in labs and in custodial areas, etc.

⇒ Take note of where carpeting is used. How is it cleaned, and how often? Does it ever get wet from flooding, roof leaks, etc, and if so, how quickly is it dried out?

⇒ Walk around outside of the building and look for potential pollution sources.

⇒ Look for locations of fresh air intakes and exhausts. Are they too close together, allowing exhaust air to be sucked back into the building via the intakes? Are the intakes located near dumpsters or where busses, trucks or cars idle?

⇒ Look at how the building is set on the land. Does the land slope downward towards the building, allowing rainwater to pool along the foundation? Is the building located on former swampland or landfill? Is there a high water table or underground stream under the building? Is landscaping too close to the building?

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All of these things can have an impact on indoor environmental quality. Here are some additional things that should be done early on, before resorting to actually testing the air

- **Examine Building Usage**

  Compare the hours the building is used with any automatic timers that may be set to turn the mechanical ventilation systems on and off, and make adjustments as necessary. Those who schedule building usage for activities must be sure to communicate this to facilities management. Mechanical systems should be turned on early enough in the morning to let these systems attain full capacity by the time school or work begins.

- **Ask About Maintenance Service Contracts**

  Schools and offices often have service contracts to take care of certain parts or all of the physical plant. This is especially true for the ventilation equipment. You can ask questions about how often filters are scheduled to be changed, and about what other components are included in an annual service contract (be sure to ask to see the maintenance log for proof of when this work was completed).

  If your facility subcontracts out janitorial services, find out what is included in the contract. Ask about the cleaning agents they use, and request "low emitting" chemicals when available.

- **Plan Minor Renovations During Off-Hours**

  - Schedule minor jobs such as painting, floor re-surfacing, carpet installation, etc. during hours when school is not in use

  - Use low emitting paint, glues, polyurethane, and other building materials whenever possible. Limit the use of particleboard, pressed wood and plywood containing formaldehyde.

- **Build Communication Into Large Renovation Projects**

  - Before major renovation projects are scheduled, meet with office workers, principal, teacher representative, school nurse, facilities director and local health director in your town or district. Set up a plan for communicating relevant information to everyone who may be affected. This includes workers, parents and students. For schools, EPA's ***Tools for Schools*** program can be very helpful here . CT DPH has a similar program for offices called ***Tools for Office Buildings*** - see page 6.

  - Plan to do as much work as possible during non-school or non-business hours.

  - Isolate construction areas from non-construction areas using barrier techniques to minimize contamination in areas that will be used for normal school or office activities.

Much of the time, a building assessment should be to identify basic problem areas. Once these areas have been identified, you then may decide to call in the professionals. However, as a first cut, here are some things you can do yourself.

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- **What You Can Do Yourself**

  - Schools should implement EPA's ***Tools for Schools Program***. Offices may wish to implement ***Tools for Office Buildings.*** (see page 6)
  - Develop proactive risk communication
  - Do routine scheduled maintenance, *especially on HVAC* (heating, ventilation and air conditioning) *systems*
  - Remove pollution sources
  - Substitute low emitting products whenever possible
  - Fix all leaks *promptly!*
  - Remove and discard all porous materials damaged by water. This includes ceiling tiles, carpets, furnishings, and even wallboard
  - Schedule repairs/renovations during off hours

- **When *Is* Indoor Environmental Testing Useful?**

Once a problem has been identified, the solution may be thought of as a puzzle. There are many pieces, and air sampling may be one of them. Other important pieces of the puzzle will include: a building walk through, taking a history of the physical plant and any past and present maintenance problems, history of building usage and land usage on the property and surrounding neighborhoods, review of architectural and mechanical blueprints, interviewing maintenance staff, and anything else that would add information about the physical structure of the building, and the activities that go on in and around the building.

It may also be useful to interview the building occupants. Ask for their help in identifying problem areas Set up good lines of communication between management, staff, and parents. This is crucial and cannot be over emphasized! Ask the school or company nurse if she/he has observed or documented an increased incidence of health complaints. Are they specific types of complaints or more generalized in nature? It may be desirable to do a symptom survey if lots of people are affected. Your local health director can help coordinate these activities.

When all of the practical steps and investigations described above have been conducted, there may be a place for air testing. Air testing may be used to confirm or refute a highly suspected source that is uncovered during the walk-through inspection.

Air testing is most useful when a specific contaminant or contamination source has already been identified as a likely culprit, and quantitative data are needed to:

- Document the degree or extent of the hazard, or
- Document different locations in a building where elevated levels or severe conditions exist.

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Air testing may also be useful in a qualitative manner when trying to differentiate between several suspect chemicals or sources. Although air testing is sometimes useful in tracking down chemical sources, air testing for mold is an entirely different story. A complicating factor in interpreting air results from mold testing is that a variety of molds are present in our everyday environment. Most of the time, you will find that molds normally found outdoors are also present indoors. This is because they are carried in on our clothing and shoes, and also enter building interiors via open windows, doors, and fresh air intakes.

So, to review, indoor air testing may be useful when:

- **It is part of an overall evaluation**
- **When the data is interpretable**
- **When the data has a descriptive component that helps to illustrate its place in the overall evaluation**
- ***NEVER alone***

After undertaking the steps described above, you may find it necessary to hire one or more professionals. Remember that varied problems may require more than one type of specialist. For example, you may need a ventilation engineer, or a moisture specialist, or an architect, or an industrial hygienist, or an environmental/ geology consultant. Here are some tips to follow when hiring a consultant.

- **When You Have To Call In A Consultant**

  - Discuss the problem with your local health director, and enlist their help with risk communication to all of the stakeholders. He/she may also be able to help you select the right kind of consultant for the job at hand.

  - Review the American Industrial Hygiene Association (AIHA) consumer brochure: *Guidelines for Selecting An Indoor Air Quality Consultant.* Go to: http://www.aiha.org/news-pubs/newsroom/Documents/Guidelines for Selecting An Indoor Air Quality Consultant.pdf

  - Have a clear understanding of the problem, so that you can direct the consultant properly.

  - Make sure the consultant explains the scope of the project up front - what they can and cannot do. Communicate this to all of the stakeholders so people will have a realistic expectation about the process.

For technical information concerning evaluation, testing or data interpretation, contact:

Marian L. Heyman, MPH
CT Department of Public Health
Tel: (860) 509-7740
Email: marian.heyman@ct gov
http://www.ct gov/dph/ieq
http://www.ct.gov/dph/mold

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US Environmental Protection Agency *Tools for Schools* Program

The U.S. EPA has developed an innovative program to address indoor air quality (IAQ) in schools. The *Tools For Schools* (*TfS*) program is based on the following key principles:

- Many IAQ problems can be prevented by the school community
- IAQ problems can often be resolved using the skills of school staff
- The expenditures and effort to prevent most IAQ problems are a fraction of that required to solve problems once they develop.

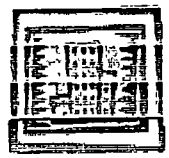
Participating schools form a *TfS* committee consisting of administrators, teachers, maintenance staff, parents, and others. The CT School Indoor Environment Resource Team works with *TfS* committees, teaching them how to use *TfS* materials to investigate indoor air quality hazards and develop short and long-term strategies to prioritize and solve IAQ problems.

The *TfS* Action Kit is a key feature of the *Tools for Schools* program. The kit provides all of the materials necessary to promote a low-cost, problem-solving team approach to improving indoor environmental quality (IAQ) in schools.

For more information about starting or maintaining a *TfS* program, call:

Kenny Foscue
CT Department of Public Health
Tel: (860) 509-7740
Email: kenny.foscue@ct.gov
http://www.ct.gov/dph/schools

Connecticut Department of Public Health *Tools for Office Buildings* Program



Poor indoor environmental quality in office buildings continues to be a concern of many workers. Using the EPA *Tools For Schools* program as a model, CT DPH created the *Tools for Office Buildings* (TfOB) Program.

Tools for Office Buildings is a proactive, preventive, team-based program that educates building occupants and property management about conditions and practices that may affect the indoor environment, identifies building conditions that contribute to poor indoor air quality, and provides guidance for remedies including low cost/no cost solutions.

Participants learn how to conduct an overall building assessment, are taught to recognize factors that can impact the office indoor environment, and how they can play a role in improving the workplace environment.

For more information about starting a *TfOB* program, call:

Joan Simpson
CT Department of Public Health
Tel (860) 509-7740
Email: joan.simpson@ct.gov
http //www ct.gov/dph/ieq

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Centers for Disease Control and Prevention
CDC 24/7· Saving Lives Protecting People ™

NIOSH Science Blog

Safer Healthier Workers

Help Wanted: Spray Polyurethane Foam Insulation Research (http://blogs.cdc.gov/niosh-science-blog/2012/03/sprayfoam/)

Categories: Chemicals (http://blogs.cdc.gov/niosh-science-blog/category/chemicals/), Construction (http://blogs.cdc.gov/niosh-science-blog/category/construction/), Exposure (http://blogs.cdc.gov/niosh-science-blog/category/exposure/), Green (http://blogs.cdc.gov/niosh-science-blog/category/green/), Personal protective equipment (http://blogs.cdc.gov/niosh-science-blog/category/personal-protective-equipment/)

March 21st, 2012 1:55 pm ET - **David A. Marlow, BS**

(http://blogs.cdc.gov/niosh-science-blog/files/2012/03/spf.jpg)

Environmentally friendly doesn't necessarily mean worker friendly. In many cases, new "green" technologies and products have reached the market without being adequately evaluated to determine whether they pose health or safety risks to workers in manufacture, deployment, or use. Spray polyurethane foam—commonly referred to as SPF—is a case in point. Its use as insulation has been on the upswing because of the laudable aim of builders and property owners to improve energy efficiency. As popular as it has become, however, much remains unknown about spray polyurethane foam—specifically the health implications of its amines, glycols, and phosphate upon workers.

Polyurethane foam has a high R-factor (or R-value), so it resists the flow of heat and, when used as insulation, increases a building's energy efficiency. Because of this, it has become a favorite in the world of energy-conscious construction and renovation. While better insulation

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clearly means less energy consumption, what's not clear is the level of protection and ventilation workers need so that they remain safe during the installation process.

MDI: The known hazard

Spray polyurethane foam is applied as a liquid but expands as it dries. The product itself is a two-component system. The first chemical in the mixture is methylene diphenyl diisocyanate (MDI). The hazards of MDI (http://www.cdc.gov/niosh/topics/isocyanates/) are well-documented and their exposure limits have been established However, the known hazards for spray polyurethane foam only take into account the first part of the mixture—the MDI.

Amines, glycols, and phosphate: Unknown risks

The other half of the mix has not been studied for worker safety. It is a chemical question mark with no toxicology or health information. This part contains amines, which act as a catalyst; glycols—blowing agents that react with the foam; and phosphate, a flame retardant. This half of the spray polyurethane foam equation raises several questions:

- What is the concentration of the fumes and vapors from these chemicals when spray foam is applied?
- Are the workers who are applying the spray foam adequately protected?
- What about others on site who are not applying the spray foam and who are not wearing the same personal protective equipment?
- How long does it take to ventilate the area after application?
- Are there cost-saving methods for isolating and venting the fumes?

A need for real-world air sampling

We are currently researching these issues. In our labs we've done tracer gas studies, simulating potential exposures to spray polyurethane foam components, but to make the science useful for SPF installers, we need partners to help us collect on-site air samples. At the worksite, we will collect personal breathing-zone air samples and set up five tripods with air-sampling pumps to obtain readings in a variety of sampling areas. We would like to gather samples during the spray foam application, and again at intervals afterwards. The data we collect will help us gauge:

- The true level of personal protective equipment needed by the worker applying the spray foam and by those who are elsewhere on the worksite.
- The actual amount of time before the area is void of harmful levels of vapors. The idea that the area needs to be clear for 24 hours is anecdotal and has no scientific underpinning.
- Proper ventilation and cordoning of the spray foam work area. Some contractors go to great lengths to tape and plastic the room; others do nothing at all. Our air sampling will clarify what the best practice is.

Additionally, we are working on a portable spray booth that will contain overspray fumes and improve ventilation—a cost-saving intervention.

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A need for solid science

It's difficult for even the most conscientious employers to protect their workers because limited data exist on the second part of the spray foam mixture. The popularity of the product and the number of companies using it demands that there be some scientific background informing its use.

Help wanted

Please contact NIOSH to advance the science behind spray polyurethane foam insulation. You can reach us through this blog. While foam insulation may be green, with your help, our research can ensure that spray foam is sustainable for your workers as well.

—David A. Marlow, BS

Mr. Marlow is an industrial hygiene engineer in the NIOSH Division of Applied Research and Technology.

25 Comments (#comments)

Public Comments

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1. March 26, 2012 at 12:54 pm ET - Rachel White

   I work with Byggmeister [http://www.byggmeister.com], a residential remodeling firm in Newton, MA, that has been using SPF as an insulation material for some now. Your call for help is timely for us: we have recently begun to take a closer look at the existing guidelines on SPF safety in an effort to better protect our crew and our clients (most of whom are living in their homes during construction). So, we are thrilled that you are doing this research and would very much welcome the opportunity to participate in your study. Please let me know if we can be of help.

   Link to this comment (http://blogs.cdc.gov/niosh-science-blog/2012/03/sprayfoam/#comment-3499)

2. March 28, 2012 at 4:14 am ET - Emlyn Ó Troighthigh

   This topic should be of interest to health and safety professionals, trades and regulatory bodies in Ireland as at the moment, there are incentive schemes in place for home owners to improve insulation in their homes. As a health and safety consultant, I closely follow such topics in the media, online etc. and am not aware of any concerns to date in this field.

   It would be interesting to hear the views of users of this material or trade representative bodies in respect of the extent of use and any research done on the application of spray polyurethane foam in Ireland.

   Link to this comment (http://blogs.cdc.gov/niosh-science-blog/2012/03/sprayfoam/#comment-3514)

3. March 29, 2012 at 12:20 am ET - greenwashed

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122 Spring Street, Suite C3
Southington, CT 06489
Phone (860)621-3000
Fax (860)620-9005

February 21, 2013

General Law Committee
Legislative Office Building
300 Capitol Avenue
Hartford, CT

RE: HB No 5908
Certification Standards for the Spray Foam Industry

Dear General Law Committee:

As the owner and operator of a small spray foam insulation company I completely understand the need for proper training and certification for any company actively engaged in the business of installing polyurethane based spray foam, whether it be in a customer's home or commercial setting. If installed correctly it is a perfectly safe product; if installed incorrectly there could be health repercussions for both the spray foam installers as well as the building's occupants.

While I agree with the need to regulate this industry, I'm requesting the General Law Committee consider exempting companies that have already taken the time and absorbed the expense of becoming trained and certified by a reputable Spray Foam Training Facility.

The Spray Polyurethane Foam Alliance (SPFA) should not be the only acceptable form of certification required of spray foam companies. I was trained and certified by Bayer Corporation – an intense, week long certification school based in Arizona. I have also sprayed in excess of 2 million board feet of foam without incident or call backs. To require struggling companies in a struggling economy to absorb the added expense of redundant certification would imposed an unnecessary financial burden.

In short, requiring proper certification is necessary to protect the health and safety of spray foam installers and the customers they serve, however, please consider exempting those companies that can prove they have received SPFA comparable training in addition to a minimum amount of years in business or having a certain level of spray foam installation experience.

Thank you for your time and consideration in this matter.

Sincerely,

Ronald P. DaMotta, Jr.
Owner/State-Wide Restorations, LLC

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

TESTIMONY PRESENTED BEFORE THE GENERAL LAW COMMITTEE
Feb 21, 2013

Ellen Blaschinski, Branch Chief, Regulatory Services Branch, (860) 509-817

House Bill 5908 – An Act Requiring Safety and Certification Standards For The Spray Foam Insulation Industry

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The Connecticut Department of Public Health opposes H.B. 5908.

The Connecticut Department of Public Health recognizes that there are potential health and safety hazards associated with spray polyurethane foam insulation (SPF). These hazards have been described by NIOSH, OSHA, CPSC, and EPA', and pertain to both installers and their helpers, as well as for household/building occupants that inhabit the building where SPF is installed. Many of these installations are performed without subsequent problems. However, a number of cases of faulty installations have resulted in improperly cured product that off-gas for many months. In these cases, building occupants report noxious odors and symptoms that include mucous membrane irritation, visual disturbances, respiratory problems, headache, and difficulty concentrating Some of the problems identified during these faulty installations have included use of the wrong type of foam product for a given application, improper mixing of components, installing during environmental climate conditions outside of manufacturer recommendations, and improper installation technique.

Installers and the general public purchasing these services need to be better educated about SPF. Currently, there are national efforts to voluntarily educate and credential/certify professional installers. The largest trade organizations offer training and certification or credentialing for professional contractors and weatherization professionals, as well as information for the general public. The two most prominent organizations are the American Chemistry Council's Center for the Polyurethane Industry (CPI) and the Spray Polyurethane Foam Alliance (SPFA). Additionally, the US EPA has a great deal of guidance and informative publications for contractors and the general public, and is sponsoring research in this arena.

- CPI: http://spraypolyurethane.org/spf-chemical-health-and-safety-training
- SPFA. http://www.sprayfoam.org/
- US EPA: http://www.epa.gov/dfe/pubs/projects/spf/spray_polyurethane_foam.html

Rather than requiring Connecticut to develop standards for the SPF industry, a more practical approach would be to encourage persons installing SPF to obtain training, certification or credentialing from CPI, SPFA, or similar organization.

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1 TESTIMONY OF SPRAY FOAM POLYMERS TO THE CT GENERAL LAW COMMITTEE

2

3 CHAIRMAN BARAM, CHAIRMAN DOYLE

4 STATEMENT FOR THE RECORD

5 SUBMITTED TO THE CONNECTICUT GENERAL LAW COMMITTEE

6 STATE OF CONNECTICUT GENERAL ASSEMBLY

7 FEBRUARY 21, 2013

8 CHAIRMAN BARAM, CHAIRMAN DOYLE, MEMBERS OF THE GENERAL LAW COMMITTEE, FOR THE

9 RECORD MY NAME IS STEVE J FORTIN FROM SPRAY FOAM POLYMERS, A SPRAY FOAM MANUFACTURER

10 BASED OUT OF NEW CANAAN CONNECTICUT WITH WAREHOUSES AND OFFICES IN WEST HAVEN,

11 WILTON AND NORWALK

12 I AM SUBMITTING TESTIMONY ON HOUSE BILL 5908, AN ACT REQUIRING SAFETY AND CERTIFICATION

13 STANDARDS FOR THE SPRAY FOAM INSULATION INDUSTRY.

14 SPRAY FOAM POLYMERS IS A NATIONAL SPRAY FOAM MANUFACTURER OF INSULATION SPRAY FOAM

15 AND ROOFING SPRAY FOAM. SPRAY FOAM POLYMERS IS AN ACTIVE MEMBER OF SPRAY POLYURETHANE

16 FOAM ALLIANCE (SPFA) AND IS COMMITTED TO ITS CUSTOMERS/CONTRACTORS BY OFFERING

17 TRAINING AND SUPPORT AT NO COST.

18 THE SPRAY FOAM INDUSTRY HAS IMPROVED TREMENDOUSTLY IN THE PAST FIVE YEARS WHEN IT COME

19 TO SAFETY, QUALITY OF PRODUCTS, TRAINING AVAILABILITY, EQUIPMENT AND METHODS OF

20 INSTALLATION. SPRAY FOAM HAS GAINED RECONGNITION AS THE PRODUCT OF CHOICE WHEN IT

21 COMES TO ENERGY CONSERVATION AND INSIDE QUALITY AIR CONTROL SINCE ENERGY EFFICIENCY

22 PROGRAMS HAVE BEEN ROLLED OUT IN MANY STATES AND TOWNS AROUND THE COUNTRY.

23 NOW THAT PEOPLE ARE MORE AWARE OF THEIR ENERGY CONSUMPTION, THEY ARE LOOKING FOR NEW

24 PRODUCTS TO IMPROVE THEIR HOMES OR BUILDINGS AND THEY ARE TURNING TO SPRAY FOAM

25 INSULATION AS THE MOST EFFECTIVE SOLUTION. AT THE SAME TIME, CONSUMERS ARE

BOMBARDED BY ALL KINDS OF MISINFORMATION ONLINE AND ON TELEVISION ABOUT OUR PRODUCTS AND INDUSTRY, THAT IS WHY SPRAY FOAM POLYMERS SUPPORTS SPFA IN ITS SPRAYFOAM PROFESSIONAL CERTIFICATION PROGRAM DEVELOPMENT.

WE ALSO UNDERSTAND THAT THE STATE OF CONNECTICUT WANTS TO PROTECT AND SERVE ITS RESIDENTS, THAT IS WHY SPRAY FOAM POLYMERS IS READY TO WORK WITH THE STATE AND ANY PARTY INVOLVE IN DEVELOPING A CONCIENCUS PROGRAM THAT WILL EFFECTIVELY PROVIDE GUIDELINES TO IMPROVE OUR INDUSTRY STANDARDS WITHOUT MAKING IT PROHIBITELY DIFFICULT FOR SMALL BUSINESSES TO USE OUR PRODUCTS IN A COMPETITIVE BUSINESS ENVIRONMENT.

AS FOR MYSELF I AM A PREVIOUS SMALL BUSINESS OWNER, I HAVE BEEN IN THE INSULATION BUSINESS FOR MORE THAN SIX YEARS AND NOW WORKING AT SPRAY FOAM POLYMERS AS A TECHNICAL AND TRAINING SUPERVISOR. I STRONGLY BELIEVE IN HEALTH AND SAFETY REQUIREMENT FOR OUR INDUSTRY WITH A COMMON SENSE APPROCH TO ITS APPLICATION. I AM OSHA, LEAD CERTIFIED AND POSSESS MY BUILDING PERFORMANCE INSTITUTE (BPI) CERTIFICATION. THESE CERTIFICATIONS DO NOT PROVIDE A FOOL PROOF SYSTEM TO THE CONSUMERS LOOKING TO HIRE A CONTRACTOR, BUT IT PROVIDED AN INDICATION OF MY DEDICATION TO PROVIDE QUALITY WORKMANSHIP TO MY CUSTOMERS. THAT IS WHY I SUPPORT TRAINING AND CERTIFICATIONS FOR ALL OF OUR CONTRACTORS IN OUR INDUSTRY, BUT AT THE SAME TIME WE HAVE TO REALIZE THAT IT IS ALSO THE RESPONSIBILITY OF THE CONSUMERS TO DO THEIR DILIGENT WORK ON HIRING THE RIGHT CONTRACTOR FOR THEIR PROJECT.

WE LOOK FORWARD TO WORKING WITH YOU ON THIS SAFETY AND CERTIFICATION STANDARS FOR THE SPRAY FOAM INDUSTRY IN THE STATE OF CONNECTICUT.

THANK YOU FOR YOUR TIME AND CONSIDERATION

TESTIMONY OF SPFA TO THE CT GENERAL LAW COMMITTEE P14

1 CHAIRMAN BARAM, CHAIRMAN DOYLE PS: 15 LN: 13

2 STATEMENT FOR THE RECORD

3 SUBMITTED TO THE CONNECTICUT GENERAL LAW COMMITTEE

4 STATE OF CONNECTICUT GENERAL ASSEMBLY

5 FEBRUARY 21, 2013

6 CHAIRMAN BARAM, CHAIRMAN DOYLE, MEMBERS OF THE GENERAL LAW

7 COMMITTEE, FOR THE RECORD MY NAME IS DR. RICHARD DUNCAN FROM THE

8 SPRAY POLYURETHANE FOAM ALLIANCE, OR SPFA. I AM SUBMITTING TESTIMONY

9 ON HOUSE BILL 5908, AN ACT REQUIRING SAFETY AND CERTIFICATION

10 STANDARDS FOR THE SPRAY FOAM INSULATION INDUSTRY.

11 SPFA IS THE NATIONAL 501(C)6 TRADE ASSOCIATION REPRESENTING THE VALUE

12 CHAIN OF THE SPRAY POLYURETHANE FOAM INSULATION AND ROOFING

13 INDUSTRY. OUR MEMBERSHIP IS COMPRISED OF MANUFACTURERS,

14 DISTRIBUTORS AND INSTALLERS OF SPRAY POLYURETHANE FOAM, HENCEFORTH

15 REFERRED TO AS SPRAYFOAM, FROM ACROSS THE UNITED STATES.

16 USE OF SPRAYFOAM INSULATION AND ROOFING HAS GROWN CONSIDERABLY

17 OVER THE PAST DECADE, CONSISTENTLY AT DOUBLE DIGIT RATES. THIS IS DUE TO

18 ITS PERFORMANCE AS BOTH A FANTASTIC INSULATOR WITH HIGH R-VALUE, AS

WELL AS AN AIR-BARRIER PREVENTING AIR-LEAKAGE, A MAJOR CULPRIT OF BUILDING INEFFICIENCY.

IT ALSO PROVIDES EMPLOYMENT FOR TENS OF THOUSANDS OF EMPLOYEES OF MEMBER COMPANIES, WITH THE HIGH PERFORMANCE CONTRACTOR AND INSTALLERS REPRESENTING SMALL BUSINESSES PERFORMING SERVICES THAT CANNOT BE EXPORTED. THE CONNECTICUT MARKET ALONE SUPPORTS SEVERAL HUNDRED OF THESE SMALL BUSINESS EMPLOYEES, AND EXTENDS TO SEVERAL THOUSANDS OF SUPPORT EMPLOYEES AROUND THE COUNTRY. SPRAYFOAM IS A HIGH PERFORMANCE PRODUCT WITH SUBSTANTIAL TESTING FROM MAJOR CODES, FIRE AND "GREEN" ORGANIZATIONS, AS WELL AS RECOGNITION AND USE AMONG VARIOUS STATE AND FEDERAL AGENCIES INCLUDING THE U.S DEPARTMENT OF ENERGY, THE ENVIRONMENTAL PROTECTION AGENCY, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, THE GENERAL SERVICES ADMINISTRATION AND THE DEPARTMENT OF DEFENSE TO NAME A FEW.

RECOGNIZING THIS GROWTH AND BROAD STAKEHOLDERSHIP, SPFA HAS ENGAGED IN SEVERAL INITIATIVES TO SUPPORT THE INDUSTRY, ITS CUSTOMERS, AND THOSE ENTITIES THAT HAVE EMBRACED ITS PERFORMANCE AND INNOVATION.

WE HAVE WORKED CLOSELY WITH THE U.S. EPA, OSHA AND NIOSH ON TOPICS RELATED TO SPRAYFOAM HEALTH, SAFETY AND PERFORMANCE. MOST RECENTLY SPFA, WITH OUR PARTNERS, ENGAGED IN THE DEVELOPMENT OF A TRUE SPRAYFOAM PROFESSIONAL CERTIFICATION PROGRAM.

IT WAS MADE COMPREHENSIVE THROUGH THOUSANDS OF HOURS OF MEMBER AND STAFF COMMITMENT TO DEVELOPING MATERIAL RELATED TO THE OCCUPATION. SPFA FOLLOWED ANSI/ISO 17024, STANDARDS FOR THE CERTIFICATION OF PROFESSIONAL PERSONNEL. WE ENGAGED IN A THOROUGH JOB TASK ANALYSIS, AND DEVELOPED SUBSEQUENT SUPPORTING KNOWLEDGE, SKILLS AND ABILITIES OR "KSA"S, AND LEARNING OBJECTIVES RELATED TO EACH KSA.

THE RESULT IS AN OUTSTANDING PROGRAM FOCUSED UPON SPRAYFOAM INSTALLATION PROFESSIONALS, UNBIASED BY BRAND, AND CONSENSUS-DEVELOPED. IT IS OWNED AND MANAGED BY SPFA AND IS ANSI/ISO 17024-ACCREDITED.

WE ARE PROUD TO ANNOUNCE THAT WE JUST ROLLED THIS PROGRAM OUT AT OUR SPFA NATIONAL CONVENTION IN FEBRUARY 2013 FOLLOWING SEVERAL

TEST-PILOT SESSIONS. SO FAR ALMOST EIGHT HUNDRED TESTS HAVE BEEN ADMINISTERED NATIONALLY BUT THAT STILL REPRESENTS A SMALL PORTION OF SPRAYFOAM INSTALLATION PROFESSIONALS. THE TESTING WILL BE AVAILABLE AT MANY NATIONAL TEST CENTERS, INCLUDING AT MANY OF OUR MEMBER MANUFACTURING FACILITIES. IT WILL ALSO BE AVAILABLE THROUGH NATIONAL DISTRIBUTORS AND OTHER LOCATIONS, SEVERAL OF WHICH WILL BE RIGHT HERE IN THE STATE OF CONNECTICUT.

THIS HOWEVER TAKES SOME TIME. WHILE THE INDIVIDUAL TESTING AND FRAMEWORK ARE COPLETE, THE PROGRAM HAS SEVERAL ASPECTS INCLUDING FINAL POLICIES AND PROCEDURES, INTEGRATION WITH VARIOUS TRAINING PROGRAMS, AND REQUIREMENTS FOR CONTRACTOR, DISTRIBUTOR AND MANUFACTURING FIRMS TO BECOME ACCREDITED THAT NEED TO BE COMPLETED. SPFA, ITS MEMBERS AND INDUSTRY PARTNERS ARE HARD AT WORK TO COMPLETE THESE OTHER CRITICAL ELEMENTS AND ANTICIPATE THE REMAINDER OF 2013 BEING NEEDED TO FINISH THE WORK.

SPFA ENGAGED IN THIS EFFORT RECOGNIZING THAT ALL SPRAYFOAM STAKE-HOLDERS, INCLUDING HOMEOWNERS, GENERAL CONTRACTORS, ARCHITECTS, HOME BUILDERS, STATE AND FEDERAL GOVERNMENT AGENCIES ARE LOOKING

FOR A BASELINE ON HEALTH AND SAFETY, ALONG WITH PERFORMANCE AND QUALITY, IN THEIR DETERMINATION OF SPRAYFOAM CONTRACTOR SELECTION. THIS PROGRAM WILL DELIVER A COMPETENT AND EFFECTIVE BASIS FOR THAT SELECTION, ALONGSIDE OTHER FACTORS CUSTOMERS SHOULD TAKE INTO CONSIDERATION THAT REPRESENT APPROPRIATE DUE-DILIGENCE IN SELECTING A CONTRACTOR TO PERFORM SERVICES.

THIS PROGRAM WAS DEVELOPED AND IS SUPPORTED BY THE SPRAYFOAM VALUE CHAIN, AND IS ANTICIPATED TO BE AN AVENUE THROUGH WHICH CONTRACTORS WILL BE ABLE TO DIFFERENTIATE THEMSELVES, THEIR COMPANIES AND THEIR SERVICES.

IN THE VERY SHORT TIME ALLOTED TO US, I WANTED TO INTRODUCE AND ORIENT YOU TO SPRAYFOAM, THE SPFA, AND OUR NEW CERTIFICATION PROGRAM. WE ARE VERY INTERESTED IN WORKING WITH YOU MORE CLOSELY TO FULLY HIGHLIGHT THE ASPECTS OF THIS PROGRAM, MAKE IT A RESOURCE TO THE GREAT STATE OF CONNECTICUT, AND WE APPLAUDE YOU IN YOUR EFFORTS TO REPRESENT YOUR VARIOUS CONSTITUENTS.

WHILE WE ENDEAVOR TO FINISH OUR WORK ON THE PROGRAM, WE ALSO LOOK FORWARD TO WORKING TOWARD COMPLETE DEPLOYMENT ON A REASONABLE TIMELINE AND MANAGED PROCESS WITH YOU, YOUR AGENCIES, THE BUSINESSES, HOMEOWNERS, AND BUILDING OWNERS OF CONNECTICUT.

THANK YOU FOR YOUR TIME AND CONSIDERATION.

ANCHOR INSULATION

Industrial, Residential, Commercial and Marine, Refractory, Noise Control, Heating & Cooling, Fireplaces, Gutters, Waterproofing

Testimony of Tyler Fiske on HB 5908
AN ACT REQUIRING SAFETY AND CERTIFICATION STANDARDS FOR THE SPRAY FOAM INSULATION INDUSTRY
General Law Committee
Thursday, February 21, 2013

Chairman Baram, Chairman Doyle, members of the General Law Committee, for the record my name is Tyler Fiske from Anchor Insulation with offices in Niantic, Manchester and East Haven and I am submitting testimony on House Bill 5908 AN ACT REQUIRING SAFETY AND CERTIFICATION STANDARDS FOR THE SPRAY FOAM INSULATION INDUSTRY.

Hello, my name is Tyler Fiske with Anchor Insulation. We have three locations in Connecticut. They are in Niantic, East Haven and Manchester

Thank you for giving people here the opportunity to speak on the subject of whether or not spray foam insulation contractors should be required to have some sort of certification. I would like to say that we at Anchor Insulation are in favor of an industry specific certification and believe that contractors should start to work towards having their spray foam technicians go through the SPFA (Spray Polyurethane Foam Alliance) Certification process. The SPFA is the Industry Trade Association and we feel that their programs are industry specific, appropriate, and have OSHA, NIOSH and EPA review and support to ensure validity. Were the state of Connecticut to require a trade certification, Anchor Insulation feels that the SPFA has the certification program in place and that this is what the state should require.

Thank you for your time and for allowing me to speak on this process.

Tyler Fiske

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Yale SCHOOL OF MEDICINE

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February 2, 2013

Mr. Tyler Fiske
Anchor Insulation
435 Narragansett Park Drive
Pawtucket, RI 02861

Dear Mr. Fiske:

I am writing to thank Anchor Insulation for invaluable help in Yale University's work to better understand the hazards of exposure to chemicals used in polyurethane (PU) foam insulation, including MDI, and how to ensure a safer work environment. Our group at Yale has been studying exposures and health effects related to isocyanates now for two decades in several industries, including auto body repair shops, manufacturing and construction. Although we have had excellent cooperation in the past, we have never before worked with a company such as Anchor Insulation Anchor's staff has taken impressive leadership and initiative in working towards identification of as well as approaches to reduce potential worker exposure and health risks from chemicals associated with PU spray foam

Anchor Insulation is clearly a leader in making sure that "green" industry jobs are also safe and healthy jobs, and that your product is safe and healthy for consumers looking for energy savings. We have learned a great deal from you and your knowledgeable staff about practical ways to reduce hazards related to spray foam insulation

We have been most impressed with the dedication of your staff, their interest in health and safety, and their willingness to provide state-of-the-art training and protective equipment to your workers, as well as their dedication to providing builders, general contractors and home owners with an outstanding product.

It has been a pleasure working with Anchor Insulation, and we look forward to continuing to collaborate with you on our PU spray foam project.

Sincerely yours,

Carrie Redlich

Carrie A Redlich, MD, MPH

Professor of Medicine

Richard Beyer
8 York Ave., Niantic, CT 06357
Ph. 860-460-5434

PS: 15 LN: 21

General Law Committee

2/21/2013

Bill 5908 Testimony

I am here today to testify before this general law committee. There is an immediate need for mandated **training and licensing** for the installers and companies which provide **"Spray Polyurethane Foam Insulation"** to the public. Public safety is at risk and I say this respectfully, as law makers you have a responsibility to protect the public from the hazards these products pose to occupants of homes across this state.

People are unknowingly being exposed to the toxic chemicals of spray foam while the product is being installed on construction sites, in office buildings and most importantly in the private residence.

My story begins here,

During September of 2010, I hired Anchor Insulation, Inc. (headquartered out of Rhode Island with offices throughout Connecticut) to install spray polyurethane foam insulation inside of my family home to save on heating and cooling costs. I trusted this company could perform the job with ease based on conversations I had in passing with the company Vice President, Eric Fiske and considering the number of people they employed. (@ 130-140 men and women)

My family home was constructed in 1890. I researched these products and found nothing in relation to its hazards. All I could find was the positives on how much energy you could save, how "Green" the product is and how it was promoted over the years on TV shows such as This Old House. Today these products are shown on almost every HGTV show including Holmes on Homes and the demand for the product has skyrocketed. They all promote the benefits of the product. This is what the homeowner see's and most all believe, **"How Green and Great the product is"**.

Today the business of Spray Polyurethane Foam Insulation is experiencing a real boom in business due to the current government "Green Energy" movement. Almost anyone with credit or $30,000-$40,000 cash can become a spray foam installer, with little to no training at all. Most homeowners who can afford these insulation products are having them installed because of their tremendous energy saving

benefits. Today I ask, at what cost is your health really worth? Is it worth the advantages of saving on fuel when these products are installed by amateurs or by non-trained companies?

There appears to be a significant health issue with spray foam insulation. No wonder the EPA is looking at potentially banning this practice:

_and the CDC is investigating these products. (See exhibit A)

The insulation company I hired applied spray foam into my home during October of 2010 and it failed badly. The products installed emitted noxious odors, gases, shrunk, cracked, disappeared and literally exploded in the middle of the night. I reported all these failures to this company immediately after the installation. My first email, in November of 2010 stated, "Something strange is happening with the foam application on the second floor. It appears as though the 2lb foam is shrinking and opening up to where you can see dark holes, gaps and what appear to be tears in the foam. Between the roof framing the foam is curving toward the roof where it was even at one point."

They came out immediately and did not give any indication verbally or in writing that the product was hazardous or harmful in any way to my family. When asked the question the question was diverted to another topic. (The noxious odor was the strongest in our master bedroom. My skin felt like it was on fire, my eyes burned and I suffered major headaches, heart palpitations and breathing problems. My wife had to stop exercising in our home because her lungs hurt after the insulation was installed.) We never contributed these symptoms to the foam insulation due to the flu-like symptoms and our age. I found myself on a Benadryl diet so I could sleep at night.

They told me they would return to fill in the significant voids that began to appear shortly after installation. I suggested that maybe we should wait until the stuff finishes what it is doing before I cover it up with drywall. The only problem was it never stopped splitting, shrinking and off-gassing. When it heated up it stunk. When it cooled down it split open and exploded.

Finally, I had enough and told them they had to get this stuff out of our home!

This is where the problems escalated from bad to worse. The company brought their men in and started the removal process. Dust and stink was everywhere in my home. Friends would visit and ask if they were installing the new product? This was due to the odor from the removal process. (See attached picture) The trapped gases were emitting into the air of my home once again. During this time frame my pets and I were in the home. This company never stated the product was emitting toxic chemicals. By industry standard it should not have if it was installed correctly. By industry standard the product is supposed to become "inert" after installation. This obviously was not the issue in my home. (See attached pictures)

After months of delays and runarounds by this company and their chemical suppliers Johns Manville and Icynene, I started investigating the products more. What I found was extremely disturbing. "There are No Published Standards for the home, only the workplace."

Johns Manville later had their attorney and in house scientist issue a letter to me that the product was not theirs and that the finished product was contaminated by the installer. (See exhibit B)

Icynene to date has avoided answering any of my health questions. They claim in a most recent communication that their product was installed correctly. They will not explain why the foam stunk so badly and why the color (Mint Green) of the foam does not match up to the published color (Platinum) on their Material Safety Data Sheets (MSDS). The COO of Icynene recently stated in an email, they are still investigating the problem. This is 2-1/2 years later. In the meantime, the areas of my home are still sealed off and unusable. Once again, there are no published standards for what constitutes safe remediation practices and indoor air quality

I contacted the installation company and informed them, they need to contact their insurance and the manufacturers to clean up this mess. I was told there was no need to they would take care of this issue. "Taken care of" boiled down to the workmen destroying my property in what seemed like deliberately sloppy and destructive work practices in my home. (See exhibit C)

Being aware that this company has already installed these Johns Manville Corbond III insulation chemicals (2010 and prior) within numerous homes, small commercial public places and churches through their installers, I am very concerned for those property owners and their health. I learned through the Northeast territory manager of Johns Manville that they terminated their relationship with the installation company due in part to many disagreements over how the products are to be installed. JM claimed they had no knowledge the products were installed in my home because they were looking for the balance chemicals they were never paid for.

After the runaround and finger pointing, I had enough.

I filed complaints with the Department of Consumer Protection and they sent me to the Consumer Products Safety Council. CPSC sent me to OSHA. OSHA sent me to the EPA. EPA sent me to the Consumer Protection. Consumer Protection sent me to my town building department. Town Building sent me to the Department of Public Health. Department of Public Health sent me to the Consumer Protection Agency. Consumer Protection sent me to the State Building Official. State Building Official sent me back to the town building official. Finally I filed a complaint with the insurance commissioner regarding the treatment received by my installer's insurer. Colony Insurance estimated to bring the house back to post installation status would cost an estimated $150,000.00.

As you can see, not one agency knows who does what or what to do when problems arise from failed spray polyurethane foam insulation. All of the written complaints I filed with these agencies were closed and I was left with the mess to clean up.

This may explain why Spray Polyurethane Foam Alliance (aka, SPFA), Kurt Reisenberg could make a claim to Representative Jutila that the "failure rate of Spray Foam Insulation is less than 1/10th of 1 percent." Mr. Reisenberg claims this rate was established through an informal polling amongst industry manufactures and installers. He also claims of the one million installations completed, only 6 or 7 made

it to the courts. (See exhibit G) This is not an acceptable answer when we speak about chemicals and public safety!

Now you can see why. No one knows what to do in government when Spray Foam Insulation becomes an issue.

In one telephone conversation I had with Marian Heyman from the Connecticut Department of Public Health, she instructed me to "go to the Home Depot and purchase a five gallon bucket, scrub brush and some detergent and to scrub the foam off my walls." I could not believe what I was hearing. I asked Marian Heyman how many failures they have on file. She stated that she could not tell me the names of the people, only the manufacturers which were complained about from the homeowners she does have on file. I never heard from her again. She never provided me anything even when I issued a FOI request to DPH What I did find in the FOI was a statement made about me that said,

"these complaints will never materialize into an investigation."

So here I am today, to report to you what I found out about this industry and why citizens of Connecticut and across this country need our government to step up and stop these chemical companies from poisoning our families in the name of the dollar. These chemical companies claim through the American Chemistry Council web site that the chemicals used in spray foam insulation are heavily regulated by OSHA and the EPA. I am here to report to you this is simply not the case when we speak about your home and the air quality that is created after the products are installed.

I will make this as clear as I can. The installer is the scientist who mixes two different chemicals onsite (Part A and B) to create polyurethane foam insulation in your home. Dow chemical does this same process in a laboratory in Gales Ferry, CT. The difference is Dow operates in a controlled setting with real labs and scientist. You may get a man with training or a man who learned from watching or a man who just started work that day with no training at all or better, the helper from the day prior.

Spray Polyurethane Foam Alliance and the American Chemistry Council agree training is needed. What they do not want are laws mandating this. SPFA has a very real financial stake in this error of industry by keeping it on a volunteer basis. They make big money from training and industry through membership. The homeowner is not of their concern.

What this government needs to clearly understand, these are real chemicals and when installed incorrectly they do cause real life health problems to occupants and the installers. These installers also need you to protect them from unscrupulous employers who refuse to provide them with the proper protections. Mandating licensing and training by the means of law is real protection for public safety. Not, lip service!

In fact, as reported on **"like any building services trade, if you do not chose a skilled applicator with proper training and quality control experience issues with poor quality and future performance occur. (See exhibit H)** These are chemicals which contain chemicals of concern!

This is the ONLY building product where your home is the chemical manufacturing site!

Every other building product in your home was manufactured in a controlled factory setting. If these products are not mixed properly, they will fail. It's not if, it's when. Is your health worth the risk? (See exhibit I)

To date, there are no published health studies regarding consumers living with spray polyurethane foam insulation. There's no published scientific data which prove these insulation products are "Safe" when installed onsite. There are no mandated licensing or training procedures. There are no air quality standards for the home. (See exhibit J)

Everything industry related is strictly volunteer. Current training is 3 to 5 business days for installers who wish to attend. Chemical manufacturers training is 3 to 5 business days.

SPFA recently developed a more complicated long term training program, but this too is on a volunteer basis for a fee and is in its infancy stage.

As law makers, I say this with great respect, you have a duty to act. Please protect the citizens of Connecticut from the known hazards these chemicals pose to human health and industry installers.

Please make training and licensing law, this will be a true benefit to public safety.

Sincerely,

Richard Beyer

H – 1155

CONNECTICUT
GENERAL ASSEMBLY
HOUSE

PROCEEDINGS
2013

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University Government and Politics Class as they make a visit to this building. They're up in the Balcony. Give a wave.

(APPLAUSE.)

Potential future leaders of this building and they are brought here by their professor, Professor Louise DiCocco. Thank you.

DEPUTY SPEAKER RYAN:

Thank you, Representative. Thank them for coming.

Are there any other further announcements or introductions? Are there any other announcements or introductions?

Hearing none, will the Clerk please call Calendar Number 132.

THE CLERK:

On Page 40 of today's Calendar, Calendar Number 132, House Bill 5908 AN ACT CONCERNING SAFETY AND CERTIFICATION STANDARDS FOR THE SPRAY FOAM INSTALLATION INDUSTRY.

DEPUTY SPEAKER RYAN:

Representative Baram of the 15th, sir, you have the floor.

REP. BARAM (15th):

Thank you, Mr. Speaker. I move for acceptance of the Joint Committee's Favorable Report and passage of the bill.

DEPUTY SPEAKER RYAN:

The question is acceptance of the Joint Committee's Favorable Report and passage of the bill.

Representative Baram, you have the floor.

REP. BARAM (15th):

Thank you, Mr. Speaker. This bill requires the Commissioner of Consumer Protection, in consultation with the Commissioners of Public Health and Energy and Environment, to adopt regulations developing safety and certification standards for the spray foam industry.

This industry has had many complaints in the past and the purpose of this is to come up with uniform standards that will protect both the installers and the owners. If installed incorrectly, this can cause sickness among inhabitants of the house and the bill goes to promote regulations that will prevent this.

This was passed unanimously by the General Law Committee. It is effective upon passage.

There is a fiscal note of a one-time expenditure of $15,000, which DCP would have to expend to hire

some experts and consultants to draft these regulations.

I move for passage of the bill.

DEPUTY SPEAKER RYAN:

Thank you, Representative. Will you remark further? Representative Carter of the 2nd.

REP. CARTER (2nd):

Thank you very much, Mr. Speaker. I rise in strong support of this bill as well. You know, there's obvious issues with some of the contractors out there, not only with the health and safety, but also with the way the insulation has been put in.

There's been a number of faulty installations of the insulation, so I think this is a real good opportunity where the state is actually helping out business get their act together, so to speak.

And I'll also mention that this will, this will encourage the installers to get training and certification actually from the American Chemistry Center, or excuse me, the American Chemistry Council Center for a polyurethane industry.

So it's going to be well adopted standards. I would say this is a good bill and I'd urge my colleagues to support it. Thank you.

DEPUTY SPEAKER RYAN:

Thank you, Representative. Will you remark further on the bill? Will you remark further on the bill?

If not, will staff and guests please come to the Well of the House. Will the Members please take your seats. The machine will be opened.

THE CLERK:

The House of Representative is voting by Roll.

The House of Representatives is voting by Roll.

Will Members please return to the Chamber immediately.

DEPUTY SPEAKER RYAN:

Have all Members voted? Have all Members voted? Will the Members please check the board to see if their vote has properly been cast.

If all Members have voted, the machine will be locked and the Clerk will take the tally. The Clerk will please announce the tally.

THE CLERK:

Bill Number 5984.

Total Number Voting	145
Necessary for Passage	73
Those voting Yea	145

Those voting Nay 0

Those absent and not voting 5

DEPUTY SPEAKER RYAN:

The bill passes.

The distinguished Majority Leader, Representative Aresimowicz.

REP. ARESIMOWICZ (30th):

Good afternoon, Mr. Speaker.

DEPUTY SPEAKER RYAN:

Good afternoon, sir.

REP. ARESIMOWICZ (30th):

Mr. Speaker, in a few moments we will be recessing. The Democratic Members will be holding their caucus in Room 207A. It shouldn't take all that long, we hope. But we will be caucusing. Thank you, Mr. Speaker.

DEPUTY SPEAKER RYAN:

Thank you, sir. Any other announcements or introductions? Hearing none, the Chamber will stand in recess.

(On motion of Representative Aresimowicz of the 30th, the House recessed at 12:42 o'clock p.m. to reconvene at the Call of the Chair.)

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SENATOR LOONEY:

That's right.

THE CLERK:

Oops.

THE CHAIR:

That's (inaudible).

THE CLERK:

On Page 11 --

THE CHAIR:

That's the technical term.

Mr. Clerk.

THE CLERK:

Calendar 462, House Bill Number 5908, AN ACT CONCERNING SAFETY AND CERTIFICATION STANDARDS FOR THE SPRAY FOAM INSULATION INDUSTRY, Favorable Report of the Committee on GENERAL LAW.

THE CHAIR:

Senator Doyle.

SENATOR DOYLE:

Yes. Thank you, Mr. President.

I move acceptance of the Joint Committee's Favorable Report and passage of the bill, in concurrence with the -- the House.

THE CHAIR:

On acceptance and passage.

Will you remark, sir?

SENATOR DOYLE:

Yes.

Thank you, Mr. President.

This -- this bill deals with an issue that the Committee struggled with at a Public Hearing, in terms of the potential health risks to consumers in connection with the spray foam in the homes and there's a lot of testimony in connection with the potential health risks of cancer and the like. We really could not come to a -- a firm consensus.

So what this bill does is it asks the Commissioner of Consumer Protection, in consultation with the Commissioners of Public Health and DEEP to adopt regulations that would kind of develop safety and certification standards for the spray foam insulation industry. Ultimately, these regulations would look towards collaboration between our departments and provide the best means and protection for our consumers.

And I urge the Chamber to approve this legislation.

Thank you, Mr. President.

THE CHAIR:

Thank you, Senator.

Senator Witkos.

SENATOR WITKOS:

Thank you, Mr. President.

I also rise in support of the bill before us.

As the good Chair of the General Law Committee stated, during the Public Hearing it was quite confusing, actually, as a layman who doesn't deal with anything in the spray foam industry, trying to figure out the difference between the science versus the application. And we felt, as the Committee would be best served to

go through the different entities here at the State and have regulations adopted, so it protects everybody involved.

It passed the House unanimously. Hoping to do the same thing in the Senate.

Thank you, Mr. President.

THE CHAIR:

Thank you, Senator.

Will you remark further on the bill? Will you remark further on the bill?

Senator Doyle.

SENATOR DOYLE:

Thank you, Mr. President.

If there's no objection, I refer this bill to the Consent Calendar.

THE CHAIR:

Seeing and hearing no objections, so ordered.

Mr. Clerk.

THE CLERK:

I believe its Calendar Page 15, Calendar 521, House Bill 6407, AN ACT CONCERNING THE ASSAULT OF A LIQUOR CONTROL AGENT, Favorable Report of the Committee on GENERAL LAW.

THE CHAIR:

Correct.

Senator Doyle.

SENATOR DOYLE:

Thank you, Mr. President.

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Would move to place that item also on the Consent Calendar.

THE CHAIR:

Seeing no objection, so ordered sir.

SENATOR LOONEY:

Thank you, Madam President.

Madam President, now would ask the Clerk to call the items on the first Consent Calendar, so that we might proceed to a vote on that Consent Calendar.

Thank you, Madam President.

THE CHAIR:

Mr. Clerk.

THE CLERK:

On Page 5, Calendar 278, Senate Bill 709; Calendar 333, House Bill 5759; Calendar 334, House Bill 6396; Calendar 340, House Bill 6211.

On Page 8, Calendar 357, House Bill 6349 and Calendar 398, Senate Bill 1065.

On Page 11, Calendar 457, House Bill 5564 and Calendar 462, House Bill 5908.

On Page 15, Calendar 516, House Bill 5500; Calendar 521, House Bill 6407.

On Page 19, Calendar 558, House Bill 6340.

Page 21, Calendar 574, House Bill 6534; Calendar 575, House Bill 6562; and Calendar 577, House Bill 6652.

Page 23, Calendar 587, House Bill 6465; Calendar 589, House Bill 6447.

On Page 24, Calendar 599, House Bill 6458.

Page 25, Calendar 602, House Bill 5614.

And on Page 29, Calendar 622, House Bill 5278; Calendar 625, House Bill 6624.

Page 39, Calendar 223, Senate Bill 954 and Calendar 227, Senate Bill 819.

And on Page 46, Calendar 100, Senate Bill 273 and Calendar 137, Senate Bill 837.

THE CHAIR:

Mr. Clerk, please call for a roll call vote and the machine will be open on the first Consent Calendar.

THE CLERK:

Immediate roll call has been ordered in the Senate. Members to the Chamber. Immediate roll call has been ordered in the Senate on today's first Consent Calendar.

THE CHAIR:

All members have voted, all members have voted.

The machine will be closed.

Mr. Clerk will you please call the tally.

THE CLERK:

On today's first Consent Calendar:

Total Number Voting	34
Necessary for Adoption	18
Those voting Yea	34
Those voting Nay	0
Those absent and not voting	2

THE CHAIR:

Consent Calendar passes.

The Senate will stand at ease.

(Chamber at ease.)