

# HEALTH AND PRODUCT SAFETY ISSUES ASSOCIATED WITH IMPORTED DRYWALL

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## HEARING

BEFORE THE

SUBCOMMITTEE ON CONSUMER PROTECTION,  
PRODUCT SAFETY, AND INSURANCE

OF THE

COMMITTEE ON COMMERCE,  
SCIENCE, AND TRANSPORTATION  
UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

MAY 21, 2009

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ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

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## **HEALTH AND PRODUCT SAFETY ISSUES ASSOCIATED WITH IMPORTED DRYWALL**

**THURSDAY, MAY 21, 2009**

U.S. SENATE,  
SUBCOMMITTEE ON CONSUMER PROTECTION, PRODUCT  
SAFETY, AND INSURANCE,  
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,  
*Washington, DC.*

The Subcommittee met, pursuant to notice, at 10:33 a.m. in room SR-253, Russell Senate Office Building, Hon. Mark Pryor, Chairman of the Subcommittee, presiding.

### **OPENING STATEMENT OF HON. MARK PRYOR, U.S. SENATOR FROM ARIZONA**

Senator PRYOR. I'll go ahead and call the meeting to order.

I want to thank all the witnesses and the audience for being here this morning, and I want to thank my colleagues. We're going to have a few more join us.

I'm going to make a very brief opening statement, but I want to welcome everyone to the Consumer Protection, Product Safety, and Insurance Subcommittee. Today, we are going to be talking about a very important issue for the country, and that is Chinese drywall. This issue creates new challenges for our Subcommittee, the full Committee, and the Federal agencies charged with protecting consumers from harmful products.

Chinese drywall was imported in large volumes during the height of the building market, and used extensively in Florida and Louisiana following the devastating hurricanes in 2005. In reviewing complaints against Chinese drywall, we are grappling with a potential dangerous and embedded product built into the very fiber of hundreds of family homes—apartments, and mansions built with some Chinese drywall, maybe making residents sick rather than providing them a place of home sanctuary. This crisis is a double threat to homeowners, as it destroys the value of a family's largest investment.

In early 2008, homeowners in Florida and Louisiana began complaining of a peculiar odor, describing it as a rotten-egg smell, that was permeating their houses and serious metal corrosion, including air-conditioning units that had turned black with corrosion within 2 years after new construction. Residents of these homes also reported health problems that included bloody noses, recurrent headaches, irritated eyes and skin, and asthma attacks. As many residents reported that their symptoms abated after leaving their

homes, investigators began examining products in the home as the potential cause.

Florida health officials and homebuilders eventually narrowed down the cause of these problems to an unlikely source: drywall imported from China used for home construction. While there are several theories about the root of the Chinese drywall problem, we're here today to establish for the record the likely cause of this health and economic threat, as well as the scope of the Chinese drywall crisis.

More importantly, we will hear how our State and Federal agencies are responding and we'll work to complete a record to see if there are any steps we need to take to make sure that this situation does not happen again. The impact on people's lives is immense, both financially and emotionally.

I implore all the parties involved to always consider the well-being of innocent people who have been evicted from their uninhabitable homes.

I congratulate those homebuilders who have begun taking remedial action in the affected homes. The courts and all the parties involved need to quickly develop a solution so that these families have a safe place that they can call home.

I want to welcome Senator Nelson. Senator Landrieu will join us shortly. But, before I let them give an opening statement, we'd love to hear from the Ranking Member, Senator Wicker.

**STATEMENT OF HON. ROGER F. WICKER,  
U.S. SENATOR FROM MISSISSIPPI**

Senator WICKER. Thank you, Mr. Chairman. And I appreciate the hearing.

Earlier this year, we started hearing news reports of homes built during 2006–2007 in Florida plagued by strong odors and failed electronics due to metal corrosion. We also heard reports of the symptoms that Senator Pryor just described. These reports have increased in frequency, and now they're coming from other States. Mississippi, Louisiana, and Virginia, for example, are investigating similar health and home related problems.

The United States has consumed an average of 31 billion square feet of drywall since the year 2000. To handle the increased demand during post-Katrina rebuilding along the Gulf Coast, as well as during the Nation's housing boom, domestic producers expanded their facilities and increased capacity. Our current domestic production capacity exceeds 37 billion square feet of drywall, and that's enough drywall to cover the entire State of Rhode Island. It's also a significant increase in the domestic capacity in 2000, which was only 31 billion square feet.

Despite this increase in domestic production, our demand caused us to import drywall from sources outside North America, notably China. The United States imported almost 280 million square feet of drywall in 2006, and roughly 32 million square feet in 2007. These numbers seem high. They do represent only one-half of 1 percent of the amount used in the United States for the 2-year period.

According to the Department of Commerce, the Chinese drywall entered through ports in some 14 States, including my home State

of Mississippi. No doubt, the product has been distributed to other States also.

The widespread distribution of the suspect drywall makes it very important to have the CPSC, the CDC, and the EPA testify today. I'm eager to hear their preliminary findings, Mr. Chairman, the elemental analysis of the drywall samples, and their suggestions on how best to move forward.

It's my hope that these agencies will keep us informed of progress on identifying the specific issue with the imported drywall—What was the problem?—and the efforts to establish the testing methodology to test homes which might be affected.

I also appreciate the attendance today of Mr. Noel, who's speaking on behalf of the National Association of Homebuilders. These builders play a vital role in the issue. And I'm glad to know that he can join us today to discuss efforts the industry is taking regarding the suspect drywall.

While it is clear we are not importing Chinese drywall currently, I'm sure we will discuss how to prevent this problem from occurring again in the future. I'm hopeful we will act rationally and make decisions based on sound science.

Officials in the State of Mississippi are aware of the issue and are currently investigating complaints that have been made to our State agencies. I will continue to monitor the matter as these investigations continue.

I look forward to working with the Senator from Florida, who's taken a lead on this issue, and our colleagues, to ensure that the Federal Government is providing the necessary expertise and assistance on this issue.

Thank you.

Senator PRYOR. Thank you, Senator Wicker.

And now I want to introduce Senator Bill Nelson of Florida, who really has taken a lead on this. He and Senator Landrieu have been working tirelessly to get this issue before this Subcommittee and before the Nation and try to get a resolution.

Senator Nelson?

**STATEMENT OF HON. BILL NELSON,  
U.S. SENATOR FROM FLORIDA**

Senator NELSON. Thank you, Mr. Chairman.

I just wanted to show you some of the evidence of what's happening in the homes. I've been in several of these homes, and what you see here are coils on an air-conditioner. Now, they're copper, and you can see the copper shining through, here. When copper ages, it turns green, but look what has happened to all of these copper coils and pipes on an air-conditioner. You can see the air-conditioning ducts, back here. So much so that I went in homes that had the coils replaced three times on their air-conditioners because the surface, not only turns black—and I took a screwdriver and scraped it off, down to the copper—but also it corrodes and eats into the actual metal. Now, that's one example.

I'll give you another example. This is some kind of electrical thing that has a copper tube coming off. Again, you can see the discoloration of the copper tube in an electrical—and this is the electrical wire.

Or, look at a water heater. Look at the pipes. Now, this is a more recently installed pipe, and you can see that it still retains its copper color, but look at the tube that was there.

In one case, there was an elderly couple whom I visited in their home, who had gone to Mexico the month before on a cruise and the wife had bought a silver bracelet. And she showed me the silver bracelet, and it was completely corroded and black. And that had only been a month.

Look at the shower head, how it's popped. I can show you pictures of mirrors, the same thing for the silver behind the glass in a mirror.

This is not even to speak of the questions of people's health.

Now, I guess I'm like a canary in a coal mine, because I am highly allergic to mold and mildew, and I can walk into a room, and within 5 minutes my respiratory system starts contracting. The same phenomenon occurred when I walked into these houses. Others have experienced headaches, watery eyes. In my own case, it was congestion. There is the smell—there is a sulfur smell. Some describe it as the smell of rotten eggs. And in the case of children, pediatricians have been advising the parents to take the kids out of the house.

Now, how do we know that this is Chinese drywall? Well, bring up that photograph, there. Yes, please.

It's interesting, in the houses that don't have a problem, there's none of this, but in the houses that do, you can see the cutout of the wallboard and you can see the writing—this is upside-down—"C-h-i-n-a," upside-down. And that is a consistent phenomenon, that, where there are these effects, there is this drywall that is labeled having come from China.

Now, we've been all over the Consumer Product Safety Commission to get moving. They have sent a team down to Florida. They gave the samples of this to the EPA, and they have just reported on their first test. And that test says that, compared to American drywall, there are three different elements. There are traces of elements that are in acrylic paint. There is sulfur and there is strontium.

The next step is to have a test that simulates the environment like in places like Louisiana and Florida that is hot and humid, and to see what the gases are that come off from it. And the CPSC has said it doesn't have any money. Thanks to Senator Pryor, we reformed the CPSC last year, and they do have money. So, today, when we pass the supplemental appropriations bill, it's going to have \$2 million in there for this test for the CPSC to coordinate with the Centers for Disease Control and the EPA in order to do that test and other tests. And we've got to get to the bottom of this because our people are potentially endangered.

Now, the CPSC has, under legal authority that it was given in the reform, the ability to stop the importation of this drywall and to go out and basically impound it. And the CPSC is waiting until it gets better evidence. That's why we can't sit around and wait on this anymore.

So, you're going to have the money after this supplemental is signed into law by the President.



I want you to show that chart, right there. Now, this is just since 2006. We believe the drywall has been distributed in all of these states. We know that most of it has come into Florida: over 3 million drywall boards, 668,000 boards that came in through the Port of New Orleans, and so forth, throughout these particular States. And, of course, in our State of Florida, you can see that most of the drywall has come into the Port of Miami and the Port of Tampa.

We have estimates indicating that as many as 100,000 homes nationwide may have been affected by this Chinese drywall. The estimates are that it could be anywhere from 35 to 50,000 homes just in our State of Florida.

We needed drywall in the aftermath of the 2004 hurricanes. Louisiana needed drywall in the aftermath of Hurricane Katrina and Rita in 2005. And you can see the enormous problem that is facing the homeowners who have a mortgage and whose pediatrician is telling them to take their child out of this home. If they are fortunate, like the single mother and her child whom I visited in Bradenton, she had her mother with whom they could go and live. But, she's still paying the mortgage. But, if it's like another family that I visited, they don't have anyplace to move, except to pay rent, and still pay their mortgage because the banks are refusing to work with them on their mortgages.

Look at the poor homebuilder. It's not like homebuilders aren't suffering enough with the economy as it is now. Is the homebuilder going to be responsible for this? It wasn't his fault that he got a faulty product. So, who is going to stand by this? And that's why we can't wait around anymore. We've got to get to the bottom of it. And the U.S. Government, in its role as a protector of consumers, has got to do its job, and to do it swiftly and accurately.

Thank you, Mr. Chairman.

Senator PRYOR. Thank you, Senator Nelson.

Let me inform our panel of witnesses what is going on. We understand that we're about to have a roll-call vote on the floor very soon—maybe as soon as 10 minutes from now. And I know that Senator Landrieu's on her way over, and we may have one or two others who are on the way over. What I would like to do is ask you all to dispense with your opening statements and just submit those for the record. I know you've prepared that testimony, and we appreciate that, but, in the interest of time—what I'd like to do is just dive right in on questions.

**STATEMENTS OF: LORI SALTZMAN, DIRECTOR, DIVISION OF HEALTH SCIENCES, U.S. CONSUMER PRODUCT SAFETY COMMISSION; MICHAEL MCGEEHIN, PH.D., DIRECTOR, DIVISION OF ENVIRONMENTAL HAZARDS AND HEALTH EFFECTS, NATIONAL CENTER FOR ENVIRONMENTAL HEALTH, CENTERS FOR DISEASE CONTROL AND PREVENTION, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES; ELIZABETH SOUTHERLAND, ACTING DEPUTY DIRECTOR, OFFICE OF SUPERFUND REMEDIATION AND TECHNOLOGY INNOVATION, U.S. ENVIRONMENTAL PROTECTION AGENCY; DR. DAVID KRAUSE, STATE TOXICOLOGIST, FLORIDA DEPARTMENT OF HEALTH; RICHARD J. KAMPF, RETIRED FEDERAL EMPLOYEE, CAPE CORAL, FLORIDA; AND RANDY NOEL, PRESIDENT, REVE, INC., ON BEHALF OF THE NATIONAL ASSOCIATION OF HOME BUILDERS**

[The prepared statements of all witnesses follow:]

**PREPARED STATEMENT OF LORI SALTZMAN, DIRECTOR,  
DIVISION OF HEALTH SCIENCES, U.S. CONSUMER PRODUCT SAFETY COMMISSION**

Good Morning, Mr. Chairman and Senators,

My name is Lori Saltzman. I am a toxicologist and the Director of the Division of Health Sciences at the U.S. Consumer Product Safety Commission (CPSC). With approximately 450 employees across the nation, the CPSC is a small, independent and bipartisan Federal commission charged with protecting the public from unreasonable risks of injury and death associated with thousands of consumer products.

Since its establishment in 1973, CPSC's work has contributed substantially to the decline in the rates of death and injury related to the use of consumer products, and it has been my privilege to work at the agency for over 25 years.

I am pleased to have this opportunity to testify today regarding CPSC's work on the emerging drywall problems that home owners are experiencing, particularly in Florida, but also in Louisiana, Virginia, Mississippi, and other states as well. The CPSC is the lead agency in a coordinated Federal investigation involving the Environmental Protection Agency, the Centers for Disease Control and Prevention, and the Agency for Toxic Substances and Disease Registry.

We are working closely with state and local government agencies as well. Close coordination of our enforcement and regulatory activities among the various state, local and Federal agencies is essential given the many Federal agencies with responsibilities and the myriad of state and local housing standards and codes that regulate construction. Historically, our Federal partners, along with the Occupational Safety and Health Administration and the Department of Housing and Urban Development, have addressed other housing hazards, such as lead, asbestos, formaldehyde and carbon monoxide, in close cooperation with state and local regulatory and enforcement officials.

In the investigation of drywall problems, we are engaging in a systematic, multidisciplinary and comprehensive scientific investigation that recognizes the urgency of the problem and the difficult situation facing homeowners who have been affected.

To date, the CPSC has heard from over 320 residents in 16 states and the District of Columbia who report that they are experiencing health symptoms or the corrosion of certain metal components in their homes that they believe are related to the presence of drywall produced in China.

Common complaints in the reports submitted to the CPSC include:

- a "rotten egg" smell within the consumer's home;
- health concerns such as irritated and itchy eyes and skin, difficulty in breathing, persistent cough, runny noses, recurrent headaches, sinus infection, nosebleeds, and asthma attacks; and
- blackened and corroded metal components in the home and frequent replacement of components in air conditioning units.

These consumers largely report that their homes were built in 2006 and 2007 when an unprecedented increase in new construction occurred in part due to the hurricanes of 2004 and 2005.

CPSC's investigation of drywall is proceeding simultaneously on three distinct tracks:

1. evaluating the relationship between the drywall and the reported health symptoms;
2. evaluating the relationship between the drywall and electrical and fire safety issues in the home; and
3. tracing the origin and the distribution of the symptom producing drywall.

CPSC field staff is continuing to collect samples of various drywall and degraded electrical, gas and fire safety components and working to identify points along the distribution chain that link manufacturers to U.S. consumers.

Additionally, field staff is following up with a number of residents to discuss their particular drywall issues and to document their experiences in greater detail. We have field investigators permanently stationed in the affected states, and we are shifting additional staff to those areas to assist in this investigation.

One challenge for our field investigators has been to determine the quantity of problem drywall present in a particular home, given that it is already installed, likely painted and may not be clearly marked. The drywall in question could fill the entire house or be just a few sheets in one or two rooms.

To assess the impact on human health, the CPSC, in coordination with other Federal and state agencies, has advanced a multi-tracked test program. The specific elements of the test program include laboratory elemental characterization testing, chamber testing of domestic and imported drywall, and in-home air sampling.

It is important that our scientists carefully determine how the reported symptoms may be related to the drywall as opposed to other environmental factors or pollutants in the home. In this regard, we are aggressively conducting a scientific investigation and researching scientific literature and reports for evidence which could link the identified chemical emissions from the drywall chamber testing and in-home air sampling to the reported health complaints.

The laboratory elemental characterization testing will identify any fundamental differences between domestic and imported drywall samples so we can determine what is contained in the composition of each sample. The data from the elemental characterizations will guide us in focusing on what to analyze during the chamber and the in-home air sampling testing.

The laboratory chamber tests will isolate the drywall's chemical emissions from those of other products found in the home (*e.g.*, carpets, cleaners, paint, adhesives, and beauty products) so that we can determine what gases are being emitted from each drywall sample.

Our in-home air sampling testing will involve real-time measurements of sulfur containing compounds, acid and other gases, including volatile organic chemicals, pesticides, and the possible presence of refrigerant byproducts. The presence of microorganisms will also be checked. Samples will be collected from indoor spaces and from behind wall cavities. The measurements will take into account humidity and heat conditions and will take place at various times of day since some symptoms have been reported to occur in the morning after hours of sleeping.

In addition to health symptoms, residents have also reported blackened and corroded components containing metal in their homes. Particularly, consumers have reported premature failures of central air conditioning evaporator coils located indoors and intermittent operation or failure of appliances, such as refrigerators and dishwashers, and electronic devices such as televisions and video game systems.

To date, the CPSC has not received any confirmed reports of fire, electric shock or fire precursor incidents (such as discolored, overheated/burned out, or smoking components) related to problem drywall.

Visual examination of electrical wiring within affected homes by CPSC engineers has shown varying levels of corrosion on the exposed portions of copper wires, in particular ground wires, since they are not insulated. The presence and extent of corrosion within a house, or even within a room, however, appeared inconsistent.

The CPSC is focused on the potential electrical and fire safety issues in the home, including the corrosion of components related to fuel gas piping and fire safety devices. Electrical components are a particular target for this investigation. Electrical components include residential wiring, receptacles, switches, circuit breakers, panel boards, ground fault circuit interrupters, and arc fault circuit interrupters.

CPSC engineers are investigating the deterioration of connections such as where a wire is connected to a receptacle or where a circuit breaker is installed in a panel

board. A degraded connection could develop hot spots resulting in overheating and possibly fire.

Engineers are also looking at the erosion of copper conductors over time, which would compromise their physical integrity. If the corrosion is progressively eating away at a wire, the wire would eventually lose its capacity to carry current and start to overheat or become physically weak and break.

Another concern for our engineers is possible damage to circuit traces or electronic components on printed circuit boards which could cause failure of protective devices like ground fault circuit interrupters, arc-fault circuit interrupters, and smoke alarms.

Shock and fire hazards could result from the loss of protection that these devices provide, and damage to gas service components, such as flexible connectors and copper piping, could lead to gas leakage and a fire or explosion hazard.

With regard to smoke alarms, concerns include potential damage to electronic circuitry and degradation of the sensor. Either condition could result in an inoperable smoke alarm. For fire sprinklers that use metallic fusible elements, corrosion may adversely affect activation temperatures.

CPSC's investigation into electrical and fire safety issues includes a two-part engineering component test program. Initially, a metallurgical analysis of various components collected from affected residences will be carried out. In addition, electrical/gas components and fire safety devices from homes will be tested for integrity, functionality, and possible safety hazards. This analysis will characterize the type and extent of any damage.

The second track of this test program exposes *new* components to elevated levels of gases that are identified in the drywall chamber tests to simulate accelerated aging. Our engineers will compare the aged samples with the samples collected from the homes.

It is critical that these interrelated elements of the test program coordinated by CPSC's technical staff be conducted with thoroughness and precision so that we can correctly identify the specific cause of the reported health symptoms and corrosion and develop an appropriate remedy for consumers.

Additionally, our findings may be needed to support the agency in the event that we go to court to force a corrective action. The CPSC does not have the authority to order a company to conduct a recall without a trial, and we do not want to jeopardize any potential remedy for homeowners by having inadequate scientific proof to support and advance a possible court case.

In addition to CPSC's technical work that I have discussed, agency staff has also been in contact with our counterpart agency in China, the Administration for Quality Supervision and Inspection and Quarantine (AQSIQ). AQSIQ has initiated an investigation and brought the Chinese Ministry of Commerce into the case, and we have a continuing exchange of information underway. Additionally, the CPSC has accepted AQSIQ's offer to send an expert team to the United States, and we plan to have a CPSC investigative team travel to China.

Before closing, I would also like to refer you to the website that the CPSC has established—[www.cpsc.gov/drywall](http://www.cpsc.gov/drywall)—to report on our research and investigation into drywall and to provide updates and answers to your constituents' questions. The website includes important advice and information for your constituents who are experiencing health symptoms or mechanical and electrical degradation.

Mr. Chairman, the Commission recognizes the severity of this problem, and resources from throughout our agency are being redirected to support this effort. We are working diligently to come up with the answers that we need to address this challenge in a comprehensive way that provides the fullest protection for your constituents.

I appreciated the opportunity earlier this month to join other CPSC and EPA staff here in this room for our Congressional staff briefing on the drywall problem, and I am pleased to have the opportunity to be here again today to answer your questions.

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PREPARED STATEMENT OF MICHAEL MCGEEHIN, PH.D., DIRECTOR, DIVISION OF ENVIRONMENTAL HAZARDS AND HEALTH EFFECTS, NATIONAL CENTER FOR ENVIRONMENTAL HEALTH, CENTERS FOR DISEASE CONTROL AND PREVENTION, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Good morning Chairman Pryor, Senator Wicker, Senator Nelson, and other distinguished Members of the Committee. Thank you for the opportunity to be here today. I am Dr. Michael McGeehin, Director of the Centers for Disease Control and Preven-

tion's (CDC's) Division of Environmental Hazards and Health Effects within the National Center for Environmental Health (NCEH).

The Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (CDC/ATSDR) recognizes the serious concerns that residents of Florida, Louisiana, and other affected states have regarding certain drywall manufactured in China and imported to the United States that has been used in construction and renovation of homes. My testimony today will focus on three aspects of CDC's ongoing support of the response to emerging concerns regarding this issue:

- CDC's role in the coordinated Federal response to Chinese manufactured drywall.
- CDC's approach to understanding the possible human health effects of exposure to potential environmental hazards.
- CDC's development of recommended public health action.

#### **CDC's Role in the Coordinated Federal Response to Chinese Manufactured Drywall**

The Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (CDC/ATSDR) is providing public health expertise in support of the Consumer Product Safety Commission's (CPSC's) leadership of the Federal response to concerns regarding Chinese manufactured drywall. As part of this response, CDC/ATSDR is collaborating with the CPSC, U.S. Environmental Protection Agency (EPA), the Florida Department of Health (FLDOH), the Louisiana Department of Health and Hospitals, and others to determine any possible health implications from living in a home where drywall imported from China exists and, most importantly, to be able to provide information for residents who may be adversely affected by these exposures.

Critical to the response will be continued cooperation among involved agencies and use of existing resources to develop and implement the appropriate response strategy. CDC/ATSDR participated in a meeting on April 14, 2009, with CPSC, EPA, and other agencies to define appropriate roles for each agency and to define the next steps to drive the health and safety response.

CDC/ATSDR has utilized its extensive network of contacts with state health and environmental agencies during weekly conference calls among the involved Federal and state agencies to help ensure that current and accurate information and approaches are rapidly shared, and to assist with coordination among the involved agencies and groups. In addition, CDC/ATSDR is providing technical input to the EPA and CPSC indoor and outdoor air sampling plans to ensure results can be interpreted for public health purposes.

CDC's National Institute for Occupational Safety and Health (NIOSH) is also providing industrial hygiene expertise to the coordinated Federal response. NIOSH is preparing to conduct a health hazard evaluation and working with the Florida Department of Health and a home builder, to evaluate potential health hazards and make any needed recommendations to protect persons involved in drywall removal.

Shortly after receiving a January 2009 request for assistance from the State of Florida, CDC/ATSDR established regular communication with the Florida Department of Health. We continue to expand our technical assistance to include other state health departments. For example, we are working with the states to create fact sheets for the public about imported drywall. We are also developing a fact sheet for health care providers who may be evaluating patients living in homes with Chinese manufactured drywall. The Florida Department of Health, Louisiana Department of Health and Hospitals, and other state health departments and poison control centers will distribute the educational material. It will also be available on the CDC/ATSDR website.

#### **CDC's Approach to Understanding the Possible Human Health Effects of Exposure to Potential Environmental Hazards**

The first step in assessing a possible link between an environmental contaminant and health outcomes is to determine the nature of the exposure accurately. The air and material sampling that CPSC and EPA are conducting is critical in moving us toward a better understanding of who is exposed to what contaminants and at what levels. Once we know the exposure, we will be able to more accurately evaluate the strength of possible links to human health. We will be meeting next week with Florida Department of Health staff to discuss further the options for addressing the health concerns associated with Chinese manufactured drywall.

#### **Determination of Recommended Public Health Action**

CDC will collaborate with the other Federal agencies and with the states in driving a rapid, coordinated, appropriate, and effective public health response. We are

likely to continue to be involved with a range of activities, including defining the type and extent of the hazard, educating the public and various health and environmental professionals about the potential hazard and how to avoid it, and working with partners (including regulatory agencies) to develop appropriate policy responses.

If we determine that there are health threatening exposures in homes, we will work with all the agencies to recommend the appropriate response strategy. Actions now underway to define the type and extent of the exposure are an essential first step.

### Conclusion

In conclusion, CDC/ATSDR recognizes the urgency of this issue and is committed to working with Florida, Louisiana, and other affected states. Furthermore, we will continue to contribute to the overall Federal response consistent with our expertise and mandate.

Thank you for the opportunity to present this information to you today. I would be happy to answer any questions.

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PREPARED STATEMENT OF ELIZABETH SOUTHERLAND, ACTING DEPUTY DIRECTOR,  
OFFICE OF SUPERFUND REMEDIATION AND TECHNOLOGY INNOVATION,  
U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. Chairman and members of the Subcommittee, my name is Elizabeth Southerland. I am the Acting Deputy Director of the U.S. Environmental Protection Agency's (EPA's) Office of Superfund Remediation and Technology Innovation. Thank you for the opportunity to testify on EPA's role in Federal agency efforts to address issues associated with suspect Chinese drywall.

The Consumer Product Safety Commission (CPSC) is the lead Federal agency regarding the issue of suspect Chinese drywall. EPA is now working with CPSC, the Department of Health and Human Services' Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR), the Florida Department of Health, and other state and Federal agencies to help determine what health and environmental risks, if any, may be posed by suspect Chinese drywall.

At the request of ATSDR, EPA's Environmental Response Team (ERT) in Edison, New Jersey is assisting Federal efforts by undertaking analysis of the chemical composition of samples of suspect Chinese drywall. ERT analyzed two samples of Chinese drywall product from Florida homes provided by ATSDR and four drywall product samples manufactured in the United States.

EPA completed its initial content analysis of the drywall samples including the two samples of suspect Chinese drywall taken from Florida homes and further analysis is expected. It is important to note that the analysis included a very small sample size, and the results of this testing may not be representative of all drywall products.

Beyond this initial analysis, EPA is chairing a Federal and state technical group to develop protocols for home indoor air sampling to characterize the gaseous emissions that may be causing indoor air problems under varying temperature and humidity. This effort consists of two phases. During Phase I, EPA may analyze other drywall samples, conduct literature searches, identify chemical(s) and sulfur gases of potential concern that may be responsible for observed odors, and develop/modify analytical methods for air monitoring.

During Phase II, three houses in Florida and three houses in Louisiana will be selected to field test the validity of the draft protocol in consultation with CPSC, CDC, and the respective states. This activity will also help refine the list of suspected causative agents. Phase II is expected to begin during the first week of June.

CPSC is currently designing a series of chamber tests to evaluate "off-gases" derived when drywall samples from a variety of U.S. and Chinese manufacturers are exposed to varying temperature and humidity. The results obtained from EPA Phase I and II activities will be used to prepare a protocol for CPSC and states to use when conducting indoor air sampling of homes in Florida, Louisiana and other states throughout the Nation. EPA expects a joint Federal-state agreed upon air monitoring protocol to be completed by the end of June 2009.

Once the joint Federal-state agreed upon air monitoring protocol is established, CPSC may utilize a contractor to conduct large scale home testing in accordance with this protocol. CDC/ATSDR is providing recommendations to EPA and CPSC to ensure that results can be interpreted for public health purposes.

EPA will continue to support Federal and state efforts to evaluate suspect Chinese drywall and help our Federal, state, and local partners determine what actions will be necessary to ensure protection of human health and the environment. Thank you again for inviting me to testify here today, and I look forward to answering any questions that you might have.

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PREPARED STATEMENT OF DR. DAVID KRAUSE, STATE TOXICOLOGIST,  
FLORIDA DEPARTMENT OF HEALTH

**Florida DOH Activities Related to Complaints from the Public of Copper Corrosion in Homes Associated with the Presence of Drywall Imported from China**

In August 2008, County Health Department and Florida Department of Health staff began receiving reports of sulfur-like odors in relatively new homes built since 2004. Initial reports were limited to homes in south Florida counties. Inspections by County Health Department indoor air program staff revealed these homes also exhibited severe corrosion of copper on air conditioning coils that eventually caused the air conditioning systems to fail due to the loss of Freon. A connection between the sulfur odors, copper corrosion, and Chinese Made Drywall was reported by some builders and their consultants. This eventually led to discussions between Florida Department of Health (FL DOH) staff and a handful of environmental consultants who were studying the problem. Throughout September and October of 2008 DOH staff learned of studies by private consultants representing a builder, a drywall manufacture and a handful of homeowners.

As the number of citizen complaints and effected counties increased FL DOH initiated steps to register complaints in a systematic manner; solicit information from consultants and builders; request assistance from technical specialists in Federal Agencies, primarily the Consumer Product Safety Commission (CPSC), U.S. Environmental Protection Agency (EPA), and Centers for Disease Control and Prevention (CDC)/ Agency for Toxic Substances and Disease Registry (ATSDR); We conducted media interviews in response to requests from local and national news outlets and sought funding to conduct some preliminary site visits and laboratory tests. In late January 2009 Mr. Tim Wallace and I performed our first site assessment of 12 homes in 6 different south Florida counties.

During our preliminary assessment of these homes we collected samples of gypsum drywall from homes experiencing copper corrosion for material testing and analysis, but did not collect any air samples to measure chemical concentrations. These preliminary site visits revealed that the "sulfur-like" odors were often not present in homes and, when present, did not resemble the "rotten-egg odor" described in some reports. The great variability of odors experienced in effected homes suggests that odor is a poor predictor of this problem. However black corrosion of copper on air conditioning coils and other Freon-carrying lines was a consistent visual indicator in homes with this problem. Further inspection revealed wide spread corrosion of exposed copper electrical wires in all affected homes, with some homeowners reporting electrical appliance and light switch failures. Some homes had natural gas furnaces with brass and other metal fittings that could suffer from accelerated corrosion.

Information gathered during these preliminary assessments enabled FL DOH to develop a Case Definition for homes experiencing copper corrosion associated with the use of Chinese made drywall. Using the case definition FL DOH has published on its website a "self assessment guide" that enables homeowners and inspectors to quickly determine if a home is affected by performing a thorough visual inspection and asking a few specific questions, without chemical testing.

A review of air sampling data provided by Environ International, a private consulting firm hired by Lennar Homes, did not reveal levels of sulfur-containing gases that exceeded any published health thresholds or that posed a health hazard to building occupants. However, limitations in the data suggested the need for a more robust assessment of occupant exposures to corrosive gasses and possible by-products of chemical interactions they may have with other building materials or household chemicals.

Florida DOH has engaged other state agencies to address the potential fire hazards related to corrosion of electrical wiring, safety equipment, and gas service fittings; the remediation of effected homes; drywall disposal; and consumer protection from unscrupulous groups seeking to defraud homeowners with unproven and potentially dangerous "overnight remedies." These efforts are being orchestrated through an Incident Management Team currently lead by the Florida Department of Health.

Participation of our Federal partner agencies has so far consisted of analyzing two samples of drywall by an EPA laboratory, a preliminary site visit by a technical team from the Consumer Products Safety Commission (CPSC) on March 26, 2009, and a site visit by a team of technical specialists from U.S. EPA and ATSDR on May 4, 2009. A multitude of conference calls and planning meetings have occurred and more are scheduled with U.S. EPA and ATSDR, however communications with the CPSC have been limited.

Efforts are currently underway to perform indoor air testing in effected homes to quantify the concentrations of corrosive gasses emitted from problematic drywall, and other potential by-products of chemical reactions with building materials, paints, or household chemicals. Testing in Florida homes is proceeding in three phases, each necessary to build the foundation for interpreting the volumes of data that will be generated in later studies. The type of testing being used to measure the highly reactive reduced sulfur gasses emitted from Chinese made drywall is technically challenging, requiring strict protocols to ensure valid and reproducible results. In order to produce data with the sensitivity and accuracy needed to assess human health risks, labor intensive sample collection and laboratory analysis is required because direct reading instruments are not readily available for many of the gasses being tested. The three phased study begins with a assessment and validation of available test methods (Phase I), an in-depth assessment of chemicals present and their concentrations in a small number of homes (Phase II), and finally a focused characterization of occupant exposures to chemicals of concern in a wide population of effected homes (Phase III).

Initial hesitation by Federal agencies to fully engage the necessary resources is transforming into a more active partnership. Letters from Governor Crist on April 3 and 29 to the heads of the EPA, CDC, and CPSC, in addition to inquiries from Senator Nelson have prompted clear commitments from the U.S. EPA and the CPSC (See attached correspondence). However a commitment to conduct the testing necessary to determine if a health hazard exists has been unclear and falls short in some ways. Acting on the request of Florida DOH, ATSDR, and the CPSC, the U.S. EPA has committed to testing 2 affected homes and 1 control home in Florida. This testing is scheduled to begin during the first week of June. Florida DOH will perform parallel testing of a third affected home and control home, demonstrating our commitment to safeguarding the health of Floridians, by increasing the available data from these early efforts.

While the results anticipated from testing of three affected homes are absolutely necessary to develop the scientific foundation for later evaluations, they cannot be expected to deliver all of the information necessary to conclude if a public health hazard exists in the vast number of homes where this product may have been installed.

At least five major areas of investigation should proceed in order to understand the impacts on public health and safety. First we must validate the estimated amount of Chinese made drywall imported during the period in question. How these estimates were derived are uncertain, and could grossly over or under estimate the number of potentially effected homes. Second, a wide scoping study of homes throughout Florida and other states to quantify the chemical exposures that occupants experience in homes with problematic drywall and corrosion. We understand that the CPSC is commissioning such a study, however FL DOH requests the ability to provide input on the study design and implementation. The number of homes and what testing protocols will be used are critical aspects of such a study and greatly impact the relevance of its findings. Third, determine how the corrosion of electrical wiring, appliances, and gas fittings affect the risk of fire and electrical shock. Fourth, an assessment of exposure to the chemicals present in affected homes and what effects they may have on the long term health of families living in these homes. Due to the sparse chronic toxicity data available on some of the chemicals emitted from problematic drywall, a direct answer to the question of chronic health risks may be unavailable. Meetings with epidemiologists from the Centers for Disease Control-National Centers for Environmental Health (CDC-NCEH) are scheduled with FL DOH to consider the need and utility of a registry and/or cohort study to follow exposed and unexposed populations. Finally, a comprehensive program to develop evidence-based recommendations for remediation and repair of effected homes is necessary to ensure the long-term health and safety of occupants.

The multitude of policy decision necessary to address questions of liability, insurance, resale of homes, and the implication these homes will have on mortgage holders are beyond the authority and expertise of public health officials. However, these are commonly asked questions I have received from effected homeowners. It is likely that the need to develop public policy related to these homes will outpace the results of scientific studies.



Florida requests the three following commitments:

1. Funding and resources to enable FL DOH and its Federal partners to move forward with efforts to assess the scope and severity of this issue and ascertain if there are threats to public health associated with the use of Chinese made drywall.
2. Commitment from the CPSC and U.S. EPA to integrate FL DOH and other relevant state agencies in the development of assessment strategies, review of resulting data, and development of public health and safety messages.
3. Funding and resources for CDC-NCEH to perform appropriate long term follow-up of exposed families to address questions of chronic health concerns.

#### SUMMARY OF AGENCY ACTIVITIES IN FLORIDA

The following description of agency objectives and activities has been provided to demonstrate the broad spectrum of issues under consideration by the State of Florida. This summary reflects the respective agencies' activities and priorities as of Monday, May 18, 2009. Input from the Florida Department of Environmental Protection (FDEP) was not available by the deadline to submit written testimony for this hearing by the Senate Committee on Commerce, Science, and Transportation.

#### DOH Objectives

1. Determine if volatiles (reduced sulfur gases and volatile organic compounds) pose a health hazard to occupants (w ATSDR).
2. Assess the need for possible long-term epidemiological study (w CDC).
3. Occupational health issues of mitigation personnel (w OSHA/NIOSH)

#### Recently Completed Tasks

- DOH:
  - Conducted Operation Drywall state partner's meeting Wednesday afternoon (5-13-09)
  - Provided drywall samples to State Fire Marshal for testing Chinese drywall effects on fire safety of electrical outlets and smoke and carbon dioxide detectors
  - Submitted samples for DEP (UF) analysis for presence/absence of asbestos in drywall
  - Extended invitation for Federal partners' participation in Operation Drywall State Partners conference calls Fridays at 9 a.m.
  - Working with EPA, ATSDR, and CPSC to develop testing protocol for Phase II and

#### DOH Future Actions

- DOH:
  - Develop coordinated integrated Incident Action Plan, IAP (ongoing weekly)
  - CDC/NCEH site visit in May (29th ?) to consider potential cohort study and registry

#### Communications

- Develop a graphical timeline projecting milestones into the future
- Develop press/media plan for June sampling in Lee County
- Request assistance with steps 3A and 5 of DOH's self-assessment, re: hiring professionals with DCA/DBPR to provide appropriate guidelines to professionals
- Media Briefing TBA for end of May 2009 (week of May 25?)
- Consider Operation Drywall state website on *myflorida.com* to link unified command agencies. Link to building code professional guidance provided by DCA

#### Testing

- Identify and coordinate a location in Lee County for EPA mobile lab (end of May through June)
- Chris Dowell, NIOSH representative, has contacted Lennar to arrange for NIOSH representatives to visit a few remediation projects and initiate some guidance on remediation for Chinese Drywall. Coordination through Dr.

David Krause's office and the CHDs has been requested before their arrival for on-site visits [David]

- Submit DOH and EPA ERT test results to Department of Agriculture's Environmental Services for possible presence and impact of fungicide
- Finalize Phase II testing protocol & Quality Assurance Plan (QAP) to define testing and data handling procedures (w/ EPA, CPSC, ATSDR)
- Develop MOU with CPSC for their intended testing and to define each agencies' roles and responsibilities regarding interpretation and release of findings.
- 3 Phase Testing Strategy:

Phase I—Scoping and Validation study to evaluate available test methods. Preliminary data should be available May 21, 2009 re: indoor and outdoor reduced sulfide gas and VOC testing methods

Phase II DOH, U.S. EPA—ERT mobile lab will arrive the last week in May 2009 sampling 3 homes in June. Testing will be 24 hours in severely affected homes, for hydrogen sulfide, and other sulfur gas emissions from drywall and from chemical reactions with building materials and household chemicals. Preliminary data at end of June to be used to develop protocols for Phase III testing.

Phase III: To be completed by CPSC ? (DOH's role is uncertain).

Target Date of August 31, 2009 for delivery of Public Health Message and publication of Interim Guidance for . . .

1. Testing and Assessment;
2. Remediation and;
3. Disposal of drywall from homes.

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*State Fire Marshal*

Agency Representative: Julius Halas, Director, Division of State Fire Marshal

Phone: (850) 413-3600

E-mail: [Julius.Halas@myfloridacfo.com](mailto:Julius.Halas@myfloridacfo.com)

Web: <http://www.fldfs.com/SFM>

**A Report of Activities by the State of Florida, Department of Financial Services, Division of State Fire Marshal as Regards Effects of Tainted Drywall in relation to Fire Investigations**

The Division of State Fire Marshal led by Director Julius Halas and representing the Honorable Alex Sink, Chief Financial Officer and State Fire Marshal of the State of Florida provide this synopsis of activities to the U.S. Senate hearing set for Thursday, May 21, 2009:

To date the Division of State Fire Marshal has reviewed the current known data on the suspect drywall as well as the reports of corrosion of electrical connections and other metallic surfaces.

The Bureau of Fire and Arson Investigation has advised field investigation personnel to be aware of the issue, to familiarize themselves with the indicators of the use of the tainted product, and in the course of their normal investigations, to document any found indicators and inform their superiors via Chain-of Command. If instances are found, the information will be transmitted to the Unified Command so that the appropriate agency can seek to obtain any wiring or appliances for forensic engineering evaluations by the appropriate State, Federal, or Contract partner.

The Bureau of Forensic Fire and Explosives Analysis is constructing test chambers made of new untainted materials and materials from homes suspected of containing tainted drywall. These chambers will be equipped with smoke detectors (2), a carbon monoxide detector, electrical wiring, a sprinkler head, and other materials. Due to their size and construction, the chambers will concentrate the vapors emitted by the drywall. The concentrated vapor's effects on these various materials and systems can be documented. Periodic samples for chemical analysis will be withdrawn. At the end of the 90 day testing period, an engineering evaluation of the effect of the concentrated vapors on the system and whether they would suffer failure or present an increase in fire risk will be performed. During the test period the information and data will be funneled to the Consumer Products Safety Commission and other State and Federal partners in this project. Should a fire risk be demonstrated by the data and testing, an advisory will be prepared for field investigators and inspectors discussing indicators and methods for assessment.

A site visit coordinated by the State of Florida Department of Health may be attended by representatives of the Division of State Fire Marshal, but is dependent on availability of personnel and travel funds.

In order to see this work to its completion, the Division of State Fire Marshal is investing significant hours by its personnel away from their normal tasks. The Division is also purchasing the materials and supplies for the chambers and testing. Existing monitoring equipment will be used. Travel funds for any site visits will have to be diverted from other projects.

Should funding by the Federal Government become available, the supplemental funding to aid in the completion of our efforts is estimated at:

Overtime funds for personnel for the next 90 days	\$12,500.00
Contract funds for engineering evaluations of materials	\$10,000.00
Travel funds for personnel to assess suspected sites	\$ 6,000.00
Materials for construction of test chambers and the components in them	\$ 1,500.00
Upgrade to testing instruments and monitoring devices	\$12,000.00
Total	<u>\$42,000.00</u>

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*Office of the Attorney General of Florida*

Agency Representative: Michael Palecki, Chief, Bureau of Economic Crimes

Phone: 850-414-3634

E-mail: [Michael.Palecki@myfloridalegal.com](mailto:Michael.Palecki@myfloridalegal.com)

Web: <http://myfloridalegal.com>

- We have met with builders, suppliers and one of the major manufacturers, Knauf. Our fact-finding efforts continue. We are in the process of requesting or subpoenaing the records of entities in the supply chain.
- We have discussed the possibility of a universal settlement fund with Knauf, suppliers and builders. These discussions continue.
- We have been receiving and documenting consumer complaints and identifying victims. We have conducted field investigations of affected homes.
- We are gathering evidence and preparing for possible legal action against parties involved in the manufacture, import and distribution.
- We are investigating reports of scams against home owners. These include bogus test kits, home inspections by "experts" with no qualifications, sale of sprays and applications that do nothing to solve the corrosion problem and sale of ozone generators that may actually accelerate the corrosive process. We have issued a consumer alert, widely reported in Florida media, to warn consumers.
- We are preparing to meet with persons who claim to have developed technology to remediate the corrosive properties of tainted drywall without the need to remove it from the home. They will be asked to present their methodologies for study and review by scientists with our task force.
- We have met with homebuilders and one supplier that have been remediating homes by removing and replacing the tainted drywall. We have scheduled a meeting with this group to discuss their drywall removal experiences, methodologies, costs, and best practices.

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*Department of Business and Professional Regulation*

Agency Representative: G. W. Harrell, Executive Director, Construction Industry Licensing Board

Phone: 850-487-9516

E-mail: [GW.Harrell@dbpr.state.fl.us](mailto:GW.Harrell@dbpr.state.fl.us)

Web: <http://myflorida.com/dbpr>

- The DBPR has received less than ten complaints against construction contractors for the installation of defective (Chinese) drywall. None of these complaints have contained sufficient evidence to warrant contractor discipline, as there is no indication that the contractors knew, or should have known, the drywall was defective.
- The DBPR has posted information on the department's website regarding licensure requirements and the submission of complaints for defective drywall installation. The DBPR has also posted a link to the Department of Health drywall information on the department's website.
- The DBPR has worked with the Department of Community Affairs and other state agencies to develop remediation guidelines for the identification and re-

removal of defective drywall. The DBPR is prepared to assist with the electronic dissemination of the remediation guidelines to construction contractors and the public when completed.

- The DBPR has assigned the Executive Director of the Construction Industry Licensing Board and the Deputy Director of the Division of Regulation to represent the department on the Department of Health's "Operation Drywall" incident response team.

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*Department of Community Affairs*

Agency Representative: Sherri Coven, Director of Intergovernmental and Public Affairs

Phone: (850) 922-1600

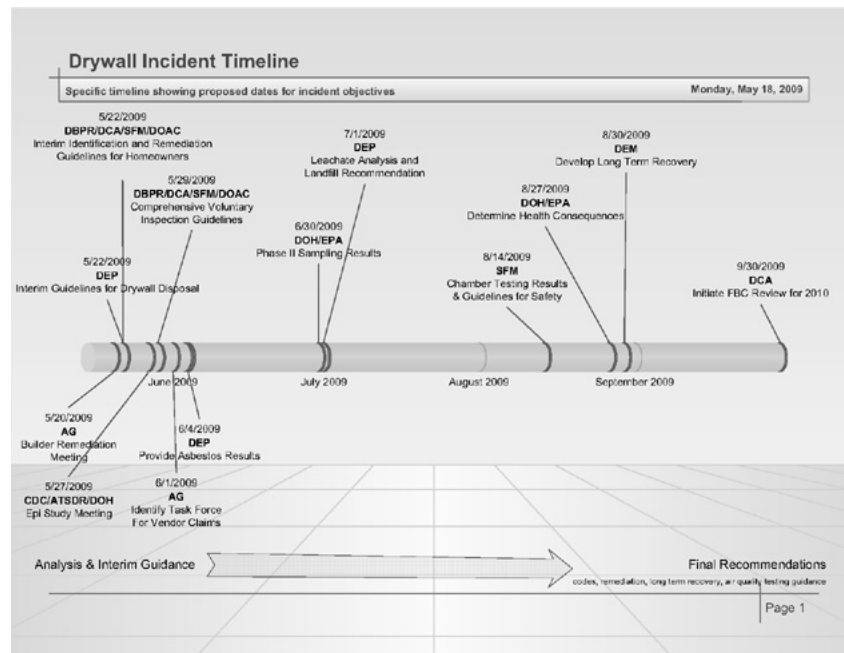
E-mail: [Sherri.Coven@dca.state.fl.us](mailto:Sherri.Coven@dca.state.fl.us)

Web: <http://www.dca.state.fl.us>

Long term objective is to improve the Florida Building Code provisions that currently cover the performance testing and evaluation of gypsum board materials so that this problem does not happen again.

Resource(s)/information needed to carry-out this objective:

1. Conclusive determination the gypsum elements/substances caused the problem.
2. Collaboration and coordination between the impacted states, model building code organization (*i.e.*, International Code Council "ICC"), Standard promulgation entities (*i.e.*, ASTM International), and Federal Government (EPA) to better determine how best to revise the current codes and standards with regard to gypsum board materials. The State of Florida/Florida Department of Community Affairs/Florida Building Commission will be a partner in this effort.
3. Repository for research and information accumulated from all sources, *i.e.*, states, Federal, ICC, ASTM, etc.
4. Resource will be needed for Items 2 and 3.



*April 3, 2009*

Hon. LISA JACKSON,  
Administrator,  
Environmental Protection Agency,  
Ariel Rios Building  
Washington, DC.

Hon. RICHARD E. BESSER, M.D.,  
Acting Director,  
Centers for Disease Control and Prevention,  
Atlanta, GA.

Dear Administrator Jackson and Director Besser:

On behalf of the State of Florida, I am requesting assistance from the United States Environmental Protection Agency and the Centers for Disease Control and Prevention to develop and implement chemical testing strategies in homes that are experiencing severe copper corrosion associated with Chinese made drywall. The resources housed in the Environmental Response Teams (ERT) and Industrial Hygienists from the Agency for Toxic Substances and Disease Registry (ATSDR) capable of evaluating the health hazards possibly associated with corrosive gasses emitted from Chinese made drywall will enable a timely assessment of exposure and public health implications. Media reports on the amount of drywall imported from China during the recent housing boom suggest that many Florida homes may be affected.

In late January 2009, the Florida Department of Health (DOH) State Toxicologist and indoor Air Programs Coordinator performed a preliminary assessment of 12 homes throughout south Florida, where bulk samples of drywall were collected for laboratory analysis. Laboratory analysis of these materials confirmed many of the findings reported by private consultants, including the presence of strontium sulfide and elemental sulfur in drywall from China. Tests also confirmed that drywall from problem homes generated hydrogen sulfide, carbonyl sulfide, and carbon disulfide when exposed to high relative humidity or heat. All of these compounds are capable of causing the type of corrosion identified in the complaint homes, and at sufficient concentrations could pose a health hazard.

These initial findings suggest that indoor air samples to determine occupant exposure to the corrosive gasses should be performed. Health related complaints from occupants living in these homes are sporadic and DOH is attempting to gather more health related information. The health hazards posed by exposure to chemicals in these homes are currently unclear, but we believe that a thorough and robust exposure assessment will enable DOH to determine if a health advisory is warranted.

The Consumer Product Safety Commission (CPSC) has recently initiated an investigation focused on the suspected drywall and secondary damage it may be causing to electrical wiring, safety equipment, and natural gas connections. However, the resources and testing expertise necessary to evaluate occupant exposure in problem homes is not available from the CPSC.

Until mid-March 2009, the problems associated with Chinese drywall had only been documented in Florida to any appreciable degree. Recent reports from Louisiana, Virginia, and North Carolina have demonstrated this is a multi-state issue directly connected with the importation of a foreign-made product.

Any assistance you may be able to provide in accessing Federal resources to assess human health exposures in these homes will benefit the Floridians adversely impacted by this extraordinary event.

Our point of contact for testing related to this project is our State Toxicologist: David Krause, Ph.D., MSPH, CIH  
Bureau of Environmental Public Health Medicine  
Division of Environmental Health  
Florida Department of Health  
4052 Bald Cypress Way Bin A08  
Tallahassee, FL 32399-1712

We look forward to working with you and your staff in the coming days.

Sincerely,

CHARLIE CRIST,  
*Governor,*  
State of Florida.

cc: Surgeon General Ana M. Viamonte Ros  
Florida Congressional Delegation

*April 29, 2009*

Hon. RICHARD E. BESSER, M.D.,  
Acting Director,  
Centers for Disease Control & Prevention,  
Atlanta, GA.

Hon. LISA JACKSON,  
Administrator,  
Environmental Protection Agency,  
Washington, DC.

NANCY NORD,  
Acting Chairman,  
U.S. Consumer Product Safety Commission,  
Bethesda, MD.

Dear Director Besser, Administrator Jackson, and Chairman Nord:

On behalf of the State of Florida, thank you for your ongoing efforts to assist our state regarding Chinese drywall. I am again requesting assistance from our Federal partner agencies in response to the emerging concerns regarding homes which are exhibiting severe corrosion of copper and other metals associated with Chinese manufactured drywall.

We request that parallel State-Federal efforts, rather than the more traditional tandem approach, be undertaken to evaluate the situation and provide guidance to citizens. We ask that the Federal agencies work with Florida to conduct parallel research in the following areas:

1. Materials testing to identify underlying sources of corrosive gas emissions and odors, and those which may have adverse impacts on human health.
2. Laboratory chamber testing to determine the emission rates of corrosive gases and the impact of environmental conditions and construction practices on the emission of gases from Chinese manufactured drywall and resulting copper corrosion.
3. In-home testing to assess occupant exposures to corrosive gases and possible secondary by-products due to the interaction of drywall emissions with other building materials, adhesives, coatings, paints, insulation, flame retardants, or household chemicals.
4. Remediation of homes and establishment of the standard of care needed to fully address and repair the secondary damage caused by corrosive emissions from Chinese manufactured drywall. A cooperative assessment of on-going remediation efforts being carried out by builders and homeowners may allow government agencies to identify the key factors necessary for a successful remediation and repair of impacted homes.

Parallel research efforts to develop guidance and eventually a "standard of care" for testing potentially affected homes and remediation of those determined to be affected has some understandable disadvantages. A multi-prong effort may be more expensive and may result in some redundant testing and doubling back on research paths. However, the time savings likely to be achieved, along with the synergy of such a multidisciplinary approach, can be anticipated to deliver important findings and useful guidance to homeowners and builders in a significantly shorter timeframe. If research on the remediation of homes does not begin until a full understanding is achieved of the material chemistry, all of the contributing environmental conditions, and resulting occupant exposures, a scientifically-based evaluation of remediation protocols may be significantly delayed. If this issue was not adversely impacting Florida's citizens, a more traditional iterative study would certainly be advocated. However, I am urging a more productive and rapid research effort be implemented to achieve timely results that can deliver relevant information to affected homeowners and builders.

I am also seeking a response to several inquiries made by the Florida Department of Health (DOH) to your agencies. The pending requests include:

- Requests to the Consumer Products Safety Commission:
  1. Guidance for inspections needed to evaluate the safety of compromised (corroded) electrical systems in homes experiencing copper corrosion from Chinese manufactured drywall (*i.e.*, for private electricians, electrical engineers, and others performing evaluations).
  2. Guidance for inspections needed to evaluate the safety of compromised (corroded) natural gas systems in homes experiencing copper corrosion from Chi-

nese manufactured drywall (*i.e.*, electricians, electrical engineers, and others performing evaluations).

3. Findings from the initial evaluation of corroded electrical and natural gas systems by CPSC's staff on March 26–27, 2009.
- Requests to the Environmental Protection Agency:
  1. Confirmation of tentatively identified compounds in Chinese manufactured drywall materials reported in the EPA's April 1, 2009 analysis.
  2. Broad technical assistance from the Environmental Response Team to develop the scope of a study, including testing and analysis protocols, for evaluating occupant exposures to corrosive gases and secondary by-products in homes with copper corrosion associated with Chinese manufactured drywall. Of greatest need are technical and field personnel to conduct testing of select homes experiencing copper corrosion from Chinese manufactured drywall, including equipment and analysis needed to perform testing.
- Request to the Centers for Disease Control and Prevention:
  1. Agency for Toxic Substances Disease Registry: Technical assistance to prepare educational materials for physicians who may be evaluating patients living in homes with Chinese manufactured drywall,
  2. The National Institute for Occupational Safety and Health: A Health Hazard Evaluation (HHE) to assess occupational hazards related to remediation and abatement of homes with Chinese manufactured drywall.

In order to ensure the most effective communication, please provide the name, title and contact information for your Agency Point of Contact (POC) to serve as your Agency's representative for Florida's Operation Drywall Incident Management Team. Please send this information to Nancy Leiva, Unified Command, Situation Status Unit Leader, at *Nancy\_Leiva@doh.state.fl.us* or 850–245–4250.

I appreciate the assistance as requested in an expedited manner. I look forward to hearing from you and working with you on this important matter.

Sincerely,

CHARLIE CRIST,  
Governor,  
State of Florida.

*April 29, 2009*

Hon. DAVE ARONBERG,  
Senate Office Building,  
Tallahassee, FL.

Dear Dave:

Thank you for your recent letter regarding the problems associated with Chinese manufactured drywall in Florida homes. Please be assured that I recognize the impact of this issue on Florida homeowners and have taken several steps toward addressing the situation.

I have tasked the Florida Department of Health (DOH) with coordinating the statewide response on this issue. DOH is working closely with the Florida Department of Business and Professional Regulation, the Florida Department of Community Affairs, the Florida Department of Environmental Protection, the Florida Attorney General's Office, the Florida Department of Agriculture, and the Florida Division of Financial Services and has established a Chinese Drywall Unified Incident Command Team composed of representatives from these departments and offices.

Importantly, DOH is engaging in additional testing of homes containing Chinese-manufactured drywall to identify potential health hazards. DOH has also prominently placed on its website information about Chinese-manufactured drywall (<http://www.doh.state.fl.us/environment/community/indoor-air/drywall.html>).

Among other things, on this site citizens can learn ways to determine whether their home may contain Chinese-manufactured drywall, the latest results of drywall testing, answers to frequently-asked questions, and how to file a consumer complaint if fraud in testing or remediation is suspected. In addition, in a few days the site will allow citizens to sign up to receive e-mail notifications of the latest news on this issue.

I have also requested targeted Federal assistance from the Environmental Protection Agency, the Centers for Disease Control and Prevention, and the Consumer Products Safety Commission. Specialized resources within these entities would

greatly assist Florida in assessing any potential health hazards and establishing best practices for remediation of affected homes. Please find enclosed copies of letters I sent to our Federal partners on April 3, 2009 and earlier today asking for assistance.

We will continue to work with all diligence on this important issue and will keep you apprised of any new developments.

Sincerely,

CHARLIE CRIST,  
Governor,  
State of Florida.

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PREPARED STATEMENT OF RICHARD J. KAMPF, RETIRED FEDERAL EMPLOYEE,  
CAPE CORAL, FLORIDA

Thank you, Chairman Pryor and members of the Committee for this opportunity to provide testimony to the Senate Subcommittee on Consumer Protection, Product Safety and Insurance. I would also like to express my personal appreciation to Senator Bill Nelson for his commitment to helping affected homeowners whose houses are contaminated by sulphur compounds emitted from Chinese drywall. I am convinced that these compounds are causing health and safety problems for my family and countless Americans.

My wife Patricia and I are retired career Federal Employees and have been married for 35 years. We have two great children, Kristen, who resides in Philadelphia and Stephen who lives with us and attends High School in Ft. Myers. Our dream was to retire early, build our first ever new home in Florida, and share responsibility with my sister in caring for my 96-year-old Mother, Sophia.

#### **High Expectations after Retirement**

After spending countless hours researching which home design and homebuilder we would prefer, we settled on a local Cape Coral builder, Aranda Homes, Inc. In July 2007, we finally moved into what we thought would be our dream home. Little did we know we would be embarking on a journey consisting of countless breakdowns of our air conditioning system, a number of computer equipment failures, and various family health problems.

Beginning in July 2007, our air conditioning system failed fifteen (15) times in 1 year. Since we did not have air conditioning, we could not care for my mother and the full burden of caretaking fell to my sister and her husband, Carol and Delbert Cochran. During the many visits by the air conditioning company the unit was charged and recharged with R22 refrigerant, as many as ten (10) times, all of which leaked into the air ducts and throughout our home.

Our air conditioning coil has been replaced four (4) times. The most recent coil was installed in December 2007. The manufacturer, Trane Inc., sent the coil to Aero-Marine Engineering, Inc., located in Texas, prior to installing it in our house. Aero-American Marine's literature indicates the coil is protected "with Technicoat 10-2", an anti-corrosion coil coating.

#### **How We Found We Had A Problem**

With so many breakdowns of the air conditioning unit, we asked the manufacturer, Trane Inc., if we could purchase an extended warranty. They have never responded to that request. The only time we ever heard from Trane was on October 24, 2007, when the Fort Myers technical representative informed us that we likely had contaminated drywall imported from China installed in our home. The representative said other air conditioning manufacturers were experiencing similar breakdowns and they confirmed that the drywall combined with high humidity exacerbates the corrosion of the copper coils causing premature failure. We were devastated. Our first thought was, what about our health?

We made many calls and wrote letters to our builder, Aranda Homes, Inc., asking for help. Their representative consistently pushed us off to the supplier of the drywall, Banner Supply Company in Fort Myers, Florida. Aranda's representative arranged for Banner Supply to inspect our home on October 27, 2007. Banner's representative (accompanied by a representative from Aranda Homes) confirmed that "Knauf-Tianjin China," was embossed on the back side of the drywall. Banner's representative said, "I can deliver 250 sheets of drywall in your driveway tomorrow." I declined because no offer was made to install it.

We also made telephone calls to the Florida Health Department who referred us to the Sarasota County Health Department, who at the time was taking the lead on this emerging crisis. Mr. Robert Kollatte was very aware of the problem and in-



formed us that the only remedy at this time would be complete removal of the drywall. Mr. Kollatte also said that other factors need to be addressed in the remediation, including removal of any corroded copper piping, electrical wiring and possibly other metals. He explained that the corrosion caused by sulphur, once started, continues even if the contaminated drywall is removed. Try to imagine how many products used in your daily lives contain copper? Mr. Kollatte also said the corrosion is not limited to just copper. Again, we thought, if it's doing this to copper and other metals, what's it doing to our lungs?

We started looking through our home, and found mirrors turning black, electrical switches stopped working for no reason, our son's computer and game console both broke down three times and were finally replaced by the manufacturers under warranty.

### **Realizing Our Dreamhouse May Be Killing Us**

Nearly every day I have a nosebleed; some days they are not as severe as others, but none-the-less, I did not have them before moving into my home. Stuffy noses and raspy throats are commonplace in our household; there is not a night that goes by that I don't wake up worried that I may be harming my family by allowing them to stay in the house. My wife, Patti keeps vials of eye drops at her bedside because her eyelids become so dry that they are difficult to open if she wakes up during the night. My son, Stephen, who is very healthy and rarely sick, came down with a respiratory ailment recently. He lost 5 days of school and we made 2 visits to the physician in that same period. The doctor could not understand why he was not responding to the medication. Stephen was tested for mononucleosis and the flu, both which were negative. Finally after being bedridden for seven consecutive days he was able to return to his classes. But he continued to complain of weakness for at least a week or two afterward. He even took naps after school which we have never seen him do. I am convinced that the background sulphur contamination emitted from the drywall contributed to his lengthy recovery.

### **Aranda Homes, Inc., Response**

Feeling abandoned by our builder, we hired an attorney who filed a latent defect complaint against Aranda Homes, Inc., under Chapter 558 of the Florida Statute. The 558 Notice claims that Aranda Homes, Inc. is responsible for installing defective drywall in our home and provided Aranda Homes 45 days to respond as to how they intended to remediate.

On March 4, 2009, Counsel for Aranda Homes, Inc., responded to the Chapter 558 Notice. The response says, "Notwithstanding the assertions in the notice that scientific tests have proven that the Knauf plasterboard causes corrosion of interior metal fixtures and electronics, potentially posing a risk of fire and a risk of human health, Aranda Homes, Inc., has neither received any such test results, nor heard of any such test results". It further states, "Aranda Homes, Inc. has made several inspections of the premises and cannot conclude there are any construction defects that need a response." Needless to say, we are disappointed with and insulted by this response.

Shortly before receiving the builder's response we were informed by our law firm that our attorney was no longer with the firm and we have not retained another attorney since.

We also inquired with Aranda Homes, Inc., as to who their insurance carrier was. The Counsel for the builder said that our claim was sent to their insurer. However, Aranda Homes, Inc. has refused to tell us who their insurance carrier is.

### **Regulatory Response to Our Drywall Problem**

The Florida Health Department has been in the forefront trying to confirm whether any health or other risks exist from the drywall emissions. Dr. David Krause, in particular, has been a wonderful resource to us and we want to bring this to your attention.

We also had the opportunity to have our house inspected by the U.S. Consumer Products Safety Commission, the U.S. Environmental Protection Agency, and the Agency for Toxic Substance and Disease Registry. Representatives from these agencies sampled our home for potential sources of contamination caused by the drywall. In addition, we provided one of our smoke detectors to the Florida State Fire Marshall for inspection to determine if the corrosion could cause our fire alarm system to malfunction during a fire.

Lastly, we have been asked to allow the U.S. Environmental Protection Agency's Emergency Response Team and the Florida Department of Health to install indoor air monitors in our home during the first week of June 2009 for a 3-day period, during which we may be asked to vacate. Coincidentally, we are attending a wedding in Pennsylvania during this time period. We are only too happy to accommodate

these agencies in their efforts for the benefit of all those impacted by this unfortunate tragedy.

**I Ask That the Committee Consider the Following Ideas:**

- Establish a Federal Task Force led by U.S. EPA or FEMA and made up of Federal agencies charged with looking at existing regulatory authorities to fund the removal and remediation of the drywall contamination. This would be similar to having a response to a hurricane, earthquake or other natural catastrophe. I suggest this activity be coordinated with the appropriate State and local entities, which can provide their expertise in the various elements of the remediation process.
- Direct the U.S. EPA and U.S. Department of Housing and Urban Development the responsibility of establishing a protocol for cleanup and remediation. This protocol should provide standard guidelines so that remediation of the drywall and corrosion problem is consistent from State to State or builder to builder.
- Require the U.S. Consumer Products Safety Commission to issue a recall of the defective drywall, and a directive that no other drywall imports from China be permitted until such time as minimum health and safety standards can be developed by this agency.
- The manufacturers of the contaminated drywall need to be held accountable for any remediation costs rather than the taxpayer. I think that enforcement of this effort could be performed by several Federal agencies with the lead agency efforts being undertaken by the U.S. Consumer Products Safety Commission.
- In developing the costs of remediation, I would suggest that the Federal Task Force consider other costs for complete remediation as: moving and relocation expenses of the homeowners during reconstruction, including utilities; storage costs for contents of their homes; replacement of all corroded items including but not limited to: televisions, computers, smoke detectors, refrigerators, mirrors.

In conclusion, I would like to again express my appreciation to the Committee and to Senator Nelson for this opportunity to provide testimony on this important issue. I stand ready to answer any questions the Committee may have. Thank you.

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PREPARED STATEMENT OF RANDY NOEL, PRESIDENT, REVE, INC., ON BEHALF OF  
THE NATIONAL ASSOCIATION OF HOME BUILDERS

**Introduction**

Chairman Pryor, Ranking Member Wicker and Members of the Subcommittee, thank you for this opportunity to testify today on the topic of Chinese drywall and how the home building industry is attempting to respond to this unexpected crisis. My name is Randy Noel and I am a builder from the New Orleans area of Louisiana. I'm here today also in my capacity as a former president of the Louisiana Home Builders Association, and a current National Life Director of the National Association of Home Builders Board of Directors. With more than 30 years in the industry, I have had extensive experience not only with the day to day operations of a residential construction company, but also with building code development and general liability insurance issues in the state of Louisiana, and at the national level.

I want to talk with you today about what the National Association of Home Builders knows on the Chinese drywall situation, and to discuss the perspective of home builders on the issue. NAHB is committed to offering a constructive role in resolving this issue.

The National Association of Home Builders is a Washington, D.C.-based trade association representing more than 200,000 members involved in home building, remodeling, multifamily construction, property management, subcontracting, design, housing finance, building product manufacturing and other aspects of residential and light commercial construction. Known as "the voice of the housing industry," NAHB is affiliated with more than 800 state and local home builder associations around the country. NAHB's builder members will construct about 80 percent of the new housing units for 2009. Taken collectively, the residential construction industry has been estimated to contribute up to 15 percent of the annual Gross Domestic Product (GDP). Given the downturn in the housing industry and the larger U.S. economy, many of NAHB's members are currently struggling to remain afloat and the annual estimate of new home construction has fallen from an average of 1.6 million per year, to about 500,000 for 2009, making the current economic crisis the worst housing downturn since the Great Depression.

### Potential Scope

NAHB first became aware of the problems with Chinese drywall in late 2008, when a consumer approached association staff concerned about rumors he had heard that some “Chinese drywall” in newer homes in Florida was causing problems with copper wiring and creating potential health concerns for homeowners. At the time, staff attempted to research the rumor only to find that there was no information publicly available about any problems or concerns in the Florida market, or the surrounding region. In fact, even a Google search failed to return any hits on the term “Chinese drywall.” Following up on the issue, staff began canvassing the membership to look for members who had found problems with drywall, and ultimately, media coverage of concerned homeowners began to move the issue forward very quickly. Since that time, NAHB has been working aggressively to educate itself about the various aspects of the issue, attempting to determine the scope of the potential problems, and talking to its membership about the ways in which the industry can address and resolve the problems.

In keeping with media reports, NAHB has found that a vast majority of the builders experiencing problems with drywall are in the state of Florida. Thus far, we have been unable to produce an accurate estimate of the number of homes that are potentially impacted in Florida, but continue to attempt to determine the scope. My fellow Louisiana builders have attempted to identify the scope of problems in our state, and have done preliminary estimates that indicate that perhaps 500 homes in the state are impacted, and we have begun the work of trying to determine which builders would have received the product. At the present time, we believe that most of the Chinese product imported into the state went predominantly to a few medium- and larger-sized builders. We are aware of a few drywall issues in Virginia and litigation against a builder in North Carolina. While many builders have heard of multiple news reports and stories on the issue, they have not brought any active cases in their states to NAHB’s attention.

### Use of Drywall in Home Construction

Gypsum board, known commonly as ‘drywall’, has been used without incident throughout residential and commercial construction and has been since the 1950s. In an average home [2,500 sq. ft.], there is approximately 8,740 square feet of drywall, with 6,285 sq. ft. contained within the walls and 2,455 sq. ft. within the ceilings. Approximately another 235 square feet of surface area of a house is made up of wood/concrete, or other building materials. In most instances, builders use ½” thick drywall boards in home construction.

State and/or local building codes determine how drywall is incorporated into a residential structure. Building codes identify the minimum requirements for using and installing building components in all single and multi-family residential construction. These codes derive from model codes developed by the International Code Council (ICC), which incorporate national standards for product performance such as the American Society for Testing and Materials (ASTM). Current standards related to drywall concern packaging, marketing, shipping, handling and storage of gypsum panel products and characteristics of the drywall such as the need for water resistance and fire resistance. They do not relate to the composition of the drywall beyond the requirement that the core consist essentially of gypsum.

For the typical NAHB member, a small business with fewer than 10 employees who builds fewer than 25 homes per year, subcontractors perform the drywall work. A home builder will contract with a drywall subcontracting firm to do the work on one or more houses in a year, and it is the job of the subcontracting firm to obtain the product that will be used in the completion of the home. The builder typically does not specify a particular brand name, or source, of the drywall, but rather specifies the amount of product required, the characteristics of the product (as it relates to dimension or thickness) and the timing required to complete the work. Subcontractors in turn coordinate with their suppliers—many of whom work only with professional builders and subcontractors and who do not sell to the general public—to obtain the product they need to meet their contractual obligations with the builder. It is notable however that in the past few months, NAHB has been made aware of builders who did specify in their subcontracts the use of domestic drywall only to find out years later as this issue unfolded that Chinese drywall was installed.

The use of drywall sourced from China spiked during the housing “boom” years of 2005–2007 when several separate situations converged to create a severe drywall shortage in the United States. First, with mortgage rates at historic lows and the associated factors leading to more home purchases in the U.S., a building boom was instigated by a dramatic increase in home buying activity. Second, the domestic producers were experiencing a lag in production capacity, with many domestic producers attempting to move quickly to bring new capacity on line to meet demand

for drywall. Third, the historically devastating Hurricanes Katrina and Rita led to a sudden and unexpected need for additional drywall for repairs and remodeling of hurricane-ravaged homes and businesses in the Gulf region. While the U.S. had typically sourced the majority of its drywall from domestic producers, with Mexican and Canadian producers providing the balance, these three factors led to the increase in supply sourced from China.

It's important to note that in all of the cases that NAHB is aware of, it appears that the problems with the drywall did not become evident until long after the homeowner had taken possession of the house. In discussions that NAHB has had with builders on their use of drywall in home construction, builders note that had drywall that was off-gassing a foul-smelling odor been on-site or installed in a new home under construction, their site supervisors would have called in their sub-contractors to address the issue and replace the drywall. Many builders cite the common sense conclusion that as the home builder they would not move forward with the sale of a house that was off-gassing an offensive odor because not only would it have been completely inappropriate and unprofessional, but the home buyer would have immediately contacted the builder to rectify the situation after taking ownership of the house.

### **Industry Goals**

NAHB and its members praise the work being done by Congress, the Consumer Product Safety Commission (CPSC), and other Federal agencies to investigate the source of the drywall problem, and determine the appropriate response and necessary outcomes. While NAHB members who have homeowners impacted by Chinese drywall are continuing to work on a daily basis to respond to the situation, we find that we are increasingly coming to the same conclusion: that the CPSC and other Federal agencies must provide both homeowners and builders/remodelers/contractors with the information necessary to not only fully and finally identify the cause and source of the problem so that it will not be repeated, but to also provide a reliable test for drywall problems and a method to appropriately remediate in cases where the problem has occurred. While NAHB has spoken with its own NAHB Research Center and other research entities about the possibility of looking into the situation on our own, we believe that the best possible scenario would be for a national consensus to be developed on these issues based on the work currently being done by the Federal Government. Understanding the time constraints presented in trying to perform the necessary tests on drywall to determine answers to these questions, NAHB urges the government to move as quickly as the science will allow to provide information to consumers of the product.

As noted above, NAHB is determined to play a constructive role in resolving this issue. Our members are trying to be responsive to homeowners and others who raise the question of whether drywall in their homes is made in China and whether the drywall is causing current issues or will likely develop them in the future. As builders, we live or die by our reputation. Home building is a very competitive business and a builder who does not pay attention to quality, value and customer service won't be in business very long.

One of the challenges we face as an industry is illustrated by our decision to decline an on air interview on the *Nightline* television program that was scheduled to air last night regarding the Chinese drywall situation. We talked with the *Nightline* producers on background and provided them with industry information but despite our best efforts, we could not locate a builder member to appear on camera to discuss this matter because of the current uncertainty about how to identify the affected drywall, and how to fix it.

### **Testing and Remediation**

At present time, we are not aware of any consensus on the scientific cause of the issues with drywall, and as the CPSC has noted, there is no definitive test to determine if a home has a drywall problem. Consequently, NAHB supports the CPSC's current efforts to identify the actual scientific cause of the problem, and develop an appropriate testing protocol to identify problematic drywall. Once the cause is identified and a testing protocol established, it will greatly help builders identify potential homeowners who may have problems.

Over the past few weeks, NAHB has been made aware of a concerning new development in the area of drywall testing: the dramatic increase in the number of companies in the marketplace claiming to have the capability to test someone's home to determine whether or not they have, or will have, a "toxic drywall" problem. One specific example involves a company in Louisiana who claims that for a "documentation fee of \$1100 (no travel charges within the Parish) and a fee of \$1350 per sample," they can identify homes that have, or will have a problem.

Similarly, until the problem with the drywall is identified, it will be difficult to determine how it can be remediated. We are aware that some builders have opted to remove and replace all of the drywall—but that is very expensive—some estimates indicate that the cost is \$100,000 per home or more, while others indicate that the cost to remediate each home would be approximately  $\frac{1}{3}$  of the value of the house—and many of our members do not have the financial ability to incur such a cost without the benefit of insurance. It is imperative that research continue to determine whether there is a viable solution short of full removal and replacement of all of a home's existing drywall. Further, the remodelers in our membership are also interested in determining the best remediation strategy for homes in which only a portion of the drywall is identified as problematic. An appropriate remediation strategy should also touch on how to handle those homes and the wiring and electrical systems that they contain.

#### **Potential Health Effects**

The health effects associated with the drywall present a serious issue that merits further research. NAHB supports research that will lead to scientifically sound and reliable data on whether scientific evidence exists linking chemical emissions and “off-gassing” from the drywall to the reported health complaints. This is vitally important not only to the homeowners who have been so incredibly impacted by the drywall problems, but also for those who will be going into the affected homes to remediate the problem.

#### **Litigation**

The lack of current scientific conclusions on the causes, impacts and remediation strategies on the drywall issue has not stopped the litigation and threatens to obscure many of the legitimate issues. More than 60 separate lawsuits have been filed in 7 states—the bulk of those in Florida and Louisiana—and attorneys are advertising for the creation of class action lawsuits in multiple jurisdictions as they look for clients allegedly injured due to this exposure. Predictably, some have tried to use the dearth of science to take advantage of the issue, like those who use the term “toxic drywall” or “toxic Chinese drywall.” The obvious implication of such terms is clear—this drywall is poisonous and very dangerous to human health. In regard to Chinese drywall, the reality according to the CPSC is that at this time any such relationship linking chemical emissions from the drywall to the reported health complaints or long-term health effects are unknown.

NAHB supports the right of all potentially injured parties to seek redress through the courts, but we believe that this attempted rush to judgment is premature and all concerned would benefit from a stay of the litigation until the CPSC and other agencies have concluded their investigations, identifying the scientific cause of the problems associated with the drywall, and establishing a workable remediation strategy. Litigation is an inefficient means to resolve construction defect and other contract disputes because it is expensive, time-consuming and unlikely to produce the desired result. Moreover, litigation frequently leaves homeowners with insufficient funds to perform repairs once legal fees and costs are deducted from any court recovery they may receive (if any). We are encouraged by reports that the CPSC is developing a set of affected home criteria for dealing with the drywall.

In the vast majority of cases, the result that homeowners and home builders most desire is very simple—a repair to an alleged defect or other similar correction, which is why NAHB spearheaded the effort several years ago to enact Notice and Opportunity to Repair (NOR) laws. These laws, which require homebuyers to provide builders with notice and opportunity to repair before filing suit, increase the likelihood that construction defect disputes will be resolved without costly and time-consuming litigation.

#### **Insurance Coverage**

As noted above, as a commitment to their customers, some builders have opted to remove and replace the drywall.

Builders, subcontractors, and remodelers who are sued by homeowners for damages caused by defective Chinese drywall may have coverage under their own liability insurance policies, or under policies issued to other parties—if they are an additional insured under these policies. Homeowners also will seek coverage for their losses under their homeowner insurance policies. However, one insurance company has filed suit against a builder seeking a declaration that no coverage exists for claims related to Chinese drywall based on policy provisions including the pollution exclusion, and it seems likely that other insurance companies will also seek to deny coverage.

We urge Congress to continue to explore ways to identify possible sources of funding to help offset the costs of remediation, particularly if it is determined that the ultimate responsibility lies with manufacturing entities situated in China.

**Potential Concerns Regarding S. 739, the Drywall Safety Act of 2009**

Again, NAHB applauds Congress for its active interest and quick response to the drywall issue. Specifically, we thank Senators Nelson and Landrieu for bringing attention to the issue through the introduction of S. 739, the Drywall Safety Act of 2009.

However, of note is a concern that NAHB has with the draft of S. 739 as introduced. Specifically, Section 4 of the legislation attempts to ensure that no potentially problematic drywall is still entering or being sold in the United States by banning as a product with a product defect any drywall that contains over 5 percent organic compounds by weight. We believe that this 5 percent parameter comes as a result of some preliminary analysis conducted by the Florida State Department of Health. While NAHB is not questioning the organic compound results of the sample analysis in this case, we are concerned that attempting to ban all products with 5 percent organic compounds by weight may actually lead to a massive disruption of the domestic drywall industry, and a potentially significant obstacle to a future housing market recovery. Put simply, the 5 percent organic compounds by weight parameter may accidentally capture most, if not all drywall in the United States, not simply the imported drywall that is subject to investigation at this time. The paper backing on all drywall is technically considered as an 'organic' substance, as is—for example—the wax emulsion that is contained in moisture resistant drywall which is used in places like bathrooms in order to protect against mold. In many instances, the paper backing alone could bring the organic compound weight of the drywall to 5 percent, regardless of the content of the drywall's core. We urge the Subcommittee and the bill sponsors to investigate other ways in which to target the drywall that is of concern, without potentially banning all drywall produced in the United States.

Importantly, it is with appreciation that we note that the Senators sponsoring the legislation and their staffs have indicated an understanding of the industry's concerns with the 5 percent parameter, and that they are actively engaged in attempting to find a better way to identify the potentially problematic drywall.

**Conclusion**

NAHB appreciates this opportunity to testify on the issue of Chinese drywall and to share our member's experiences and concerns. We look forward to continuing to work with Congress and the Federal agencies to provide any information we can on the industry and its use of drywall, and to disseminate and educate the Nation's home builders on the appropriate testing protocols and response to this issue. We share the goal of ensuring a satisfactory resolution for the homeowners who have been impacted by this situation, as well as to ensure that such a situation will never be repeated.

Thank you.

Senator PRYOR. I'll go first, and then Senator Nelson, and we'll do the order from there. But, let me just start with a couple of very brief questions, if I may.

First, Dr. Krause, you're at the Florida Department of Health. Is that right?

Dr. KRAUSE. Yes, I am, Mr. Senator.

Senator PRYOR. And how many homes do you estimate have this affected drywall in your State?

Dr. KRAUSE. Currently, we have approximately 300 that have called the Florida Department of Health and entered one of our registries. However, there is a barrier in—with the public, to calling the Departments of Health and letting us know, so we believe our numbers are grossly underestimating the—

Senator PRYOR. And what's the barrier?

Dr. KRAUSE. One barrier I've been informed of are attorneys that are—plaintiffs' attorneys who are representing these folks are telling their clients not to register with the Department of Health.

Senator PRYOR. OK. Do you know to what extent people are staying in their homes with affected drywall, or, on the other hand, to what extent they are leaving their homes? Do you have a percentage or a feel for how many people are staying and how many people are going?

Dr. KRAUSE. No. No, sir. We are including that in our questionnaire, and hope to have some information on that soon.

Senator PRYOR. And let me ask Ms. Saltzman, with the Consumer Product Safety Commission—Ms. Saltzman, do you have a sense of how widespread this problem is around the country?

Ms. SALTZMAN. Yes, we've heard from 320 consumers in 16 States and the District of Columbia.

Senator PRYOR. And is your understanding that the sale, at least temporarily, of this drywall has stopped in the United States?

Ms. SALTZMAN. It's our understanding that it has, that there's no more that's coming in.

Senator PRYOR. And let me ask this—since the CPSC, is the lead Federal agency on this issue, can you tell the Subcommittee what the CPSC has been doing to try to determine what's going on out there?

Ms. SALTZMAN. Yes, of course. We've actually—our program is based on three different tracks. We're looking at the—trying to find the link between the Chinese drywall and the health symptoms. We're looking at trying to identify the link between the drywall and the corrosion of the metal components. And we're also tracing the origin and the distribution of the drywall.

Senator PRYOR. OK. And, with my last question—I see Senator Landrieu coming, and I'd like to expedite my questions, here, so that we could get to the other Senators—if I may ask Mr. Kampf—you're a homeowner in Florida. Is that right?

Mr. KAMPF. That's correct.

Senator PRYOR. And where do you live?

Mr. KAMPF. Cape Coral, Florida.

Senator PRYOR. And where?

Mr. KAMPF. Cape Coral, Florida. It's—

Senator PRYOR. OK.

Mr. KAMPF.—in Lee County.

Senator PRYOR. And you've had some experience with this in your own home.

Mr. KAMPF. Yes.

Senator PRYOR. Could you give us 2 or 3 minutes on what your experience has been and maybe the highlights of your testimony that I've asked folks to submit for the record? If you could give us the highlights of that, I'd appreciate it.

Mr. KAMPF. Yes, Mr. Chairman, I'd be happy to do that.

My wife and I are both career—retired career Federal employees, and we had an opportunity to retire early. And we wanted to settle in Florida, and decided to purchase—or, build a new home. And that was—we took occupancy in that house in November 2006. However, we didn't move in until July 2007, because of our moving plans.

Nonetheless, the day we moved in, in July 2007, the air-conditioner broke. And at the time, we just thought it was something that happened. Within one year, we had 15 visits from the air-con-

ditioning repair company. During that time, they recharged my air-conditioning unit ten times, all of which, with R-22 freon that was, in fact, then dispersed back through the ductwork in my house into me and my son and my wife.

We had four coils in our house that are replaced. That latest one was shipped to Texas by the Trane manufacturing company, and had it coated. The coated coil seems to work. We have air-conditioning now. But, we also have another smell. There's a volatile organic compound that comes off the smell of the coated coil each time the compressor comes on.

We have had a significant amount of deterioration of products in our home. Our mirrors are black, the copper piping, particularly on the water heater—I have plastic pipe in most of the house, but the copper piping in my water heater is black. All of the shutoff valves under the toilet closets, normally chrome, are completely black. The paint cans in my garage and things that I've bought just a month or so ago, for example, turned to a rust, complete rust.

We have had illnesses. I am sick, today. Respiratory problems are prevalent. We're constantly going around the house drinking bottles of water. And my wife is complaining quite a bit about, at night, her eyes are burning. She has vials of teardrops on her bedside, as do I have bottles of water. When you get a respiratory illness, it's not unlike any other respiratory illness, only it's a lot worse and it lasts a lot longer, and it's a lot harder to recover.

Senator PRYOR. Let me interrupt right there, if I may, just for clarification. You're still living in the house.

Mr. KAMPF. I am still living in the house, yes.

Senator PRYOR. And is there any way of knowing right now what your estimated value of your home is now?

Mr. KAMPF. Yes, I could tell you that number. It's zero.

Senator PRYOR. OK.

Mr. KAMPF. There is no—I paid \$315,000 for that house, and, as Senator Nelson pointed out, I'm paying a mortgage of \$1,900 a month. My bank doesn't want to hear anything from me.

My builder has basically abandoned me in trying to remedy any problem. He's not stood by my side. And I applaud the builders, like Lennar and Taylor Morrison and others, that have done that.

But, the health effects go beyond that. We have—I have nosebleeds every day. I mean, it's just not an occurrence that happens once in a while; it is every day. We have a—we're always having raspy throats. And it's just—it's just an annoying situation, to go around your house and look at things deteriorate that otherwise may not have happened for many, many, many years.

Senator PRYOR. Right.

Mr. KAMPF. We just—you know, our Christmas present to ourselves was a very large flat-screen TV. It's—right now, all of the pixels, across the screen, showing, and it just doesn't go away. And we wonder, every single day, what happens—what's that doing to our health?

Senator PRYOR. Right.

Mr. KAMPF. What do we do about that?

Senator PRYOR. Thank you for your statement.



Now, I'm going to recognize Senator Landrieu for her statement. She's actually chairing another subcommittee, so she's going to have to race out after the statement.

Go ahead, Senator Landrieu.

**STATEMENT OF HON. MARY LANDRIEU,  
U.S. SENATOR FROM LOUISIANA**

Senator LANDRIEU. Let me thank—begin by thanking Chairman Rockefeller and Ranking Member Hutchison for agreeing to this hearing, and particularly, Mr. Chairman, thanking you for your focus on this particular issue and the issue of defective products, this being just the latest in, unfortunately, a pattern that we are beginning to see of products coming into this country that are very questionable, in terms of their quality, and very, very concerning to our constituents.

I'm just going to be very brief. I've submitted a much longer written testimony.

[The prepared statement of Senator Landrieu follows:]

PREPARED STATEMENT OF HON. SENATOR MARY L. LANDRIEU,  
U.S. SENATOR FROM LOUISIANA

Thank you Chairman Rockefeller and Ranking Member Hutchison, for calling this oversight hearing on the health and product safety issues related to foreign manufactured drywall products. I also thank Subcommittee Chairman Pryor, Ranking Member Wicker, and especially Commerce Committee member, Bill Nelson, who has been a leader on this particular issue. I would also thank the Committee for allowing Randy Noel, a representative of the Louisiana Homebuilders to testify today. This hearing continues the important bipartisan work of this Committee to protect consumers from unsafe products. Last year, this Committee was instrumental in passing the Consumer Product Safety Improvement Act that provided new authority for the Consumer Product Safety Commission (CPSC) and authorized new resources for the agency. As homeowners nationwide face possible health and environmental risks from Chinese-made drywall products, it is my hope that the oversight of this Committee will again spur action on an important issue facing impacted consumers.

According to published reports, since 2006 more than 550 million pounds of drywall have been imported to the United States from China. This is enough to make tens of thousands of homes. However, these products may have come into the country as far back as 2000 and could be in over 100,000 homes nationwide. This is because since 2004, builders have turned overseas for materials because our own U.S. suppliers could not keep up with demand created by the U.S. construction boom, as well as a series of hurricanes and other natural disasters. This would include the 2004 Florida hurricanes, Hurricanes Katrina and Rita of 2005, and other disasters. The drywall entered the U.S. through numerous ports, including the Port of New Orleans. As I understand it, Florida was the number one destination for these products with over three million drywall boards. Louisiana was next with almost 660,000 drywall boards. In Louisiana alone, this could be as many as 7,000 homes. Overall to date though, the CPSC has received over 180 incident reports from 12 states. This problem spans the country, from California in the West to right here in the District of Columbia and Virginia. It is not just an isolated issue for Florida homeowners or the Gulf Coast—Chinese drywall is a nationwide problem.

It is my understanding that the CPSC received its first consumer incident report from Florida in December 2008. In Louisiana, we began to see reports from homeowners in southeast Louisiana in late February. These reports were similar to those seen in Florida homes: a "rotten egg" smell within homes; health issues such as skin irritation, persistent cough, bloody noses, and asthma attacks; last homeowners noticed blackened and corroded metal components in their homes. According to the Louisiana Department of Health and Hospitals, the majority of these reports were centered around New Orleans in southeast Louisiana. Just to give you an example of how widespread this issue is in my state, we have seen hundreds of homeowners ranging from St. Bernard Parish Fire Chief Thomas Stone to New Orleans Saints Head Coach Sean Payton report this product in their homes. Many parents have been seeking answers on what might be making their kids sick or, now that more

details are coming out, how they should safely remove this product from their homes. This defective Chinese drywall represents an attack on these families and presents another obstacle on our road to Gulf Coast recovery.

In response to these reports, my office has heard from countless constituents on the need for consistent, scientifically-based information on the product, as well clear guidance on the public safety, health, and environmental impact. Families have asked for information on which Federal or State agencies to contact, in addition to any updates we have on the health risks posed by this product. Many families also called concerned about the impact of defective drywall not just on their children but also on pets. To address these questions, on April 23, my office issued a fact sheet for homeowners updating them on the Federal/State response, providing key contact information, and answering frequently asked questions. My office plans to update this document as new information becomes available.

On the state level, it is my understanding that our Louisiana Department of Health has received hundreds of calls. These complaints have ranged from homeowners requesting home inspections, advice on home evacuations, in addition to inquiries on specific health information to provide their primary care physicians and veterinarians. A key question is that of remediation or possible financial assistance in order to deal with this problem. Many of my constituents received either Federal Emergency Management Agency (FEMA) or Small Business Administration (SBA) disaster assistance to rebuild these homes following Hurricanes Katrina and Rita of 2005. These families spent months in FEMA trailers and rental units following these disasters, they paid out of pocket or took on debt to rebuild. Now they find their rebuilt homes in worse shape than these post-disaster temporary units. In this situation, families are looking for answers and a timeline for when more information will be known on the definitive health impacts of this product.

In response to these concerns from my constituents, I have been working closely with Senator Nelson on numerous legislative remedies to this problem. As you know, on March 30, we introduced S. 739, the "Drywall Safety Act of 2009." This legislation would require the CPSC to join with the Environmental Protection Agency and National Institute of Standards and Technology testing labs to determine the danger level of chemicals and compounds in the drywall. S. 739 would also impose an immediate ban on imported Chinese drywall, pending promulgation of drywall composition standards by the appropriate agency. I hope that this hearing will outline areas that our legislation can help impacted homeowners and whether increased safety standards are necessary on imported drywall products.

The State of Florida has conducted preliminary testing which has confirmed that imported drywall is at the root of the problems. However, these tests have not been able to pinpoint the hazardous substances in the drywall. For its part, the CPSC has indicated that they have initiated preliminary tests of these drywall products but that more comprehensive testing and investigation is needed to understand the full health and environmental impacts of these products. To these ends, on May 4, Senator Nelson and I requested that the Senate Appropriations Committee include \$2 million in the FY2009 Emergency Supplemental Appropriations bill. These funds would be used to do field studies, analyze the substances in the product, and most importantly, expedite lab results to provide clarity for impacted homeowners. Such tests would allow the Federal Government to fully understand the problem, especially any public safety risk. Funds would also allow the agency to set up a public information campaign on defective drywall, including a website and hotline to help consumers.

I was disappointed that this key funding was not included in the bill reported out of the Senate Appropriations Committee last week. According to the CPSC, a Federal/State working group has been formed but it could take this group "months" to outline testing procedures and additional time to conduct additional testing. While I understand the need to be thorough and build a case that might stand up to future legal scrutiny, families in my state need answers now. Parents caring for sick children or pets need answers, workers removing these products from homes need to know potential health risks, and local health officials need to know what environmental impact may occur if this drywall is dumped into landfills. To these ends, I have joined Senator Nelson on a floor amendment to the Supplemental to give the CPSC necessary funding for this comprehensive testing. It is our hope that with this funding, the agency can return results in a matter of months versus the current time-frame which may take up to a year.

In closing, I believe that the scope of this problem is huge because it touches on so many different stakeholders. The first thought is on the impact to homeowners and renters, as it should be for a health risk of this nature. However, medical professionals and veterinarians also are dealing with this issue as families report health problems. The possible public safety impact also draws in fire marshals, con-

struction workers, and environmental inspectors. So this defective product is not just a concern for homebuilders or homeowners, but is a concern for many other professions in both the public and private sectors. That is why today's hearing is so important—we must ensure that there is a timely and effective Federal response in cooperation with local health authorities. I look forward to working closely with my colleagues on this Committee to support additional efforts to address this critical matter facing our homeowners.

I thank the Chairman and ask that a full copy of my statement, as well as a copy of the May 4, 2009 letter to the Senate Appropriations Committee appear in the record.

U.S. SENATE  
Washington, DC, May 4, 2009

Hon. DANIEL K. INOUE,  
Chairman,  
Senate Committee on Appropriations,  
Washington, DC.

Hon. THAD COCHRAN,  
Ranking Member,  
Senate Committee on Appropriations,  
Washington, DC.

Dear Chairman Inouye and Ranking Member Cochran:

As the Committee reviews President Obama's Fiscal Year 2009 Supplemental Appropriations request, we write to ask your consideration for the inclusion of emergency funding that will allow the Consumer Product Safety Commission (CPSC), in conjunction with other Federal agencies, to conduct a comprehensive investigation into the health and safety impacts of faulty Chinese-made drywall on thousands of American consumers.

Since 2006, more than 550 million pounds of drywall have been imported to the United States from China. In the last 18 months, countless homeowners throughout the Gulf Coast region have reported noxious fumes and serious metal corrosion in air conditioning units, copper pipes and electrical wiring. In addition, a number of homeowners have also reported serious health issues that appear to be related to the drywall, including bloody noses, headaches, insomnia, and skin irritation. In total, the CPSC has received over 180 incident reports from 12 states and the District of Columbia, demonstrating that this is a problem not just on the Gulf Coast, but also a threat to homeowners across the country.

Preliminary testing has confirmed that the imported drywall is at the root of the problem, but these tests have not been able to pinpoint the problem substances in the drywall. With this in mind, we respectfully request that the Committee include \$2 million for the CPSC to fully investigate and evaluate the defective drywall. These funds would be used to do field studies, analyze the substances in the product and, most importantly, expedite lab results to provide clarity to impacted homeowners. Such tests would allow the Federal Government to fully understand the scope of the health and public safety risks posed by this product. Funds would also allow the agency to set up a public information campaign on defective drywall, including a website and hotline to help consumers.

Attached, for your review, is a full breakdown of how these funds would be allocated within the CPSC. Thank you for your consideration of this important request.

Sincerely,

BILL NELSON,  
United States Senator.  
MARY L. LANDRIEU,  
United States Senator.

#### ATTACHMENT

##### *Drywall Elemental Analysis:*

Potential reimbursement of EPA's Emergency Response Team (ERT) Lab	\$175,000
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##### *Drywall Chamber Emissions Study:*

###### Government Laboratory:

Start-up Costs and running of Phase I	\$310,000
Phase II	\$300,000

###### Additional equipment to expedite lab studies:

Gas Chromatograph/Mass Spectrometer	\$250,000
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Additional pre-conditioning chambers	\$ 10,000
<i>Field Study (in-Home monitoring)</i> —Contractor	\$500,000
<i>Component Metallurgic Analysis:</i>	
Government Lab—Electrical/Gas Components	\$ 30,000
TBD Laboratory—Fire Protection Components	\$ 60,000
<i>Component Advanced Aging Analysis</i>	\$ 70,000
<i>Functional Evaluation of Fire Protection Components</i>	\$ 40,000
<i>Shipping Costs</i> —Samples in Tedlar Bags to Lab, EPA	\$ 1,000
<i>Compliance Field Investigators</i> (Two)	\$150,000
<i>Public Information:</i>	
Website design and build	\$ 5,000
Automated e-mail response management system	\$ 40,000
Hotline operations, inquiry response, FAQs, regular website updates	\$ 60,000
<i>Travel:</i>	
To Lab, to oversee Phase I and Phase II studies, 2 trips	\$ 12,000
Visit to U.S. gypsum manufacturing plant, 1 trip (five staff)	\$ 8,000
To China, to visit manufacturing plants, 2 trips (up to six staff)	\$ 66,000
<i>Total</i>	<u><u>\$2,087,000</u></u>

Senator LANDRIEU. But, because I am chairing a Small Business hearing at the same time, let me just say, Mr. Chairman, that I have received numerous, numerous contacts to my office, given that we believe that the State of Louisiana, has second to Florida, the greatest number of homes affected by this particular product.

Just one, that I will read into the testimony this morning, is the fire chief in St. Bernard Parish, not a man or a family unfamiliar with tragedy, since every home in St. Bernard Parish was destroyed, except for five, just 4 years ago. The fire chief would be one of the guys that stayed, when everyone else left, to try to help save people and restore the parish. He himself has testified to me that the door hinges and shower heads and metal objects in his home are turning black. They are corroding inside of the home. He had a positive reading of hydrogen sulfide in the bathrooms of his homes after showers. Evidently, it's something to do with—the heat and humidity make the situation worse. He says, “We’ve put everything into our home,” just like this gentleman here has testified. They have no money to redo it. They were probably out of their home for 3 and a half, 4 years. They’re still trying to pioneer in a parish that is struggling to come back. He spent his entire life savings finishing this home.

This is just one example, Mr. Chairman, of our many constituents in Louisiana that are looking to this Committee for action and for support. They don’t know where to turn. They don’t know what to do.

So, I hope that the bill that we’re considering will give some immediate relief, but there’s so much more that probably has to be done which is under the jurisdiction of this Committee.

Let me also say, for those that want someone even more well known than the chief of St. Bernard Parish is—the head coach of the New Orleans Saints now is living in a house that he doesn’t think that he can keep his family in. And this just goes on and on and on, from constituents in, you know, modest neighborhoods to middle-income neighborhoods, to very-high-end neighborhoods.

So, I don’t know, Mr. Chairman, what the solution is, but I wanted to come give voice this morning to my constituents, who are

looking to us for answers. And I thank you for your work that you've done in this area.

Senator PRYOR. Thank you.

Senator Nelson?

Senator NELSON. And as Senator Landrieu goes, I just received word that they are working out that our \$2 million for this next round of testing is going to be in the supplemental bill that we're going to pass today on appropriations.

Senator LANDRIEU. That'll help.

And thank Mr. Noel for being here.

Senator NELSON. I want to ask a series of questions. And Senator Warner and Senator Klobuchar, whenever you all want to interject, just please do. We have a time constraint because we're going to have a vote, momentarily.

I want to see, first of all, why we have not had responsiveness from the EPA. It's my understanding that the CPSC and the EPA started receiving reports that there was a problem with this drywall late last year. On February 13 of this year, I sent a letter to the EPA requesting that the agency look at this problem. I didn't receive a response until early May, and that was a letter dated April 30. February 13 to April 30. May I get some assurance here today from the EPA that you're going to be more responsive in the future, Ms. Southerland?

Ms. SOUTHERLAND. Absolutely, Senator Nelson. We have moved out quite rapidly. We've already given the Subcommittee the copy of the report we've done of the initial drywall analyses. We actually got—ATSDR gave us two Chinese drywall samples taken right out of homes in Florida, and we, on our own, went out and bought four U.S. drywall samples. And we've gotten those analyses done.

We're also moving out with a large group of people from all the Federal agencies, as well as from Louisiana and Florida Health Departments, to develop an indoor air monitoring protocol, and we will begin testing that protocol, checking it out, the 1st of June. We've already selected houses for Florida, and we're in the process, this week, of selecting houses in Louisiana where we'll test out that protocol. And right now we hope to have a fully Federal/State agreed-upon indoor air monitoring protocol done by the end of June.

Senator NELSON. Senator Warner?

**STATEMENT OF HON. MARK WARNER,  
U.S. SENATOR FROM VIRGINIA**

Senator WARNER. Can I just interject, here? I mean—

Senator NELSON. Sure.

Senator WARNER.—this is not a Florida- or Louisiana-only problem. And I can tell you, we've got folks in Virginia, and particularly down in Hampton Roads—I know, Congressman Nye, who represents Virginia Beach in the Hampton Roads area, actually visited some of the homes that were affected. And if we are going to start doing this testing procedure, I want to make very clear that this should not only take place in Louisiana and Florida, but all affected communities need to have this testing taking place. We have, I believe, folks here from Virginia in the audience. I'm sure

Senator Klobuchar's going to add that this perhaps concerns some of her constituents, too.

I want assurance from the EPA that actions taken in Florida and Louisiana will also be taken in other States that have had the reports of this kind of disaster taking place, because this is a health disaster, and it is—Mr. Kampf indicated—a financial disaster. I want to commend Senator Nelson. I know he and Senator Martinez put forward legislation on this. They've been the early warning lights for the Senate, overall. But, this is a national problem, and we expect a solution where all communities affected are going to be taken into consideration.

Ms. SOUTHERLAND. Yes, sir. The testing I was referring to is just to test out the indoor air protocol. We've got a draft of that circulating now amongst the technical experts, and we just need a few houses to test—

Senator WARNER. But, let me be clear. I mean, from Senator Landrieu's comments, and I would imagine, from some of Senator Nelson and Mr. Kampf's testimony here today, it seems—what I have heard is that some of this may be affected by humidity, it may be affected by other weather patterns, and—great respect for our colleagues in Florida and Louisiana, but their weather patterns are different than the patterns in Virginia. So, that's not a good enough answer. You're saying you're going to be testing out in the climates of these two states, when we've got this problem happening, I imagine, around the country. So, I expect that testing to take place elsewhere.

Ms. SOUTHERLAND. Yes, sir. And I think CPSC has a full plan for that.

Ms. SALTZMAN. Good morning, Senator Warner. I'm Lori Saltzman. I'm with the Consumer Product Safety Commission. And you are absolutely right, this isn't just an issue that focuses in the southern region of our country. We are well aware that there are issues in the Norfolk area in Virginia. We've actually collected some samples down there, and we do have some investigations that are going on in some of the homes there. We do plan on sending a team down to look at some of the homes and take a look at some of the corrosion issues, just as—

Senator WARNER. I think there may be some people—

Ms. SALTZMAN.—just as we did—

Senator WARNER. There seem to be folks that are actually in the community nodding “no” in the background, so you—you're saying to me that you have got teams—

Ms. SALTZMAN. What I'm—

Senator WARNER.—that have taken samples in Norfolk.

Ms. SALTZMAN. We have received some samples from—the Chinese drywall, and we do have some investigators that are going to be doing in-depth investigations—

Senator WARNER. In Norfolk.

Ms. SALTZMAN.—in the homes—

Senator WARNER. When?

Ms. SALTZMAN.—talking to the consumers. They've—

Senator WARNER. When?

Ms. SALTZMAN.—been assigned. They should be happening within, you know, a week, and that we also are going to be sending a

team of investigators down, much as we did in Florida, and then we have plans for that.

Senator WARNER. So——

Ms. SALTZMAN. And we are well——

Senator WARNER.—again, for the record, you are sending an investigating team into Virginia——

Ms. SALTZMAN. Yes. They——

Senator WARNER.—within the next week?

Ms. SALTZMAN. They should be down there, doing an in-depth——

Senator WARNER. So, I'll expect a——

Ms. SALTZMAN.—investigation——

Senator WARNER.—report back on—when that investigating team is in Virginia and the results of that investigation?

Ms. SALTZMAN. Yes.

Senator WARNER. And we can see that within the next 2 weeks?

Ms. SALTZMAN. Yes.

Senator WARNER. Thank you.

Senator NELSON. Ms. Klobuchar? Senator Klobuchar?

**STATEMENT OF HON. AMY KLOBUCHAR,  
U.S. SENATOR FROM MINNESOTA**

Senator KLOBUCHAR. Thank you very much. And first, thank you, Senator Pryor. I am a member of the Consumer Subcommittee, and we worked very hard, as you know, last year on the Chinese children's products issue, and got some results on that. I want to thank Senator Nelson, as well, for his work on that, and Senator Martinez.

And, as Senator Warner said, we have, what, 13 States now that are seeing this? Is that correct, Ms. Saltzman?

Ms. SALTZMAN. Sixteen.

Senator KLOBUCHAR. Sixteen States.

Ms. SALTZMAN. And the District of Columbia.

Senator KLOBUCHAR. OK. And this may be just the tip of the iceberg? What I'm looking at is further down. If your tests show, as Mr. Kampf has testified here, that this is a major problem, what would be the logistics of a recall of products like this? Just how would this work?

Ms. SALTZMAN. As you've indicated, this is—the logistics could be an issue. It is not like a recall that we've had with toys. It would take into account a lot of different factors, and we'd have to rely upon, in addition to CPSC's authorities, some of the authorities for some of the other agencies, and it would require our legal division and also our compliance division, after we've provided the technical data to them, to work something out with the other Federal agencies.

Senator KLOBUCHAR. Do we have any idea how many homes this drywall was used in, nationally?

Ms. SALTZMAN. No, we don't.

Senator KLOBUCHAR. Does anyone else have an answer?

[No response.]

Senator KLOBUCHAR. Do we have any historical example of when there has been a recall like this in multiple constructed homes?

Ms. SALTZMAN. No. I am not aware of any that I can speak to, at this point.

Senator KLOBUCHAR. Now, I know you had said that the CPSC has been in contact with our counterpart agency in China, and there is continuing exchange of information. What kind of information are you exchanging?

Ms. SALTZMAN. We have posed a number of questions to them about the origin of the lined product and also about the process, and perhaps what kind of additives may have been included in the drywall. We want to learn a little bit how it's made.

We've actually—plan on going to visit China, and we anticipate that the Chinese officials will be here next week, and we are hoping for cooperation.

Senator KLOBUCHAR. And do we know how many factories this came from, this drywall? Is it multiple producers, or is it one?

Ms. SALTZMAN. Knowledge that we have is that it's more than one.

Senator KLOBUCHAR. All right. I would echo what the other Senators have said here. When you hear Mr. Kampf's story and the story of these other people, this is something that we have to do on an expedited basis. But, if, in fact, the tests show and verify what we're hearing here, this is going to be a major logistical issue for the country and the Consumer Product—

Ms. SALTZMAN. I agree—

Senator KLOBUCHAR.—Safety Commission.

Ms. SALTZMAN.—and—excuse me, I'm sorry for interrupting, but I—

Senator KLOBUCHAR. That's OK.

Ms. SALTZMAN.—I can guarantee that the staff from—the staff, all the way up to the Commission, that we're really working diligently on this, and we feel very passionate about it. We're consumers and homeowners, ourselves. And this is a very high priority for the agency. We've—

Senator KLOBUCHAR. OK.

Ms. SALTZMAN.—put a lot of resources into it, and, in addition, as I said, the staff is very passionate about helping the homeowners. Many of us have been there for decades—

Senator KLOBUCHAR. Yes.

Ms. SALTZMAN.—and this is our life's work, and we feel very—

Senator KLOBUCHAR. Very good. OK.

Ms. SALTZMAN.—compassionate about it.

Senator KLOBUCHAR. Thank you.

Senator NELSON. Mr. Chairman, in addition to Mr. Kampf's testimony, I have testimony here from five other homeowners in Florida. I want to make that a part of the record.

Senator PRYOR. Without objection.

[The information referred to follows in the Appendix to this hearing.]

Senator NELSON. Now, I think, Ms. Southerland, you get the gist, that in an emergency letter that comes to you, a reply, two and a half months later, is not acceptable. And I would expect on the basis of what you're hearing now, that the EPA as well as the Consumer Product Safety Commission, within the jurisdiction that you have be prompt.



Now, let me ask you about the tests that you've already done. As I stated earlier, Chinese drywall has three different elements, different than American drywall. One was sulfur, two was strontium, and three were organic compounds that are found in acrylic paint. What do you think about these substances?

Ms. SOUTHERLAND. Well, I think all of them have the potential for being a potential health-effect problem. We're working with ATSDR and CDC. Of course, they cannot use this kind of elemental composition information to guess at the exposure to humans by these compounds. So, the next step is to do the chamber studies that CPSC has underway, and the indoor air monitoring, because that will allow us to see which of these compounds that are in the drywall will actually be exposed to a person living in the home. So, we have to do that exposure analysis.

Senator NELSON. Now, as I understand it, there has been some jurisdictional flap, here, about who is going to pay for this next test that is critical to simulate the conditions of heat and humidity to see what gases come off of this thing. And that's why you threw it back in our laps, in order to get \$2 million for you, which we're going to do today in the supplemental bill. But, were something to happen like that, whereby we didn't get it through the supplemental appropriations bill, it is our expectation, within the monies that you have in your two respective agencies, that you'll go on and get this next test done. Is that understood?

Ms. SALTZMAN. Yes, Senator. In fact, at the Commission, we've already made some adjustments and shifted some of the resources around so that we can work on this issue, and do it as expeditiously as possible. We're not waiting for that \$2 million that—we've already made some changes. But, thank you very much. We do appreciate the efforts on our behalf to be able—and on behalf of your constituents—to be able to get these studies done.

I think, as Ms. Southerland has indicated, the next steps, after their preliminary study, is to do some of the chamber testing and the indoor testing. But, I do want to assure you that, in addition to doing the scientific testing, we're doing the appropriate investigative work, as well. We are inspecting firms. We have sent letters out to the major importers. And, most importantly, we have issued information to the homeowner on what to do if they are—have health effects or they see corrosion of the metal. And that has been up on our website, and we're also working to have a website up, that should be up momentarily, kind of a one-stop shop for the homeowners, where they can get information from all the agencies. So, we're moving along simultaneously on a lot of different tracks to be able to resolve this. And we want to resolve it and be able to provide the appropriate remedy for the homeowner, as well as be able to have the basic science and the factual information so that we could hold accountable responsible parties.

Senator NELSON. You understand that I don't want words, I want action.

Ms. SALTZMAN. I understand that—

Senator NELSON. OK.

Ms. SALTZMAN.—completely.

Senator NELSON. Now, let me just assure you that, soon, you're going to get a new chairman and two new members, and, since

they have to come through this committee, I can assure you they are going to be educated, by the time they get confirmed, about Chinese drywall.

Ms. SALTZMAN. I can assure you they will be educated.

[Laughter.]

Ms. SALTZMAN. If they're not already educated.

Senator NELSON. I can tell you, the Chairman-to-be is already educated. So——

Ms. SALTZMAN. Well, this——

Senator NELSON. So, you're going to have the leadership that is going to try to tackle this issue.

Now, let me come back to Ms. Southerland. Of these three elements that you found in this test, would you expect to find those elements in American-made gypsum drywall?

Ms. SOUTHERLAND. The four samples of gypsum that we took, we didn't find any sulfur at all. We did find some strontium, at lower levels, granted; but, again, it's just four samples. And the propanoic acids that we found look like they're associated with paint, so we actually do have to do further checking there to see if it's really the gypsum itself or it's the paint that was on the gypsum.

The Chinese drywall was taken from a house, so it was painted; where, the U.S. drywall we looked at was unpainted, it was stock material. So, we have a little additional work we have to do on that.

Senator NELSON. Here is some Chinese drywall for you. It is not painted. We sawed it out of the wall, in that picture that I showed you, so I've got some for you, right here, without paint.

Ms. SALTZMAN. In addition, we have some samples that haven't been put into homes yet, and so, that's a very valuable type of sample, from a scientific standpoint, because it's something that isn't in the home and it hasn't had the ability to absorb anything else. So, we do have a number of samples that we'll be testing.

Senator NELSON. Ms. Southerland, is it possible that the Chinese added some chemical or element during the production process, like a fungicide?

Ms. SOUTHERLAND. Our data doesn't show that, to date. What we're going to have to do, I think, is take a look at, once we get into the chamber testing, exactly what is off-gassing from the drywall. All we have from our samples—unfortunately, these elemental characterizations just tell you the total number of compounds that are actually inside the drywall, and don't give you an idea of what a human would be exposed to. I——

Senator NELSON. Is it possible that the Chinese company would have recycled old gypsum board as part of the production process for this so-called new wallboard?

Ms. SALTZMAN. Actually, those are some of the questions that we are trying to answer, ourselves.

I do want to indicate, also, that—not to get too bogged down in the science of some of the testing program, but to follow on to what Ms. Southerland has mentioned—is that, after we conduct some of the elemental analysis to find out what's in some of the drywall samples, again, the chamber studies that we're going to be conducting, we're going to be able to isolate and characterize specific emissions. And then we're also going to be doing an in-home study,

where we're going to look at the emissions that are within the home environment. And we're also going to be able to look at the emissions behind the walls, and that's going to be a great bonus to the scientific evidence, to be able to pinpoint it and link it back to the drywall.

Senator NELSON. Ms. Southerland, if, in this subsequent testing, the EPA finds something in the drywall that is a regulated chemical, hazardous to human health, what will the agency do about it, and how fast will you do it?

Ms. SOUTHERLAND. Well, I think then we would have to look at the evidence that we have and the authorities we have available. So, we have some opportunity, under our Toxic Substances and Control Act, to look at the regulation of products, but I think that would just have to be something that we looked at after we got some evidence.

Senator PRYOR. Let me, if I may, give a brief update—we hear that there is a vote coming on the Senate floor soon. We heard it was going to be at 11 o'clock, and it's 11:20, they haven't called it, so—that's what we call "Senate time" around here. But, anyway, they're working through that, and they're trying to get that called.

So, let me go ahead and turn it over to Senator Warner and get him to ask some questions, and then we'll go to Senator Klobuchar.

Senator WARNER. Thank you, Mr. Chairman.

I guess one question I would have is—and I think Senator Nelson is asking the right questions, in terms of finding the analysis, the source, and how bad it is. But, for either Ms. Saltzman, Ms. Southerland, Dr. McGeehin or Dr. Krause, what do you say to Mr. Kampf during the meantime?

Ms. SALTZMAN. I think what I—

Senator WARNER. Do you say, "Just suck it up?" What do—to you—what's the answer—

Ms. SALTZMAN. No—

Senator WARNER.—in the meantime?

Ms. SALTZMAN.—absolutely not. I think that what we have said, and what we will say, is that if a homeowner does have health symptoms, they absolutely, the first thing, should consult with their physician. And if they find that there is corrosion in their home, and they are concerned, and they feel that it's affecting the wiring in their home, then they need to contact an electrician. If there's a belief that there is something that's affecting the gas fuel piping, absolutely get out of the house, call up the utilities.

Senator WARNER. And other than saying, "Go see a doctor," what relief?

Ms. SALTZMAN. We don't have the relief, we don't have the answer, at this point. We don't know the causative agent. And I think the relief is going to be something that's probably more than what the Consumer Product Safety Commission will be doing alone. As we indicated before, this is going to be an effort that's going to have to be addressed by other agencies.

I do want to remind you, though, I'm a toxicologist. I really can't speak for the agency. I can't speak to the legal issues. And I can't speak to the compliance or the policy issues.

Senator WARNER. Mr. Kampf, I don't know whether that was the reassuring answer you were looking for.

Mr. KAMPF. With all due respect to the answer, I'm not sure—I'm not the only one in this situation. There are——

Senator WARNER. I understand that, sir.

Mr. KAMPF.—many other families that I would like to make sure that I represent during this testimony.

But, it's disheartening to know that—I worked for the Federal Government for 37 and a half years, and I know how long it takes to get things done. And it's unfortunate that if I'm going to—I'm on the other side of the table now. If it takes that long to do it, to get remediation, I can't afford to just lift my family up and move to another house. I still have—as Senator Nelson said, I still have a mortgage to pay, and the banks are going to come after me if I don't pay it. So, I would like to see something done quickly, more quickly than I'm sure anybody at this table would like to say, but I want it done quickly. I don't know how that can happen, but I just really feel—I feel left, sort of, up in the air, and I'm not sure what to say.

Senator WARNER. Senator Nelson, I know you and the Chairman have taken the lead on this. Is there any ability to look at FEMA assistance or other assistance? The notion that we're going through the appropriate scientific analysis—but the appropriate scientific analysis, sounds to me, could take additional months. In the interim, you have, again, a financial hazard, but, even worse, a health hazard.

I mean, Dr. McGeehin or Dr. Krause, do you want to make a comment, here?

Dr. MCGEEHIN. Senator, we are moving as quickly as we can. And I think everybody at this table realizes the urgency of this, but we do have to have scientific data on which to base it.

Right now, I haven't seen any data that really tells me what the people are being exposed to. I have some pretty good ideas, based on what was found in the elemental work and what's happening to the metal in the homes. I think there's no doubt that there are corrosive materials in the air, and, I think, based on the information I've looked that came out of Louisiana and Florida, that there's no doubt that that corrosive material is causing health problems. I think that's true.

I still think we have to get good exposure data on which to base our decisions, and we're moving as quickly as we can on that. Once that happens, from what I have seen of this issue, I think it's going to be difficult to determine what the next step will be, because one of the—when we dealt with a similar issue with formaldehyde in trailers, we had a nice listing of who was living in which trailers, and we were able to sample around that, and we had FEMA that had a roster of people, and they were able to move the people out of the homes. One of the questions that's come up repeatedly in this issue is, Do we know how many homes are affected? Do we know where those homes are? Do we know how many people are in those homes? There's a tremendous number of variables that have to be dealt with before we can even talk about what the remediation might be in this situation.

But, I want to convey to the Senators that the agencies that are working on this do have a sense of urgency about it, and do understand what this gentleman and other people are going through,

since we all have houses and we all have mortgages, and we all know what would happen if that happened to us. But, we do have to have at least some scientific data that tells us what the compounds are and where they're coming from before we can decide on what the remediation should be.

Senator WARNER. Dr. Krause, do you want to add anything?

Dr. KRAUSE. Senator, Florida has moved forward in a direction to, not only identify some of the compounds that have been—that are being emitted from the gypsum drywall imported from China, we've identified three compounds that can be detected in the laboratory. And we've also reached out to some of the consultants for builders who have conducted testing in homes. We've seen what is, considerably, a small database of 79 samples taken in homes by one builder's consultants, Environ International. However, these data are very sparse. The concentrations that are demonstrated are very low, in the low parts-per-billion range. And these—it's difficult to reconcile the amount of corrosion that we're seeing in these homes with the low concentrations.

However, the symptoms that are being described by homeowners are fairly consistent, but they're also very ubiquitous. It would be hard to find a group of people that hasn't experienced some of these symptoms.

We do need to validate the estimated number of homes that are affected, because that tells us how many homes we need to be testing and looking at, overall. We also need to conduct the wide-scoping study to measure these chemical exposures.

I'm not only concerned with the primary corrosive gases, but the interactions those gases may have with other household chemicals—paints, varnishes, and the like—and secondary compounds that are created from those chemical interactions. And that has not been examined to any detail.

We also need to determine the risks of—the corrosion has with fire and electrical-shock hazards in the homes. We've reached out to State fire marshal's lab, and they're moving with some preliminary studies to evaluate the effects on smoke alarms and carbon monoxide alarms.

Senator WARNER. Is there interim advice you can give to these homeowners, in terms of fans or other things that would circulate?

Dr. KRAUSE. Well, we have. On our website, we have what we believe to be some of the most comprehensive data and information to, first, determine if your home is affected. We have a self-assessment guide that includes photographs, images, a walk-through for the homeowners, but which does seem to be very helpful, and at least people who think they may have the problem, they can at least rule themselves out as to not having this problem. And we've received positive feedback there.

We've also got links for the people to communicate and participate in a survey with our county health departments that's capturing some demographics information, as well as to register a complaint with the attorney general's office.

Senator WARNER. What do you tell them to do to mitigate the circumstances if they can't afford to move out in the interim?

Dr. KRAUSE. We currently do not have evidenced-based or scientifically based recommendations. Here's one of the problems. In

Florida, we have a lot of heat and humidity, as is well recognized. Simply opening the windows could exacerbate the problem. By increasing the humidity in the homes, you may actually increase the rate at which the compounds come out of the drywall. Also, in—opening the windows increases the amount of condensation that forms on the air-conditioning coils, causing them to fail at a faster rate.

Filtration has been recommended, or is being look at by some of the manufacturers. However, I have very tempered expectations for these filters to actually be able to remove these compounds from the air at a decent rate.

Senator PRYOR. Senator Klobuchar?

Senator KLOBUCHAR. Thank you very much.

Dr. Krause, I was listening, here, thinking, in Minnesota we like to open our windows when it gets warm because we're closed in. And the thought that these people who have these homes—and they're in areas like Florida, Louisiana, or Virginia—can't even open their windows because they think it might make it worse. It shows to me how enormous this problem is and how little we know about how extensive it can be and what they should do. I mean, I can't imagine having a home and being told, "Oh, you can't open the windows, because it might make your kids sick."

And so, one of the questions I had is for Dr. McGeehin. I know that Senator Warner explored this with you some, but you said you were not exactly sure what the causes are, but you have some suspicions. And I would think the corroding that you're seeing with the shower stems and those kinds of things certainly is a clue. But, you said you have some ideas. Could you elaborate on that?

Dr. MCGEEHIN. Well, I think we have—we have data that's pointing us toward sulfur products. The elemental analysis that was done by EPA/ERT found sulfur in the Chinese drywall. And I—my understanding is that some of the preliminary data that was taken by builders and others found some sulfur products in the air.

Again, I think you're getting it from all panel members, that we need more valid data, and we need to have it in realtime situations, in the homes, with the temperature and humidity.

But, I—what'll happen is, what—went the scoping visits are done, and the more comprehensive analysis is done, what this normally does is, it begins to focus in on the compounds that might be causing the problem, and then the future analysis can focus on those. It could be done more rapidly, and it could be done more extensively.

I would think that we may end up focusing on sulfur products, but there may be some other compounds in the air that we need to look at and eliminate first.

Senator KLOBUCHAR. I chair the Subcommittee, in the Environment and Public Works Committee, on children's health. And a lot of times we see, with these types of problems, that kids aren't just little adults, that they actually can suffer more and be more affected by toxics in the air. Do you think that's possible here?

Dr. MCGEEHIN. Yes, it's possible here, Senator, for the various reasons that you just mentioned. They're not little adults. They breathe at—actually at a different breathing zone for gases; it may be important. They are developing many of their systems that can

be affected. And—including the respiratory system—and they, in fact, frequently are impacted to a greater extent by environmental contamination than full-grown adults.

Senator KLOBUCHAR. And are there kids who are showing some of these symptoms?

Dr. MCGEEHIN. From the data that I have seen from Louisiana and from Florida, that many of the people who are calling in to the hotlines are reporting that their children are having symptoms similar to what the adults are seeing—upper respiratory irritation, sometimes asthma exacerbations, scratchy throat, runny and burning eyes, that sort of thing.

Senator KLOBUCHAR. And you mentioned that it's possible these are symptoms you'd see with other colds or other diseases. Is it also possible—is it also possible we're seeing an under-reporting because people think they have colds and other things?

Dr. MCGEEHIN. Oh, certainly. I think whenever the—when you have reports of people who have to call in to hotlines, you can have under-reporting, you can have biased reporting. But, it does give us an indication, when we're seeing, through two different States, through two different systems, some symptoms that are showing up regularly. And I think that we are seeing some consistent symptoms.

Senator KLOBUCHAR. AND—

Ms. SALTZMAN. I can tell you that we've had consistency in the data that we've collected from the 16 states where we've had reports, that there is a commonality to the symptoms.

Senator KLOBUCHAR. And do a high number of these show this corrosion on, like, the shower heads and things like this, too?

Ms. SALTZMAN. Yes.

Senator KLOBUCHAR. I would think that once you see that, and then you see the symptoms—

Ms. SALTZMAN. Right.

Senator KLOBUCHAR.—it's hard to think that they may not be connected.

Have you seen this, Mr. McGeehin, in other construction materials before—not these exact symptoms, but there have been—are there examples—I keep—I keep trying to draw on history, here, because, to me, this seems like such an enormous problem with these construction materials and figuring out, then, what to do with these homes, and recalling and tearing up walls. And I just—have you seen this with other construction material? I suppose asbestos has been a problem in the past. Do you have other examples?

Dr. MCGEEHIN. Well, basically, what you're seeing with some of these symptoms are what we frequently see when we have indoor air contamination. Something you may have heard of, called “sick building syndrome” frequently has symptoms like these, where people have upper respiratory, they have—more often, they have colds and flu-like symptoms. So, it's not unusual to see these types of symptoms when we're dealing with environmental contamination.

Now, your specific question, Senator, Have I seen this with building materials? CDC hasn't done a lot of work with building materials. And I think—if you're thinking about history, I think this particular exposure, and the way it's developing, is historical. I don't think we've seen this before.

Senator KLOBUCHAR. How about in China? It's pretty humid there. I was just there. Have they had reports, or in other countries, of things like this?

Ms. SALTZMAN. We haven't heard of any in China. I'm not sure what kind of construction, building construction they have, if it's similar to the type of construction that we have in the United States.

I do want to add something else. When our team did go down to Florida, they did experience the same kinds of symptoms that have been reported—

Senator KLOBUCHAR. You mean your team that went just to visit and do the—

Ms. SALTZMAN. Yes.

Senator KLOBUCHAR.—testing?

Ms. SALTZMAN. They did go—they went into the homes, and they—in fact, they were in the home with the gentleman down the—

Senator KLOBUCHAR. And so, it happened really quickly. It's not just—

Ms. SALTZMAN. Yes.

Senator KLOBUCHAR.—cumulative over time?

Ms. SALTZMAN. Yes. Yes. They noticed, when they came into the house, that they experienced some of the symptoms, as well. And I think last month, when we were here talking to Senator Nelson, we did discuss that with him.

Senator KLOBUCHAR. OK.

Ms. SALTZMAN. That—

Senator KLOBUCHAR. Well, that's somewhat startling, I would say, that people can just get it from walking in the house.

My last question, here, would just be—I know that you said, Dr. McGeehin, or maybe it was you, Ms. Saltzman—just the problems of trying to trace all these construction materials and this drywall, and how you would ever do this. I would say, in response to that, we have traced faulty products before. And we've done this. People have to say, where they got their products, where they ordered them, and then you have to trace them back to what manufacturing place that they came from. I mean, that's what you've done with other kinds of products. So, I don't buy that it's just impossible to figure out where these products came from.

Ms. SALTZMAN. We're not saying it's impossible, we're saying that it's challenging, but we are taking—

Senator KLOBUCHAR. OK.

Ms. SALTZMAN.—an approach, and a very—

Senator KLOBUCHAR. All right.

Ms. SALTZMAN.—aggressive approach.

Senator KLOBUCHAR. OK, very good. Thank you.

Senator PRYOR. Let me make one observation for our Federal and State witnesses, and that is, this is a very time-sensitive problem. And I'm reminded a little bit of a conversation I recently had with Secretary of Commerce Locke, where, when they were trying to figure out how to allocate some of the stimulus money and take care of some of that, his professional staff said, "Well, it's going to take us about 6 months to go through this process." And he said, "You know, this is economic stimulus money. We don't need 6



months. We need it in 6 days." And so, he cracked the whip, and he got them to do it.

And I know that everybody's working hard on this, but I would encourage all the Federal and State agencies to work overtime trying to get to some clarity on what we're talking about here. And I understand, with the scientific issue, some of that does take time, and you've got to be careful, and you have to do it right, and I'm not saying cut corners and don't do it right. But, I would just strongly encourage our Federal and State folks to really work together and get to a good understanding of what we're dealing with here, and then take the appropriate action.

Senator Nelson?

Senator NELSON. Dr. McGeehin, as you put together the draft fact sheets for medical personnel, share with the Committee what symptoms you're telling the doctors to look for.

Dr. MCGEEHIN. The same symptoms that you had spoken about, Senator, and that I mentioned earlier and that we're seeing with two—both hotlines from the States, the upper respiratory irritation, the eye irritation. I can't remember the fact sheet verbatim, Senator, but I believe we do talk about the potential for asthma exacerbations, but I'm not certain of that. But, the symptoms that we are seeing in both of the States that have the hotlines going.

Senator NELSON. Have you seen these kind of symptoms in exposure to other chemicals in other cases?

Dr. MCGEEHIN. Well, these—in industrial settings, yes, sir.

Senator NELSON. And give us an example. What type of cases?

Dr. MCGEEHIN. Well, these sorts of—these sorts of symptoms can come up when you're dealing with sulfur compounds in industrial settings. Hydrogen sulfide can cause these sorts of symptoms. Carbon disulfide can cause these sorts of symptoms. There are other reagents and products that may cause these symptoms. But, this—these symptoms would not be out of line with what we might see with hydrogen—I mean, sulfur compounds.

Senator NELSON. Dr. Krause, you're the State toxicologist. How many homes do you think need to be tested before we get helpful test results?

Dr. KRAUSE. Senator, we may be able to see something in the preliminary testing of the three homes. If something's—jumps out and is obvious—an obvious health hazard from that, we would certainly report that.

However, the more perplexing question comes if nothing—no specific or group of chemicals appears to be at levels that would explain the symptoms or the corrosion, where a much greater understanding is necessary. That goes back to understanding the number of homes that this may have been used in and test—and installed. So, it's going to be well—you know, well past and into the dozens, if not hundreds, of homes that need to be examined.

We may not reach statistical significance, is the point I'm trying to make. However, we can achieve some useful information by looking at a variety of the construction styles, types, sizes of homes, whether it's a townhome or a 7,000-square-foot home. We need to look at a variety of construction types and styles.

Ms. SALTZMAN. Senator Nelson, if I might add that, looking at some of the drywall samples in isolation in the chamber studies

that we're going—testing that we're going to be doing, will also provide some evidence for what actually is coming off the drywall, and it would actually then dovetail into in-home studies. I can assure you, we don't have to wait til every single piece of data is collected in the chamber before we start the in-home sampling. And as we're going through the in-home sampling, if something looks like it's jumping out at us, and that seems to be the direction we need to go, we will actually take every step we can to expedite the testing and move in that direction.

Senator NELSON. If you find that there's something hazardous, and you come to that conclusion, do you recommend, then, to the board of the CPSC, that they take immediate action with regard to stopping importation of this material?

Ms. SALTZMAN. As a scientist, I would provide that data to the senior managers, and it would be up to them to make those kinds of decisions.

Senator NELSON. OK. Also, let me ask you, the CPSC has entered into talks with the Chinese government; specifically, the Chinese product safety regulator. And I think that they call it the Administration for Quality Supervision and Inspection and Quarantine.

Ms. SALTZMAN. Yes.

Senator NELSON. What information have you received from them?

Ms. SALTZMAN. There have been regularly scheduled phone conversations. We have posed a number of questions to them. We are hoping that they're going to be cooperative, and we'll receive answers to those questions when they're here, early in June.

Senator NELSON. Three, possibly four, Chinese drywall specimens have been identified—Dragon, Tashon, and CNM—and they are associated with the Chinese National Building Materials Company. And it's fully owned by the Chinese government. So, has that organization that I talked about, the Administration for Quality Supervision and Inspection and Quarantine, or the Chinese Ministry of Commerce—have they turned over any records from those companies to you, the CPSC?

Ms. SALTZMAN. I'd like to be able to get back to you on that. I wouldn't be at liberty to discuss, in public, particulars about companies, but we'd be very happy to get back to you on that.

Senator NELSON. Have they agreed to allow any plant inspections?

Ms. SALTZMAN. We're planning to go over to China. I don't believe that we've gotten a commitment at this point. I will have to get back to you on that.

Senator NELSON. Well, how about another company, Knauf Tianjin, have they turned over any records?

Ms. SALTZMAN. Again, I can't discuss specific companies, with the public here. I—but, we'd be happy to get back to you.

Senator NELSON. All right, let me tell you, not only is the time clock clicking here with regard to people's health, but this is almost the 1st of June, and, later in the year, the President is going to China. And clearly, this should be on his agenda because at the end of the day, if this thing is really a problem, as it looks like it is, you're going to have to get the cooperation of the Chinese gov-

ernment to crack down on it, which, by the way, was the problem with the Chinese toys. The Chinese government was not requiring the Chinese manufacturers to meet the safety standards that they ought to have met before they exported the toys to the United States.

Ms. SALTZMAN. Yes, we understand the importance of this investigation and of your questioning. We are looking at several different avenues. We have contacted a number of companies. We've done some inspections. As I said, we'll be happy to get back to you with some additional specific information.

Senator NELSON. All right. You can answer this question because you have jurisdiction over stopping the importation of these products. Tell me, how much of this stuff was imported?

Ms. SALTZMAN. I'm sorry, I can't give you that answer.

Senator NELSON. Well, are you—

Ms. SALTZMAN. I will get back to you on that.

Ms. SALTZMAN. As I said before, I'm a toxicologist. I will get that answer back to you.

Senator NELSON. Well, the lady behind you seems to have answers. Would you come up and identify yourself? Come on up to the microphone. Identify yourself.

VOICE. I'm the general counsel. And what I—Ms. Saltzman just doesn't have those facts.

Senator NELSON. OK.

VOICE. But we can get you those facts.

Senator NELSON. You do—

VOICE. I don't have them right with me, either, but—

Senator NELSON. All right. You—

VOICE.—we'll get—

Senator NELSON.—would have the answer to this question. Are you working with Customs and Border Protection to obtain this information of how much of this stuff was imported?

VOICE. Yes, they've given us that information, and, as we explained when we were here on April 30, the difficulty there is separating out the sheets of drywall for the walls from ceiling tiles, two different products. But, we're working with them on that, and investigating further on those numbers, and we'll provide you with all of that as soon as we have those numbers.

Senator NELSON. Well, you just told me something I didn't know. We could have this problem in ceiling tiles?

VOICE. No, no. I'm just saying that the way that codes work for—the tariff codes—it covers more than just drywall sheets. So, we have to sort out how much of that's drywall sheets and how much of that is ceiling tiles, which do not appear to have that problem. So, we're just trying to get the right numbers, and it's an academic exercise. We've got 44 or more letters out to importers, trying to figure out who got the actual drywall sheets so we can have those answers for you.

Senator NELSON. OK.

Mr. Chairman, I've just got a couple of other quick areas I need to cover here. I thank you for holding this hearing because I think we're getting the word out on the problem.

Senator PRYOR. I want to thank you for your leadership because this really is your hearing. This is your request and you've done a great job asking good questions.

Senator NELSON. Well, you're very kind, but we've got a problem, here, and we've got to get to the bottom of it.

Now, because there is a problem, and we're all working on it, and we thank you for that, and, despite my irritation, I am appreciative to you for what you're doing. It's been way too slow, but I think we're now all in the harness, pulling in the right direction.

Now, we've got another situation that we've got to address, and that is the lack of public information. In the last week, the CPSC has posted a drywall information package on its website, and we appreciate that. Do you think it might make sense for the agencies to work in a unified information portal so the public can see the information collected by all of you Federal agencies, and to see that in one place? Is this something that has been discussed?

Ms. SALTZMAN. Yes. In fact, we are—we'll be launching something, in a very short timeframe, where it's going to be one portal, like we have for *recalls.gov*. It'll be something similar to that, where there'll be information from each of the Federal agencies.

Senator NELSON. OK. My concluding comment would simply be, what I want you all to do—I won't take this stuff out, because I was handling it all of yesterday, and I washed and washed my hands afterwards. I want you to take a piece of the Chinese drywall and look at it in a cross-section. And then I want you to take a piece of American drywall. And hold them up next to each other. And what you'll see is, first of all, that it's much denser in the American gypsum drywall. And you can see that with your naked eye. Whereas, there is a lot less consistency in the Chinese drywall, and it's not nearly as dense. That suggests to you that there is obviously, just by looking at it, something different and that we are now finding out these compounds are coming off.

So, let's all get in the harness and pull together and get this problem solved. And then, on down the road, we've got to figure out what in the world these people are going to do. They can't afford to rent and still pay their mortgage if they're not living in the house. I don't know what the solution to that is. Senator Warner has raised that problem. Does it come in with FEMA? I'm not sure that's a direct issue of FEMA. But, after a natural disaster like a hurricane or an earthquake, FEMA steps in to provide temporary housing for people. So, we're going to have to look at something like that because these people are no less affected by a tragedy than the victims of a hurricane or a flood or an earthquake.

So, thank you, Mr. Chairman.

Senator PRYOR. Thank you.

Senator Warner?

Senator WARNER. Thank you, Mr. Chairman. Just a couple of quick comments.

One, thank you, Senator Nelson, for your advocacy on this issue and your leadership. And, again, Mr. Chairman, for the hearing.

I'll be very brief. One, I want to thank Ms. Saltzman for that commitment that we'll have teams in Virginia within the next week, and that your agency will get back to me within 2 weeks at

least indicating how many places you've tested. And I thank you for that, and I'll expect to see that back within 2 weeks.

I would also tell you that—echoing what Senator Nelson suggested, I understand we've got to continue to do the testing. I understand we've got to continue to do the health analysis. But, for gosh sake, the sooner we can get out information to folks who are living with these circumstances on what they can do in an interim, until we get some total resolution, it's stunning to me that we have people going in and testing, and having symptoms from going into these homes to do the tests. We're leaving the homes and then saying to the homeowners, "Hang in there." That's outrageous. And I understand that means you've got to translate that into constructive action. We will look, from the FEMA side, but we desperately need that advice for folks on what they should be doing during this interim period.

And I, again, commend Senator Nelson. But, we hear you, and I think—again, Senator Klobuchar mentioned this earlier—with the number of States continuing to increase, I fear that we are at the tip of an iceberg of what could be a natural and national disaster that is both a healthcare disaster and, for many families, going to be a financial disaster.

Thank you, Mr. Chairman.

Senator PRYOR. Senator Klobuchar?

Senator KLOBUCHAR. Yes, let me end by saying this—I became interested in the consumer product issue, the children's toys issue, and we had a little boy, named Jarnell Brown, who lost his life. He was 4 years old, and his mom got a pair of tennis shoes, and she got a charm with them, and he swallowed the charm. And he didn't die from choking, he didn't die from his airway being blocked; he died over a period of days, when the lead in that charm, which was made in China, went into his system. And it took years to pass that law in Congress to ban these kinds of products and to increase the work that was being done.

And so, that's why I share my colleagues' urgency, here, that we do everything we can to test, to figure this out, that we can't just simply say this problem is too big to solve, these homes are too big to fail. We just have to say that we are going to figure this out, and, once we figure out how toxic this is and if it is truly causing these symptoms, including to workers that just go and inspect the houses, that we are then going to have to take some action.

And it's going to be complicated if, in fact, the evidence bears out what we seem to be hearing, but we can't let that be the reason we don't do anything. Because, we heard that with the consumer products, as well, "Well, it's too hard to trace where they are. We don't know where they're coming from. They're from foreign countries; we may not have jurisdiction." We got to the bottom of them, and, at least we have seen a reduction in the number of recalls in recent years. It's a very different type of analogy, but we heard some of the same arguments on the other side.

So, I want to thank you, and urge you to move as quickly as possible so we don't have other Mr. Kampfs testifying here.

Second thing I would say is, I'm very concerned of the effect on kids of this. We've seen, time and time again, that these toxic chemicals have a greater impact on small children than they do on

adults. So, I hope that's something that you will be considering as you go forward.

Thank you.

Senator PRYOR. Thank you, Senator Klobuchar. And, again, thank you for your leadership and for your advocacy on this.

Mr. Noel, I would hate for you to get out of this hearing without answering a few questions. So, now it's your turn to be in the hotseat. Let me ask, if I may—you are a homebuilder, as I understand it.

Mr. NOEL. Yes, sir.

Senator PRYOR. And you are here on behalf of the homebuilders.

Mr. NOEL. Yes, sir.

Senator PRYOR. Tell me, if you can, about the homebuilders' experience with this product, when you found out there was an issue, and what you've done to try to take care of it.

Mr. NOEL. Yes, sir. As my documents show, I'm from New Orleans, and we had to live, after Katrina, trying to reproduce houses as fast as we possibly could, because so many houses were affected. And all—every one of those houses had to have drywall put in them. The demand for drywall was at an incredible height, and to get those houses and places for them to—people to live that were affected by the storms, we needed drywall.

Typically, a homebuilder, when he orders the drywall, will order it, his subcontractor will get the material, you'll order the size of the drywall, but you won't specify the manufacturer of the products, and you count on the manufacturers testing the material and the government agencies making sure that the product comes over and it's safe, also that the material has to meet the building codes, the ASTM standards. And so, when we receive materials and build the homes, we don't particularly know what's in the product; we're not chemists. We're trying to get the homes up as fast as we possibly can.

We first got information about problems with this in November of 2008. We had a reporter from South Florida call the Home Builders Association of Greater New Orleans, asked about the Chinese drywall and the problems with the air-conditioner coils. Immediately began to call our builders and our sheetrock suppliers to find out if we'd had any reports similar to what was in South Florida.

The first report we got was in January 2009. A gentleman in—had reported that he'd changed out his AC coils three times. A local news channel ran a media report on the Chinese drywall for about a week, and then the reports began to flow in.

The major concern—and I will say this about builders—builders are hurting as bad as those people that are in those homes, because they want to do something with it. The problem is, it is a most inopportune time, because the economy is so bad and builders have seen values of their properties cut in half, the banks aren't cooperating, and it makes it difficult, because you don't have the assets or the liquidity to go in and help those folks. And it hurts.

The larger builders, the publicly owned builders who have that revenue sources, can do those things, but the small and medium builders that don't, can't.

The insurance companies have—so far, as like anything else, are backing up and don't want to step in and do anything about it. And the most important thing today is, we have to figure out how quickly we can get in and remediate these problems for these folks. Where is that money going to come from to do that? We're estimating this is probably \$100,000 a house to gut the house and go back and put in new drywall. Meanwhile, they have to live somewhere, they have to move their furniture out, et cetera. And it's hard to help them when you don't have that kind of money.

And we need—the only place that we can figure out that that might come from immediately might be the Federal Government, because ultimately the manufacturer of the product should be responsible for it. We've had product defects before. Generally, a manufacturer who wants to stay in business will show up and take care of the problem. In this situation, it was another country. And from our perspective, we can't—we need the Federal Government's help in that regard.

Senator PRYOR. Let me ask, if I may, a follow-up on all that. You indicated that you first became aware of this at some point—I think you said November 2008, and then in 2009, more cases presented themselves. Are you saying that none of your members recognized this on the way in, that there was something different about this board? I mean, did it have a different smell or a different texture? Were there any red flags before it was installed?

Mr. NOEL. That's what was interesting. We—when the reporter called, no one had heard about—we knew that there was drywall that was imported, that it was different; largely it was heavier, sometimes more brittle. But, no indicate whatsoever that it would off-gas or that there was a different compound in it that might cause a problem at a later date.

The only thing I can think is—of course, when we build houses, they're open. And when we move people in, they rely on their air-conditioning system, and, at that point, since we're trying to make our homes more and more energy efficient, we're making them tighter and tighter and tighter, that that off-gassing begins to show up in the air-conditioning coils, because all the air in that building is going through that air-conditioning coil.

Senator PRYOR. OK. Let me ask this. And I'm just asking for your impression. I know you don't have any empirical data on this. I'm not going to hold you to that kind of standard at all. But, just based on your familiarity with the issue, it is your impression that all of the Chinese drywall that was used has this problem, or just a percentage of it, or can you give us a feel on that?

Mr. NOEL. Yes, sir. We—the builders that have used it, and discovered they used it, have began testing, using private firms, some of the same ones that are in Florida. And not every house is tested with the same materials. So, it's a presumption that some of the Chinese drywall has the sulfur in it, and some of it doesn't. That's part of the biggest problem, is we need a reliable protocol for testing that everyone can rely on to determine whether that product has it or not, because currently anyone that has China—"Made in China" stamped on the their drywall, their house is—as Mr. Kampf pointed out, is worthless. And some type of certification process to

say you don't have it would help tremendously in the marketplace for those folks that may not have it.

Senator PRYOR. And let me ask this. Again, I'm not going to necessarily hold you to, the exact precise correct answer, here, but is it your understanding that, generally, as an industry, you have all blacklisted this product? In other words, is anybody—if any is offered out there on the marketplace, are the homebuilders willing to continue to install it after this?

Mr. NOEL. Oh, I can—I can just about guarantee you there won't be any homebuilders buying "Made in China" sheetrock, because it would obviously be very difficult to sell a home that had that in it.

Senator PRYOR. Yes.

Mr. NOEL. Typically, when you find out there's a problem with a product and you're a homebuilder, because you have to market to the public, and particularly in this instance, where it is so public, you steer way away from any kind of product that might potentially have the problem.

Senator PRYOR. Let me ask another follow up that you alluded to earlier. You didn't really get into it, and I know it's an unpleasant topic, but your industry's going to have to deal with it, and that's your legal liability. I'm assuming that some of your members are in litigation on this right now.

Mr. NOEL. Actually, in the State of Louisiana, they have not included builders in the litigation. I know they have in Florida. I don't know why. But, largely it's been back at the suppliers and the manufacturer.

Senator PRYOR. And I assume you're not a lawyer, and I'm not asking for a legal opinion—

Mr. NOEL. No, I'm not.

Senator PRYOR.—here, but I know that one of the things that homebuilders have to deal with frequently is an implied warranty of habitability. And maybe some States may call it something else, but basically a warranty of habitability. To me, it seems that that implied warranty would come into play here if you have installed a product, even without your knowledge, but you've installed a product that may be harmful to the inhabitants and the systems and the value of the home. Have you all, as an industry, talked about that? I mean, don't you think that you have liability, based on the warranty of habitability?

Mr. NOEL. Therein lies the question, why we need a test to know for sure the habitability and the health effects of the product. All these things are still up in the air. Yes, there are places that have habitability in their warranty requirements, and—but, for the most part, the general liability insurance companies, the warranty insurance companies that warrant houses for construction defects, et cetera, are backing off. And the questions that need to get answered are, (a) what you've discussed all day today. What—how do you test it? What's an acceptable level, an unacceptable level? And how does it affect your health? Until we get some definitive answers like that, it's going to be difficult to answer that habitability question.

Senator PRYOR. Yes.



Ms. Saltzman, let me ask you, if I may—you maybe touched on this earlier, but I don't think in detail—and that is, as I understand it, the CPSC has jurisdiction over this, up to a point. And am I correct when I say that once it is installed and becomes a fixture in the home, the CPSC may lose jurisdiction and other Federal and State agencies would have jurisdiction at that point?

Ms. SALTZMAN. It is a complicated issue. As I said before—I hate to repeat myself—I'm a toxicologist. I'd hate to be able—hate to be speaking about the jurisdictional and the legal issues.

Senator PRYOR. I think that's the status of the law, if I understand it. And the reason I bring that up is because, to me, that makes your job harder. The CPSC is, and actually should be, the lead agency on a lot of this, should be coordinating, should be working with CDC and others, and even EPA and all kinds of other folks. And you have to do that. And I understand that. But, at some point, you know, it probably will have to be a larger solution than just purely CPSC.

Ms. SALTZMAN. Yes. I would——

Senator PRYOR. And——

Ms. SALTZMAN.—tend to agree with you.

Senator PRYOR. And, again, what I would encourage all of our Federal and State folks to do is just work together and try to come up with that solution. And I do think CPSC will have a huge part of that, but there will be others that have to play a pretty major role in that solution, as well, as we go through this.

Ms. SALTZMAN. Yes. I think I can speak for the other agencies that are here at the table, as well as staff from other agencies that we may have to call upon. As I said before, I think we're all working very diligently and aggressively. We are all homeowners, and we understand the issues and the concerns for the homeowner.

Senator PRYOR. And I hope that everyone will work with a sense of urgency just to try to get this done.

Ms. SALTZMAN. Yes, we are.

Senator PRYOR. And also, Ms. Saltzman, before I let you go, I want to say that we really appreciate the professional staff at CPSC. We understand, as a subcommittee, because we've been trying to address a lot of the issues in that agency for a while now, about the funding restrictions and the attrition rate and the lack of a modern lab and all the other issues there. We're not asking you to make bricks without straw, and that's one of the reasons why Senator Nelson has been so insistent to make sure you get a few more resources, to make sure you have the ability to get this done, and get it done very quickly. And I appreciate your testimony earlier——

Ms. SALTZMAN. Thank you.

Senator PRYOR.—about your not waiting on the appropriation. If new dollars do come, you're not waiting on that, you're going ahead and acting without that. So, we appreciate that very much.

Ms. SALTZMAN. Thank you very much.

Senator PRYOR. And with that, what I would like to do is leave the record open for 2 weeks and allow Senators who couldn't be here today to ask questions.

I apologize that we hurried so much in the beginning, because it's 12:10 now, and we're still waiting on that 11 o'clock vote to start.

[Laughter.]

Senator PRYOR. But our information at the time was that we were going to have a very abbreviated hearing, and we were trying to get everybody in.

But, definitely submit your written statements for the record. We'll do that for you. And be available over the next couple of weeks; if Senators have follow-up questions, we would love to get those to you and get those answers from you as quickly as possible.

Senator PRYOR. And this is a very important issue, and it's imperative that we, as the government, the Federal and State folks, work together to try to come up with the right testing, the right science, and get all that straight, get our facts straight, and then come up with the right resolution on this.

So, it's very important. And I hope I'm wrong, but I would think we'd see a lot more of it this summer, as the heat and humidity pick up around the country.

Thank you very much for being here.

And with that, the hearing is adjourned.

[Whereupon, at 12:09 p.m., the hearing was adjourned.]

# A P P E N D I X

## PREPARED STATEMENT OF ROBERT D. GARY, PRIVATE ATTORNEY, REPRESENTING VICTIMS OF CONTAMINATED DRYWALL

Mr. Chairman and Members of the Subcommittee: My name is Robert Gary. I am an attorney with Gary, Naegele & Theado, LLC and, along with colleagues from other firms, have been representing the victims of contaminated drywall since February of 2009. I attended the hearings held before this subcommittee on May 21, 2009 and was invited by a staff member of the committee to submit a comment and questions related to the issue of whether the well documented problems associated with Chinese drywall may extend to drywall manufactured in the United States.

During the course of the testimony on May 21, there were frequent comparisons to imported Chinese drywall which has been linked to the corrosion of copper in homes and health concerns to presumably safe "American drywall." In fact, the term "American drywall" encompasses three distinct forms of drywall which may not all be equally safe for use in home construction. Whether a particular wall board product is mined drywall or recycled American drywall made from fly ash or scrap, can usually be easily determined. The manufacturers brand name and information, *i.e.*, "Gold Bond," will indicate whether the particular drywall is synthetic (fly ash) or recycled (scrap drywall).

### **I. Mined Calcium Sulfate Drywall**

Most drywall in the United States is manufactured from mined calcium sulfate which is a naturally occurring benign mineral found in deposit in ancient seabeds. The mined gypsum is made into a paste and sandwiched between layers of paper. Drywall made from mined calcium sulfate is pure white and odorless while the Chinese drywall which is the subject of these hearings has a grey color and emits a distinct sulfur odor.

### **II. Synthetic Drywall**

Drywall manufactured with recycled fly ash is commonly referred to as synthetic drywall. Synthetic drywall has been reported to account for over 20 percent of the American drywall market. Synthetic gypsum is a mix of calcium sulfate and fly ash which is a byproduct from coal power plant exhaust gases. The solid waste fly ash comes from a process of scrubbing smokestack emissions. The TVA, Duke Energy, Tampa Electric and scores of other coal fired power plants across the country provide enormous quantities of fly ash for the manufacture of synthetic drywall. Some American drywall companies have built facilities devoted to the recycling of fly ash from our country's coal fired powered electricity facilities and an industry exists just for the purpose of selling waste fly ash to American drywall producers to create synthetic drywall.

Recycled fly ash for the production of synthetic drywall has been presumed not to be a problem in America because our environmental regulations mandate that our Nation's coal powered utilities must scrub the sulfur dioxide from their gases. Theoretically it is only processed fly ash with the sulfur dioxide removed which is used in the production of synthetic drywall. It is a subject of speculation that a possible source of the problems with imported Chinese drywall is that it was manufactured with fly ash that may not have been properly scrubbed and as a result might contain unacceptably high levels of sulfur dioxide. Upon closer inspection it may very well be determined that our domestic drywall manufactured with fly ash also has unacceptable levels of sulfur dioxide. Without an understanding at what concentrations sulfur dioxide presents a threat, the potential scope of this problem is extremely difficult to even estimate.

### **III. Recycled Scrap Gypsum**

It is estimated that gypsum scrap from new construction constitutes at least 12 percent of all the waste from new construction in North America. As a result of the generation of this huge volume of waste drywall a new industry has been created

in which scrap drywall is collected and recycled for use in the manufacture of new drywall. Within recent years, recycling companies have developed working relationships with the manufacturers of American drywall to provide manufacturers more efficient access to scrap drywall for use in the manufacture of new product.

Containers are placed at building sites and waste transfer stations and processed for resale to United States gypsum manufacturers. In addition to the collection at construction sites an additional source of scrap drywall is drywall which is removed from landfills. In the manufacture of drywall using recycled scrap drywall the ratio is generally 15 to 25 percent recycled material which is combined with mined gypsum. As with synthetic drywall using fly ash, recycled scrap drywall has an ever increasing share of the American drywall market.

#### **IV. Potential Problems with Drywall Manufactured with Fly Ash And/or Scrap Drywall**

It is beginning to emerge in limited numbers that some homes that have been constructed with American manufactured drywall which used either recycled fly ash or scrap drywall are exhibiting the very same problems as have been reported with Chinese drywall. These homes which have been identified as having been constructed with American drywall are experiencing the failure of their appliances, blackening of exposed copper and respiratory complaints. To date one lawsuit has been filed alleging that fly ash is the source of the problem for American drywall. The submitted testimony of Brenda Brincku (Alba, FL) is illustrative of the problems that some homeowners with American recycled drywall are experiencing. The small number of such reported complaints may mean the problem is an isolated one or that, as with Chinese drywall, it took time for the scope of the problem to percolate to the surface.

The potential problem with fly ash is that it comes from a variety of sources and vast quantities are used. It is possible that, as in China, in some instances high sulfur content drywall is being used to manufacture synthetic drywall.

There is also the very real possibility that the recycled scrap drywall harvested from containers and or landfills may contain discarded toxic Chinese drywall. Well before the problem with Chinese drywall was identified scrap drywall was being reprocessed and recycled into new product by American companies. In addition, there is possible cross contamination from a variety of materials from drywall removed from land fills.

In view of the tragedy created by the unanticipated and unexpected crisis created by the toxic effects of Chinese drywall prudence dictates that potential questions surrounding recycled drywall manufactured in this country be addressed and answered even if the result only serves the purpose to provides reassurance that the potentially dangerous side effects of recycled American drywall is an isolated problem.

#### **QUESTIONS PERTAINING TO THE SAFETY OF RECYCLED AMERICAN DRYWALL**

1. Are there any purity standards for the fly ash used in synthetic drywall?
2. At what levels will the sulfur content of fly ash produce toxic gasses when exposed to high humidity?
3. Is any imported fly ash used in the production of domestic drywall?
4. Should the domestic recycled drywall be required to specify if it is manufactured with fly ash or scrap drywall?
5. Should manufacturers of synthetic and recycled drywall be required to provide information as to the ratios of fly ash or scrap to mined drywall?
6. Have the government agencies which are comparing the characteristics of American to Chinese drywall distinguished mined drywall from recycled drywall?
7. If the answer to 6 is yes, has synthetic drywall manufactured with fly ash been distinguished from drywall manufactured using scrap drywall?
8. How can it be determined if scrap Chinese drywall has contaminated American manufactured drywall through the recycling process?
9. Are there any standards for the reclaiming of scrap drywall from landfills?
10. Are there any standards for the reclaiming of drywall from collection sites?
11. Are there any uniform requirements as to the ratio of recycled scrap drywall to mined drywall in recycled drywall?
12. Are there any requirements as to the ratio of fly ash to mined calcium sulfate in synthetic drywall?

Obviously these proposed questions do little more than raise the question if in fact there is the potential for a repeat of the Chinese drywall debacle with our own domestic recycled product. It is beyond debate that given the specter of even a handful of homes with American recycled drywall evidencing the same problems as Chinese drywall it is the best interests of the American home owner to be both aggressive and proactive.

Thank you for the opportunity to present my concerns and questions to the Committee.

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PREPARED STATEMENT OF BRENDA BRINCKU, FLORIDA HOMEOWNER

I want to thank the Subcommittee for the opportunity to submit this statement. I also want to thank Senator Nelsen for his determined efforts to help the home owners of Florida and elsewhere who are experiencing this devastating problem.

My name is Brenda Brincku. Our story begins in February 2004 when we began construction of our new home. We were the owner-builder of this home. The home was completed on October 5, 2004. By May 24, 2006, approximately 18 months later we replaced our first air conditioner evaporator coil due to corrosion (turned black and would not operate). Within the next 2½ years we replaced 6 other coils for the same reason. According to Nemeth Air Conditioning this is not a normal occurrence. We were concerned, but unsure as to the cause. Additionally, we began to notice other unexplainable issues such as wiring of light switches, electronic and appliances becoming faulty. Other metals such as jewelry, faucets, fire sprinklers, furniture, and light fixtures became corroded with a black substance and pitting occurred. Again, we were concerned, but did not understand the cause of these issues.

On December 20, 2009, an article in the Fort Myers News Press pertaining to Chinese Drywall, described all of the issues we were experiencing. Upon reading the article we began to research Chinese Drywall thinking this may be the cause of these unexplainable happenings. We then contacted Clark Elderidge at the Florida Department of Health. He suggested we contact David Krause, the State Toxicologist. Upon contacting Mr. Krause, he informed us that in the end of January they would be testing homes for Chinese Drywall in the area.

In the mean time, we began our own investigation of our drywall and after reviewing pictures taken of the upstairs drywall before the installment, we determined at least in the upstairs we had no Chinese drywall. All of the pictures indicate the only drywall used upstairs was from National Gypsum Goldbond. Additionally, our subcontractor insisted he used only American drywall in our home. At that point we were confused since we did not find any Chinese drywall in our home.

We began searching the Internet for answers. We contacted Thomas Eagar, Sc.D., P.E. of Massachusetts Institute of Technology (MIT). We explained our situation and our health concerns regarding our 8-year-old son, Harrison. He agreed to help us by testing samples of our drywall and other corroded items from our house. On January 5, 2009, we submitted samples to Thomas Eagar and Dr. Harold R. Larson, both of MIT. The samples consisted of drywall from National Gypsum Goldbond, National Gypsum Gridmarx and U.S. Gypsum (all of which are recycled wallboard), corroded copper pennies, copper wiring and metal from our jewelry box.

From the samples sent, MIT only tested the National Gypsum Goldbond drywall sample taken from our air conditioning closet upstairs. They indicated our electrical system must be inspected and possibly replaced as the sulfurous gases causing the corrosion have accelerated the aging process of wiring by tenfold or more. In other words, our 4-year-old home has the wiring of a 40-year-old home. Based on the report we received, both Professor Thomas Eagar and Dr. Harold Larson believe our drywall to be defective.

On January 29, 2009, David Krause the Florida State Toxicologist, Tim Wallace—State Environmental Specialist and Bob Kallotte came to the house and obtained samples and photographs. Based on the official signs determined by the state, these men determined our home contained defective drywall. As a side note—several of the photos of our home, taken by the state, are now being used on State Department of Health website as indicators to help people determine if they may have defective drywall.

Currently, the Florida State Department of Health is testing the samples obtained in January. We are awaiting the results of those tests. Bob Kallotte from the Florida Department of Health based on his observations, our home appears to have the worst case of defective drywall he has witness to date.

After receiving the results from MIT we contacted Jack Walker, an officer of National Gypsum. We communicated MIT's findings and informed him of the Florida Department of Health's investigation. He initially stated he would come to our home

and take a look at our findings. However, after several phone calls and a month later, he had not observed our findings. At this time we felt we needed to seek legal assistance.

We contacted Robert D. Gary of Gary, Naegele & Theado, LLC. Upon Mr. Gary contacting their General Counsel Sam Schiffman, National Gypsum initiated the request to test our home and we requested that they provide us the results. This occurred on March 5–11. National Gypsum and Packer Engineering opened every wall in our home and determined 219 wallboards were National Gypsum Goldbond and/or National Gypsum Gridmarx and 18 boards were from U.S. Gypsum. All of these boards came from recycled materials. They did not find any Chinese drywall in our home.

Of the 237 wallboards, 15 samples of drywall (11 National Gypsum) were taken, however, only 6 of the 11 National Gypsum boards were tested. After completing their initial evaluation, observations and testing of our home National Gypsum concluded that we had no defective drywall. However, we meet four of the five criteria determined by the Florida Department of Health. The only criteria we did not meet, was the presence of Chinese drywall.

According to National Gypsum's press release, air testing was also performed and determined there were no detectable levels of sulfur compounds in the home. However, all of the testing was performed during a very low humidity time of year and no air conditioning had been used nor needed in the weeks prior to testing and during the testing. It has been well documented that the chemical reaction causing the sulfuric gases occurring in the wallboard occurs during times of very high heat and humidity.

National Gypsum acknowledged there was a serious problem in our home, but denied any issues with the drywall.

During the testing we experienced several respiratory issues—uncontrollable coughing, respiratory drainage and eye irritation. We believe this is related the gases being released after cutting into the drywall. In addition, over the past 4 years our family has experienced various health problems including nose bleeds, respiratory issues, irritated eyes, dizziness, shortness of breath, severe headaches and fainting.

Due to our concerns regarding our health and the potential of fire, related to the faulty wiring, we made the difficult decision to move from our home and find other living accommodations. We are currently renting a house and therefore have been unable to pay our mortgage on top of our rental payments. We contacted Wells Fargo our mortgage company and requested a payment suspension for 6 months until we are able to determine the outcome of the current investigations. Wells Fargo denied our request and they are threatening foreclosure proceedings. The foreclosure process is scheduled to begin June 9, 2009.

In conclusion, this ordeal has completely consumed our lives from the loss of our home, health concerns to the decreased attention to our landscaping business. With that said we are deeply committed to finding the truth. Our in depth research and findings have lead us to truly believe that not only is there a Chinese drywall problem in our country, but an American drywall problem, as well. It is yet to be determined if the cause is due to recycled drywall or something not yet uncovered. Regardless, attention and further detailed investigations need to occur in order to uncover the truth and restore not only our home, but those of the thousands of families that are being affected by this tragedy. I hope that my statement will serve as a catalyst to examine the health and safety issues that may involve American as well as the Chinese dry wall. Again, thank you for this opportunity to share my family's story.

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PREPARED STATEMENT OF JOAN D. GLICKMAN, TOWN HOME HOMEOWNER IN  
POMPANO BEACH, FLORIDA

I am a married woman, with two children in college. My husband and I purchased our intended retirement home in October 2007. We decided to put down a large down payment to keep our expenses in line. Our new home is a town house in a development called Ocean Park Estates in Pompano Beach Florida. This town house was purchased as our full time residence and we had no intention of leaving in the foreseeable future. Then IT starts to happen. We had a plumbing leak, an A/C coil failure, multiple electrical problems, and always that new house smell." In addition, all the exposed copper starts to turn black. Time marches forward, but living here we don't feel great. We are tired all the time, sore throats, headaches, cough, why?

Now I know, our dream home has imported drywall from China. As described in the DOH guide lines, all exposed copper in our home is black, appliances are failing,

plumbing fixtures are pitting and as mature adults we don't feel like ourselves. What we want is answers! What is happening here? What should we do now? We have called and sent letters to Master Builders. To date we have had no response. We call our insurance agent they have no answers. We contact the attorney general's office, they are looking into it. We put calls in to Consumer Product Safety Commission and the EPA, is our home making us sick? Is the Chinese drywall rotting our home from the inside out? They tell us they are looking into it. Should we stay or should we go? No one knows. If we leave, we lose the home we love because no one will buy it with toxic drywall. What happens to the \$100,000s of dollars we put down? What happens to our life savings, is it gone? No one seems to have answers. Are we going to loose everything? Even the bank doesn't respond (BoFA) As homeowner if walk away this truly becomes a toxic asset. Our town home is worth less than the ground it sits on. Even the experts we bring in, contractors and disaster specialists cannot decide how to fix this issue. We need to get out now, while the experts find the answers.

As homeowners with imported drywall we need to get immediate answers, with one voice from the governmental agencies. There are so many questions that remain unanswered. How do we leave our home, rent a residence and continue our mortgage payments? We have the additional problem over of college tuition payments and our largest asset being worthless. No one will buy a home with Chinese drywall, yet on paper our home has value and we cannot qualify for any type of financial aid. What is the proper way to repair this problem and not only "fix" the issues associated with the drywall but bring back the "value" of my house? What do we do with the drywall when it is torn out? Does it go into landfills? Is the sulfur content leaching into the ground and ground water? What about my personal property, is it forever contaminated and is it safe to bring into another home?

I represent small portion of those affected by this drywall wall crisis because have "shared walls" and I am an older demographic. But I represent all homeowners in trying to get answers.

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PREPARED STATEMENT OF JENNIFER RZEWNICKI, BRADENTON, FLORIDA

The purpose of this statement is to express to the U.S. Senate Committee the horrific impacts that the importation of Chinese drywall into the U.S. has had on my life and the life of my two children. Let me first start by saying that I would have really liked to be able to present my story in person. Unfortunately right now the Chinese drywall has impacted me financially as I am paying for a house I can't live in, as well as a rental agreement to ensure the health and safety of my two small children and myself. There is nothing left in my rainy day fund to travel up to Washington D.C. The Chinese drywall problem is a crippling situation for both myself and many other homeowners. Physically the long-term effects are yet to be understood. Those of us who have lived and are still living through this nightmare know full well the emotional, physical, and financial burden it has put on our families.

The Chinese drywall in my home has caused corrosion and damage to my A/C unit, copper plumbing, water heater pipes, mirrors, wiring, as well as appliances and personal property. Some of the personal property such as family jewelry is irreplaceable. Other property damage is clothing, linens, carpets, mattresses, furniture, bedding, window shades and curtains which all have absorbed the harmful, toxic odor which washing does not remove the odor. In addition to structural damage to the home, my two children and I have had health complications including bloody noses, headaches, persistent scratchy throat, fatigue, and dizziness. I am a single mother who purchased a house in good faith that it would be safe for the three of us. I didn't know I would be poisoning my children and myself with gaseous sulfuric compounds and elemental sulfur each time we entered our home.

I feel that I am at my wits end with this problem, as I am truly not getting any closer to a resolution or relief than I was when the problem was first uncovered.

My homebuilder, Taylor Morrison Homes, has made an effort to remedy the damage. However, the HOMEOWNERS are not receiving these repairs under the premise of the original warranty under the *material defect clause*. Instead, homeowners are forced to sign an agreement with the homebuilder that waives the rights as a homeowner for additional recourse in the instance that once the problem has been "fixed" in the eyes of the homebuilder. Though possibly, in reality, the house still contains corrosive gases and in essence is still toxic. I haven't even mentioned the guaranteed loss of market value due to the stigma and uncertainty of health effects that are attached to a house with Chinese drywall. The agreement also puts a cap on the amount of personal property damages that the homeowner can recover

at \$3,200. The homebuilder doesn't even have a step-by-step plan of what exactly they will be fixing, replacing, and leaving as is, as Chinese drywall is a new problem, aka uncharted waters. So knowing now that the homebuilder has not clearly defined the problem, nor have governmental agencies, as everyone is "investigating" the problem. It doesn't seem fair or legal to have homeowners sign an agreement for repair when the protocol of repair, or even the assessment of damage has not been defined. I also would like to mention that the agreement presented by the homebuilder was hard to understand and ambiguous. I consider myself to have slightly more knowledge in the area of construction than your average homeowner, as I possess a Florida license as a Professional Engineer with a practice area of civil engineering. Yet, I still found the repair agreement to be very confusing.

I have contacted my mortgage company on this issue. I was hurt and insulted at how they treated me. On April 20, 2009, I contacted the Wells Fargo Customer Service Center. The reason for my call is as follows. I have had my mortgage with Wells Fargo since Wells Fargo purchased my original mortgage with SunTrust about 1½ years ago. I have never been late on a payment. In fact, when the representative, Pam Wares, checked my account, she informed me that I was paid ahead until June 2009. I informed Pam Wares at Wells Fargo of the problem with my home. The problem is that my home was built with Chinese drywall. The Chinese drywall problem has been in the national news, national newspapers, along with local coverage in Florida. However, this was the first time the representative ever heard of such a problem.

I informed Pam Wares that due to the defects in the home and the adverse health effects, I have been forced to leave the home. She, seeming very uncaring, told me that it was a homeowner's insurance issue. I further explained to her that needing a safe place to live, I would not be able to continue paying my mortgage on my toxic residence, along with paying for a lease on a new safe place to live. She told me again to contact my homeowner's insurance company, and if I had no luck with them, to call Wells Fargo again.

I called my homeowner's insurance company and they informed me that there isn't a homeowners insurance policy out there that would cover Chinese drywall, mold yes, but Chinese drywall, no. Therefore, I did as Pam Wares at Wells Fargo directed me and called Wells Fargo again. This time I spoke with Tasha Adicks. She told me she heard about this problem; put me on hold, when she returned she told me that she just read on the Internet that the Consumer Product Safety Commission is doing an investigation. This was really no news to me as I have been living this Chinese drywall nightmare for a long time now. She then told me to write to the Attorney General. I reiterated my issue that she obviously was missing, that I couldn't pay my mortgage with Wells Fargo while I now must pay to live somewhere else. She transferred me to the Collections Department, to a person who was extremely rude to me. She didn't care that Wells Fargo, her company, was backing the mortgage on a house that has created health effects in my family and that is now unsafe and is a fire hazard due to the elemental sulfur and sulfuric compounds emitting from the Chinese drywall. She said for me to write to the attorney general. I asked if she had that number and she rudely told me to look in a phone book.

That conversation was very disconcerting. What I took away from that conversation is that: (1) Wells Fargo representatives have no idea what is going on with Chinese drywall and (2) Wells Fargo has a good customer in myself who is ahead on her payments and they were unable to offer any sort of assistance.

After my call with Wells Fargo, I contacted the Attorney General's office, which referred me to the Consumer Product Safety Commission. I contacted the Consumer Product Safety Commission and was referred to the Attorney General. So basically, these two agencies are aware of the problem and are "looking into it". In the meantime, that does nothing to help my children and I get out of a toxic house which is presenting imminent health hazards and fire hazards.

No one knows for sure the long-term health effects that my two children and myself have been exposed to. I am paying for a house I can't live in. I am paying for a house that has been devalued due to the material defects. I am paying for a house that I owe approximately \$280,000, and the house in the current market would be worth possibly \$150,000. With the Chinese drywall in this home, the house is rendered unsellable. Compounding the problem, it is unknown how far the damage is behind the drywall. If the harmful gases have absorbed into the wood studs then just replacing the drywall will not solve the problem caused by the drywall. The problem may still persist if those gasses remain in the walls. This is a very serious problem especially as more homeowners become aware that they have this problem. There is a potential for 36,000 homes in Florida alone to be affected with this problem. If there is no other aid, homeowners will begin to abandon ship and default on their mortgages as there are no other options available.



I am asking for some assistance with my problem. This is a matter of human health, safety, and financial distress. U.S. Senator Bill Nelson (FL) has been in my home and is aware of this problem in and I applaud his efforts in trying to help us hardworking individuals who purchased a “product” in good faith. From where I am sitting though it is become an overwhelming burden as I sit and wait while the problem is “investigated.” My family and I need ACTION, now.

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PREPARED STATEMENT OF HOLLY D. KRULIK, FLORIDA HOMEOWNER

Chairman Pryor, Ranking Member Wicker and Members of the Subcommittee:

I appreciate the opportunity to come before you to discuss the catastrophe created by imported Chinese drywall. My name is Holly Krulik and I am a resident of the City of Parkland in Broward County, Florida. My husband and I purchased our home in February of 2007. We lived there with our two young children for the past 2 years. In late March of this year we learned that our home was constructed of Chinese drywall. Since that time I feel as though the rug has been pulled from underneath me.

Like so many of our neighbors, we have also experienced an unusual amount of sinus problems, bloody noses, headaches, eye infections, skin irritation and respiratory issues. Freon leaks, air conditioning problems and appliance failures are a common occurrence at our home.

Certainly the health issue is of paramount importance. For those of us who have moved out of our homes, we worry about the long term health effects. For those families who have no choice but to remain in their homes, the answers to the health concerns cannot come fast enough. And for those agencies addressing the health issues, we urge you to act swiftly, while analyzing this product fully. We expect a complete and thorough study that will provide us with the answers that we are desperately seeking.

I have heard little mention at all about the remediation process. While studying the adverse health effects, we ought to be researching a remediation protocol and coming up with a consensus as to a true and appropriate fix. Without any momentum in that area, you have families that are languishing as their physical health declines and their financial health continues to suffer.

If I wanted to start remediating tomorrow, how could I possibly do so? How far do we need to tear down the house? We know the drywall has to come out. The electrical is certainly compromised. How about the HVAC system, the nails, the screws, the trusses and the wood and concrete? Nobody wants to fix their home, particularly at their own expense, only to find out later that we did not take it down far enough and now it needs to come down all over again.

The fix needs to be one that everyone can rely upon; from homeowners, renters, real estate agents, insurance agents, buyers and lenders. How else will anyone have the confidence to live in one of these homes and to be able to know that their children are breathing in clean air, that their smoke detectors will work if needed, that their dialysis equipment won't fail and that they won't be prey to a slow and steady poisoning. Homeowners demand these answers and so does the marketplace.

With every passing day we are becoming more disheartened over the financial impact of this tragedy. Not many people can afford to continue to pay on a mortgage for a home in which they can no longer live and also pay rent for safe alternative housing. At the end of each month, homeowners sit around their kitchen tables questioning whether to make that next mortgage payment or to simply walk away, risking everything they've invested in their home and their credit.

We need to get the mortgage companies to come to the table. If we, as homeowners, walk away from our home now, the banks are stuck with a truly toxic asset. I am not asking for a bailout. My husband and I are responsible, hardworking individuals who fully intend to carry out our obligation. We are simply asking for a forbearance while we are unable to live in our home. And we do not want any blemish to our credit. This will allow us to seek a safe rental while the government studies the situation and comes up with a remediation protocol.

Clearly, this is an unprecedented scenario. Creative solutions will need to be addressed. Perhaps some of the stimulus dollars can be earmarked to flow in this direction. I can't think of a better stimulus package to put thousands of people back to work—from carpenters, plumbers, electricians, manufacturers, suppliers, movers, realtors, maintenance workers, warehouses, landlords, truck drivers and more.

At every turn in this nightmare of a journey there seems to be a roadblock. I have a builder who is in bankruptcy, a homeowner's insurance company that is denying coverage, a lender that is unsympathetic and a manufacturer and supplier who

won't step up to the plate. And while I speak for myself and my family, our situation is hardly unique. I am in the same situation as tens of thousands of others.

I am deeply appreciative of the attention given to this issue by Senator Nelson, Congressman Wexler and others. I implore each and every one of you to keep the pressure on and to come together to craft some remedies for this most devastating problem. Thank you again for allowing me to share my thoughts with you.

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PREPARED STATEMENT OF JOHN MEDICO, HUSBAND, PARENT  
AND FLORIDA HOMEOWNER

I appreciate the opportunity to come before you to discuss the problems with this defective home building product, and also discuss measures that will assist current owners of properties where this defective material was used, and remedies to help prevent further financial and health damages to everyone affected that result from the use of this dangerous product.

My name is John Medico, and my wife Ban, and 11-year-old son, John III, moved into a home at 12728 Daisy Place, Bradenton Florida, on November 30, 2006 that was purchased from Lennar.

The purchase price of the home was \$420,000. We added another approximately \$25,000 in home improvements. We have very good credit, put approximately 30 percent down on the purchase, and can afford the mortgage. We invested a majority of our savings, believing, we would be living there for many years. All of our hopes were shattered, and a nightmare began for us after less than a year in the home.

Soon after moving in during December 2006, problems both medically and with the house HVAC system began.

In January 2007, we required a service call on the HVAC system as it would not work in the heating mode.

In March 2007, a second service call on our HVAC system resulted in the copper coils being replaced on the larger system due to Freon leaks.

We have a 2-zone (independent of each other) HVAC system. One cools and heats the main portion of the home, 2BR's, FR, LR, DR, Kitchen, 2 Bth Rms and Den and the other system supports the MBR and bath area.

In July 2007, the smaller HVAC system had their coils replaced. Thru out 2007, my son John III and I would develop random nose bleeds. I began to get severe headaches as well. My doctor could not locate a specific problem even though I complained of unexplained illness and respiratory problems. I started to get Angina attacks that I never experienced since before my heart bypass surgery in 1997. Since living in this house I was given nitro stat patches to wear and began to carry nitroglycerin pills that I used almost daily.

In 2008, three set of coils were replaced in our HVAC systems with the last one happening in November 2008. The house began to have a strange odor in it when we needed to use the heating part of the system. The A/C people in November said I should speak to Lennar because I may have a home infected with "Chinese drywall." I placed a call to Lennar and was told by them that their records indicate I have a home constructed with "Chinese drywall"!

I did a "Google" search on "Chinese drywall" and it scared the heck out of me based on what I read. I immediately contacted Lennar and told them I wanted out of this house ASAP. They promised to get back to me right away. Two weeks went by with no word from Lennar so I hired an attorney to go after Lennar on our behalf. My attorney informed Lennar in writing we were making a claim per Florida Statute 550.

Lennar assured my attorney that they would move the "MEDICO HOME" up to the top of their priority list as they were dealing with other homeowners in the Heritage Harbor subdivision with the same problem we were faced with.

In mid December 2008, I was contacted by Lennar who said they wanted an Air Quality inspection firm to test my home for air contamination. I agreed to accommodate them ASAP. I was told by Lennar to set my A/C temperature at 68° the night before the test so the house would be cool when their testing company came. I did this and "ENVIRON" of Tampa, FL performed the air quality test the next day.

I did a "Google" search on testing homes for Chinese drywall emissions and all indications were that the home should be warm not ice cold as I was told to do so.

I received a letter from ENVIRON that no toxic gasses of any type were found in my home. I called the President of ENVIRON regarding the test results and indicated that I felt the test was set up to benefit them. I said my house smells awful and his results were in error. Several days later ENVIRON issued to me a second report that indicated Toxic sulfur emissions were detected in my home but the levels of toxicity were not harmful to our health. I questioned ENVIRON on making this

statement and came to the conclusion that they had no medical qualification to make such a claim.

The home became so foul smelling that I purchased a highly rated Air Purifier that I kept running constantly in the MBR area where I stayed with my wife and son. We avoided being in the rest of the home as much as possible and ate our meals out at restaurants constantly until we moved.

From December 2007 thru March 2008 when we vacated the home we noticed a very fine black soot was appearing thru out the house on our furnishings, rugs, works of art, jewelry and especially on anything made of or containing silver.

Our furnishing, oriental rugs, bedding, linens, etc., all smelled of sulfur and our jewelry and works of art all became heavily tarnished and pitted beyond anything I've ever seen before.

Our personal property losses from CDW are well over \$250,000 and we are making a claim request against Lennar for this loss.

We thought that overall, we were lucky to have Lennar for our builder, but this may not be the case if repairs are not done properly. It wasn't until after we moved into a rental home, that we discovered just how badly all of our personal belongings and furnishings had been cross contaminated to the core. They were so badly contaminated, some of the guys doing the move, which had allergy sensitivities, were having a terrible time handling it. The rental home smelled like a Chinese drywall home with our belongings in it.

We informed Lennar. They said they would send someone out to HEPA vacuum the belongings (they did this), and to then air it out and it would all be fine soon after. Well, it is 10 weeks later, and we are still getting exposure symptoms from the off gassing of our belongings, such as continued headaches, sore throats, stuffy noses, raspy voices and breathing difficulties.

We are convinced that the exposure to the sulfur gases are in fact, the cause of all of our health problems, while living in that house.

There is no decontamination solution for the personal property that Lennar must replace. We now have approximately \$250,000 in belongings and furnishings that are contaminated and useless to us.

We have also had to bear the expense, of buying some new furniture, as well as dry cleaning bills to remove the contamination from bedding, and clothing.

No one is warning people who move out, that their furniture has also been contaminated, and that it may, still cause them trouble with exposure symptoms to the gases.

In addition, after the home was gutted to wooden studs, trusses, plywood and block, after 5 weeks of airing out, it still reeks of sulfur gases, and can quickly in this hot and humid environment cause exposure symptoms within 10 minutes or so upon entering the home.

Lennar is ignoring this continued contamination of our home and was continuing with repairs. I had the home inspected by a professional construction firm that has inspected over 100 Lennar homes for Chinese drywall contamination. They confirmed the presence of very strong odor within the home. I forwarded this report to Lennar as a courtesy.

I believe Lennar intends to leave these cross contaminated materials in the residence, as well as reinstall cross contaminated wood cabinetry and window treatments. Unless Lennar can find a safe and proven decontamination solution, or agrees to replace all contaminated materials, I cannot feel it is safe to move my family back into this house.

We will then have to bare the expense of paying rent elsewhere when Lennar declares themselves finished, and we will not be able to continue paying the mortgage and additional rent as well.

We will face financial ruin, thru no fault of ours, over this toxic construction material that was allowed to come into the country.

Lennar assured us in writing that we would virtually have a brand new home interior. This is turning out not to be true, as they are intending to re-install, numerous cross contaminated materials that still reek of sulfur. We had no way of knowing about the block and wood cross contamination at the time either. We truly were assured that the home, when completed would be 100 percent fully free of the toxic sulfurous compounds contamination and odor. However, it appears to me and others as well, that Lennar is not now doing this because of the unexpected climbing costs to do this.

I implore you to aide in the removal of this dangerous blight, further weakening an already distressed housing market. These homes may be going into foreclosure, if the banks will even take them, will most likely become left abandoned, and further hurt neighboring home values, or further hurt new and unsuspecting owners. They should all be identified, torn down and taken to the toxic waste dump. Then

they should be rebuilt, or the owners reimbursed, all at the expense of everyone who profited from this toxic drywall along the way.

The housing market aware of this problem is scared right now with this toxic wild card out there. Far too many families, suffering deteriorating health, have yet to even learn that it may be the drywall in their homes causing their families chronic illness. We are still finding them in our neighborhood. This problem needs more regular press, without the added minimization of health and safety risks.

In my experience, these structures are toxic gas chambers, not safe homes for families to even live in again.

I am now personally aware of a 4-year-old girl living in a CDW home, diagnosed with emphysema, a 7-year-old boy rushed to the hospital a few weeks ago with seizures, another 7-year-old boy from our sub-division, diagnosed with an auto immune disorder, and numerous children being diagnosed with asthma.

Is the Health Department going to wait for children to end up with permanent brain, heart, lung, liver, kidney, or central nervous system damage or dead, until they get serious and consistent with their alerts for parents to find their children, safe havens away from these homes?

Is FEMA ever going to step in to provide a temporary safe haven, for families that cannot afford a mortgage and rent, until a permanent solution is found? I think it is more then called for.

Further, I would strongly advise any health or product safety authorities to not further minimize the health risks of chronic domestic exposure to these chemicals. You will only loose more consumer trust, and put more families at a greater health risk, for more serious chronic exposure effects. They have been waiting on direction from you, and you are failing them right now.

In my experience, these structures are toxic gas chambers, not safe homes for families.

I would like to thank Senator Nelson and his staff for answering our pleas for help and everyone who has taken the time to come visit these homes and families, to get firsthand knowledge of the gravity of this problem, and take action to help resolve it. And I thank you for the opportunity to share my first hand experience and suggestions for much needed, emergency assistance.

I implore you, to find some way, to help people save their good credit, who could have maintained making mortgage payments, or tried to sell, and then couldn't because of a CDW disclosure, and had to flee for health reasons.

They did not engage in an irresponsible financial act by moving out and foregoing mortgage payments if they had too. They are acting on behalf of securing the health and safety of their families. They are the ones being truly responsible parents, looking out for the well being of their children first, and should not be punished on their credit reports for that.

What have we come to as a society, if we cannot support parents who do the right thing, but rather seek to punish them, just for caring for their families well being.

I am asking legislatures for assistance in many areas on behalf of all those impacted by the use of this defective and dangerous construction material.

Please provide adequate funding to the proper departments so they can do the job that tax payers pay them to do. That involves, banning and recalling defective and harmful products from the USA market place again.

The CPSC claims it has not had the funding or resources to put a ban and recall on this product by now. Though I think they can at least do that, until more can be learned.

I think it is shameful, that the health department has had to claim, they do not have the funding or resources, to better inform the public.

I also recommend that you get the best of the best on this. I find it appalling, that so many so called professional toxicologists seem to have not a clue, about the cumulative effects of low level exposure to these chemicals, or knowledge, easily obtainable from NIOSH, that the immune system can lose tolerance to hydrogen sulfide at chronic low level exposure, and that higher level exposure.

If we can so easily bail out Wall Street with billions, surely we can help the American people thru this mess that is not of their making.

This is my testimony of my experience as a parent, husband, and owner of a Toxic Chinese drywall house, as I know it to be the truth. I also believe that I speak for many others who have not yet come out of shock and denial, and into anger and found their voice, experiencing the same nightmare my family has been living through, facing the same tough choices between their families health, or financial ruin.

Thank you for your time.

PREPARED STATEMENT OF CINDY SHANNON, WIFE, PARENT  
AND FLORIDA HOMEOWNER

I appreciate the opportunity to come before you to discuss the problems with this defective home building product, and measures that will assist current owners of properties where this defective material was used, and measures to help prevent further financial and health damages that result from use of this dangerous product.

My name is Cindy Shannon, and my husband Todd, and daughter Arielle, bought and moved into a home at 12724 Daisy Place, Bradenton Florida, on October 6, 2006.

The purchase price of the home was \$559,000. We added another approximate \$125,000 in home improvements. We have very good credit, put 20 percent down on the purchase, and can afford the mortgage. We invested everything we had into it, believing, we would be living there until our daughter graduated from high school. She is now in 6th grade. All of our dreams were shattered, and a nightmare began for us.

I use to be able to brag about my stellar health, as well as have an optimistic outlook, positive attitude and love of life. So did my family, who rarely if ever visited the doctor.

Very soon after moving in, our moods began to change, taking on a very depressed, and heavy negative disposition and angry outbursts. We also started experiencing heavy and chronic fatigue, insomnia, and irregular heart rhythms.

Coming into the sixth month of living there, all hell broke loose. I started suffering day and night from cluster migraine headaches, increased heart arrhythmia, tightening of the chest and severe attacks to my sinuses. At age 38, I thought I was dying, considered writing out a will, and wanted to blow my head off to get relief from the suffering.

It was at that time, I exclaimed to my husband, this house STINKS, and I think we bought a sick house. We learned that terrible 6-week episode was brought on, while one of our evaporator coils on the AC had completely leaked out all of its coolant, making the house unusually hot and humid, no matter how low I turned the thermostat down.

I knew then by researching the symptoms, that we were under a toxic poisoning attack, of which included a neurotoxin I was sure, but did not know from what. I removed many suspect products from the home, started buying organic foods, purchased, detox products and books, as well as immune system builders. I also noticed the symptoms were worse when it was warm and humid in the house. I bought a dehumidifier and kept the AC low.

During the next year, as the prior health symptoms persisted to varying degrees, new ones developed. 'I was becoming increasingly sensitive to sunlight, experiencing nerve twitches, had the feeling of having a nervous breakdown, increased mental fog, and felt like I had aged 10 years in that last one, especially in the rapidly aging condition of my skin and increased chronic fatigue in just a year.

My daughter was now also complaining of allergy symptoms.

By a year and a half in the effected house, my daughters heart arrhythmia, and mine were getting worse. At night, I had to start sleeping sitting up, to keep my lungs from filling with fluids. My daughter started complaining a lot of flash headaches, dizziness, nausea, and fever. She had also been taking cough drops with her to bed every night, to help ease a chronic sore throat. Nothing explained why it was always sore for her.

I also started having very disturbing levels of short term memory loss. It was like having mental paralysis. I was drowning in a deep, dark and heavy mental fog by then.

In the early spring of 2008, my daughter started complaining of severe burning in her lungs, during Tae Kwon Do Class. It was so bad, she had to quit by late spring, just shy of receiving her black belt.

In the spring of 2008, I pleaded with my husband to put the house up for sale and to get us out of there. In utter and complete distress, and desperate tears, I emphatically stated to him that something was so very wrong with that house, someone needed to take a wrecking ball to it. I hated that house because it was attacking my family and me. I felt nothing but anger toward it and wanted it destroyed.

My husband agreed to list the home for sale in the summer of 2008.

More new health symptoms soon came into the picture. My then 40-year-old husband had rushed himself to the doctor one afternoon, believing, he was having a heart attack. His blood pressure had been extremely high for some time, shortly after moving in, and got much worse that day. He recalls always feeling irritable,

with nervous anxiety in that home. He was put on blood pressure medication for readings that sustained 150 or 95. The medication was not helping and he went off of it.

Coming into the fall, my daughter also started complaining about chronic heartburn and stomach ulcers. I also started getting the heartburn and ulcers regularly.

It was October of 2008, during the now 6th, AC coil replacement, that our builder Lennar told us that they suspected something in the drywall was causing the coils to fail so often. They said nothing of what was in the drywall, where it came from, or that they had any solution for it. They did tell us that they would send an air quality testing company out, to assure us, that there was no health risk to the drywall, and would continue to cover the coil replacements under warranty.

I use to joke that the drywall probably came from China. Little did I know that was the truth and I do not find it funny anymore.

I ran a Google search looking for anything on drywall making people sick. Nothing other than mold came up, and we knew there was no mold in the house. I was at a loss, not knowing if the drywall was the smoking gun for our health problems or not.

Well, I didn't feel so sure, or comfortable with having the house up for sale, not knowing what should be disclosed about this, but that something should be, and we didn't want to get sued. We took it off the market as we awaited the test results. They arrived in NOV. saying nothing was detected in the air.

How did nothing eat through 6 AC evaporator coils, 3 new hard drives, 2 new DVD players, jewelry, that backs of my mirrors, cause lights to flicker, new bulbs to burn out quickly, and make the smoke alarm keep going off, as well as turn a healthy family chronically ill?

Coming into the winter of 2008, symptoms for my daughter increased to chronic pink eye infections, chronic colds, and sore throats. My husband's headaches were getting worse, and my episodes of pulmonary edema became worse and more frequent. By then, I also noticed that we all had been bloating up while living in that home and nothing got rid of.

The first press release on Chinese drywall came out at the end of the month. WOW!!! There was our story, being told by others and there was the smoking gun. We got information on the toxic gases being released, and where the drywall had come from. I looked up the chemicals and sure enough, exposure to them could be the cause of all of our symptoms. I quickly bought several more air purifiers, and we called an attorney, as Lennar never got back to us and we thought we would have to fight them in court to take care of this.

The attorney, not fully aware of Florida statutes, noticed that we had signed Ito a mandatory binding arbitration agreement in our sales contract and said, we could not start a class action or get a jury trial. We were devastated with that news. It was the darkest day. I had learned that arbitration tends to favor the builder, and we couldn't afford it anyway. He further shared with us his experience with data related to hydrogen sulfide exposure, and told us, one way or another; we needed to get our daughter out of that house immediately.

We couldn't afford to go rent somewhere and pay our mortgage. We also had no family nearby to go stay with. My husband also couldn't bear the thought of watching all of the money we had put into the home, go down the toilet, while having our good credit destroyed over missed payments.

We soon read that Lennar was paying expenses to move families out and repair the home, in some cases. We had to meet with them and prove our case to them.

In January of 2009, I also went to the family doctor, to let him know, we were exposed to the Chinese drywall chemicals in our home, what our symptoms had been, and asked if there was more we should be concerned about while living there. His eyes widened with disbelief and shock as he said to me, "You mean, you haven't left yet?" He said we needed to get out of that house ASAP.

We also started having to spend many nights at hotels to get relief from the symptoms so we could sleep. We also learned in mid January, about a Florida Statute that waived the Mandatory Binding Agreement.

Though we did NOT think the releases to rights to sue for any personal property damage, or loss of property value, or ineffective remediation if it turned out to be the case, as well as punitive for all we went through were fair to us in the least, signing their move out and repair contract was our only way out of that toxic gas chamber without ruining our credit.

We did ask for the builder to purchase our home back at current market value, so we could be released from this nightmare. They refused. My life was first robbed, by the decline in health and constant monitoring and care of symptoms, to now, having to face a mountain of financial messes we can not afford to clean up on our own.

It wasn't until after we moved into a rental home, that we discovered just how badly all of our personal belongings and furnishings had been cross contaminated to the core. They were so badly contaminated, some of the guys doing the move, which had allergy sensitivities, were having a terrible time handling it. The rental smelled like a Chinese drywall home with our stuff in it.

We informed the builder. They said they would send someone out to hepa vac it, and to air it out and it would be fine soon. Well, it was 7 weeks later, and we were still getting exposure symptoms from the off gassing of our belongings, such as continued headaches, sore throats, chronic colds, sore and stuffy noses, raspy voice and again bad nights of pulmonary edema attacks, bad enough for both my daughter and I that we had to flee for a hotel at one in the morning, on a school night. Two nights later, I was again, forced out to the lanai, to sleep for the night. We called the builder to have it all moved out and put into storage.

Since we have removed everything contaminated by the drywall from the rental home, we have been feeling good and symptom free again, after 2½ hellish years of suffering. My husband's blood pressure has even returned to a normal and healthy reading of 110 over 70. A notable remaining symptom it seems is my short term memory loss, which may be a result of permanent damage to the memory part of the brain, from the neurotoxic hydrogen sulfide exposure.

We are convinced that the exposure to the sulfur gases was in fact, the cause of all of our health problems, while living in that house.

There is no decontamination solution for the personal property, Lennar refuses to replace it, and we waived our rights to sue for replacement damages. We now have approximately \$75,000. in belongings and furnishings that are worthless and useless to us. We are forced to either have to throw away relatively new and expensive furnishings, or continue to pay for storage until, if ever, a decontamination solution is found.

We have also had to bare the expense, of buying some new furniture, and bedding, as well as expensive dry cleaning bills to remove the contamination from bedding, and dry clean only clothing.

No one is warning people who move out, that their furniture has also been contaminated, and that the continued off gassing from it may still cause them trouble with exposure symptoms.

In addition, after the home was gutted to wooden studs, trusses, plywood and block, after 6 weeks of airing out, it still reeks of sulfur gases, and can quickly in this hot and humid environment cause exposure symptoms within 10 minutes or so, of being inside the building.

We have invited toxicologist David Krause, to come and inspect a home at this phase of Lennar's remediation, so they can better learn, about what proper remediation protocol should be. It is not what Lennar is doing. In my opinion, these cross-contaminated homes, where the toxic gases leached into everything, need to be bulldozed, to completely remedy them of the problem.

I have spent hundreds of hours, doing research, looking for a decontamination solution for my gutted house and furniture, as well as have spoken with many remediation experts. There is none to date. Further, with this being a new problem, a solution cannot be guaranteed for the long term, without the opportunity for long term testing available.

We learned that our builder intends to leave these cross contaminated materials in the residence, as well as reinstall cross contaminated wood cabinetry and window treatments.

Unless our builder can find a safe, and proven to stand the test of time, decontamination solution, or agrees to replace all contaminated materials, we cannot feel it is safe to move back in. We will then have to bare the expense of paying rent elsewhere when they declare themselves finished, and we will not be able to continue paying the mortgage.

We also, under duress, waived our rights to sue for property value loss damages. We will face financial ruin over this toxic construction material allowed to come into the country.

We also now believe that the builder engaged in misrepresentation of what signing their releases/repair contract was going to do for us. They told us that we would not have to disclose the repair.

We only later learned that Realtors in our state are now requiring that any knowledge of Chinese drywall in the home, or homes repaired for it, need to be disclosed. We also recently learned that Realtors, the market and banks are black balling these homes, "repaired" or not, and rightly so.

The builder told us that we would virtually have a brand new interior. This is turning out not to be true, as they are intending to re-install, numerous cross contaminated materials that still reek of sulfur. We had no way of knowing about the

block and wood cross contamination at the time either. We truly were lead to believe, that the home, when completed would be fully free of the toxic sulfurous compounds contamination.

This is my testimony of my experience as a parent, wife, and owner of a toxic Chinese drywall house, as I know it to be the truth. I also believe that I speak for many others who have not yet come out of shock and denial, and into anger and found their voice, experiencing the same nightmare my family has been living through, facing the same tough choices between their families health, or financial ruin.

I am asking legislatures for assistance in many areas on behalf of all those impacted by the use of this defective and dangerous construction material.

Please provide adequate funding to the proper departments so they can do the job that tax payers pay them to do. That involves, banning and recalling defective and harmful products from the market place, as well as putting in regulations that keep them from ever entering the market place. It's shameful that the CPSC claims it has not had the funding or resources to put a ban and recall on this product by now. Though I think they can at least do that, until more can be learned.

This goes beyond drywall imported from China, to include any synthetic gypsum, made from the toxic waste of coal plant scrubbers. The end product used in the making of it, fly ash, contains excessive amounts of sulfur-based pollutants. The Material Safety Data Sheet for one such "green" product indicates that the product is stable under normal conditions but should avoid sources of ignition, *elevated temperatures and humidity*. Incompatible Materials are strong oxidizing agents and hazardous decomposition is produced. There are U.S. made brands, causing the same problems.

I think it is shameful, that the Health Department has also had to claim, they also do not have the funding or resources, to better inform the public.

I also recommend that you get the best of the best on this. I find it appalling, that so many so called professional toxicologists, seem to have not a clue, about the cumulative effects of low level exposure to these chemicals, or knowledge, easily obtainable from NIOSH, that the immune system can lose tolerance to hydrogen sulfide at chronic low level exposure, and that higher level exposure symptoms, can then be experienced.

I am now personally aware of a 4-year-old girl living in a CDW home, diagnosed with emphysema, a 7-year-old boy rushed to the hospital a few weeks ago with seizures, another 7-year-old boy, diagnosed with an auto immune disorder, and numerous children being diagnosed with asthma.

Is the Health Department going to wait for children to end up with permanent brain, heart, lung, liver, kidney, or central nervous system damage or dead, until they get serious and consistent with their alerts for parents to find their children, safe havens away from these homes?

Is FEMA ever going to step in to provide a temporary safe haven, for families that cannot afford a mortgage and rent, until a permanent solution is found? I think it is more then called for.

Further, I would strongly advise any health or product safety authorities to not further minimize the health risks of chronic domestic exposure to these chemicals. You will only loose more consumer trust, and put more children at risk, for more serious chronic exposure effects. They have been waiting on direction from you, and you are failing them right now.

How many of you know that hydrogen sulfide gases, mimic oxygen in the body, tying up oxygen receptors, putting the body's organs, muscles and tissues through oxygen deprivation? Please consider the potential effects on pregnant women, and young developing children.

When it comes to determining chronic exposure risks to Chinese Drywall, the truth is, no one knows, what the short term, low level exposure risks to the off gassing of this drywall is, except for those living in the homes. There has been no reference research done for chronic, low level domestic exposure to infants, pregnant women, children, the elderly, sensitive's or pets. Please be up front and honest about that. Any claim to the contrary is not a truth. These families are the material for the first case studies, for this unprecedented problem.

You should continue to encourage that all of those impacted, make health and property damage reports to the proper departments researching this.

You cannot minimize or cover up, what hundreds of thousands of families have been experiencing, without just angering them further into action, until the full truth and solutions are found. The problem is not going to go away. It gets worse with time, and will continue to get worse, until every last piece of contaminated and cross contaminated material, lands in a toxic waste dump.



The truth of the potential damage to health, home and things, exposed to this toxic and corrosive drywall, is found in their health reports, visible damage to items, and nowhere else.

I implore you to find some way, to get home owners insurance, involved with some of the relief, in the least, minimal furniture replacement, so as families moving out for safe haven, do not have to take the cross contaminated furnishings with them.

I implore you, to find some way, to help people save their good credit, who could have maintained making mortgage payments, or tried to sell, and then couldn't because of a CDW disclosure, and had to flee for health reasons.

They did not engage in an irresponsible financial act by moving out, and foregoing mortgage payments if they had too. They are acting on behalf of securing the health and safety of their families. They are the ones being truly responsible parents, looking out for the well being of their children first, and should not be punished on their credit reports for that.

What have we come to as a society, if we cannot support parents who do the right thing, but rather seek to punish them, just for caring for their children's health and safety, through this terrible housing disaster that has befallen them. They played by the rules, and did nothing wrong, to have deserved this.

I implore you to aide in the removal of this dangerous blight, furthering weakening, and an already distressed housing market. These homes going into foreclosure, if the banks even take them, will most likely become left abandoned, and further hurt neighboring home values, or further hurt new and unsuspecting owners. They should all be identified, and taken to the toxic waste dump. Then they should be rebuilt, or the owners reimbursed, all at the expense of everyone who profited from this toxic drywall along the way.

The market aware of this problem is scared right now with this toxic wild card out there. Far too many families, suffering deteriorating health, have yet to even learn that it may be the drywall in their homes causing their families chronic illness. We are still finding them in our neighborhood. This problem needs more regular press, without the added minimization of health and safety risks.

I implore you to pass a waiver on of all the unconscionable, one sided, and misrepresented release contracts builders gave to homeowners to sign, while under duress to flee to safety. By law builders are already responsible to repair or replace the damage caused. Why did any homeowner have to give up rights to legal claims for damages to personal belongings, failure of remediation to prove effective in the short and long term, and property value loss, stemming from the disclosure stigma.

These builders took advantage of people in a very desperate situation, of chronic illness due to the slow release toxic gas chambers, these builders negligently sold them. Their despicable behavior should not be rewarded, by allowing those contracts to remain enforceable by law.

I would like to thank everyone who has taken the time to come visit these homes and families, to get firsthand knowledge of the gravity of this problem, and take action to help resolve it. And I thank you for the opportunity to share my first hand experience and suggestions for much needed, emergency assistance.

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PREPARED STATEMENT OF MICHAEL J. RYAN, ESQUIRE,  
ATTORNEY REPRESENTING FLORIDA HOMEOWNERS

Chairman Pryor, Ranking Member Wicker and Members of the Subcommittee,

Thank you for the opportunity to come before the Committee to discuss the impending catastrophe for homeowners impacted by defective imported drywall. My name is Michael Ryan and I am an advocate for homeowners. Presently, as an attorney, I represent homeowners in South Florida whose aggregate home purchase prices prior to the discovery of defective drywall exceeded one hundred million dollars (\$100,000,000). Now, their homes are unsellable except at pennies on the dollar. Many of my comments here today are shared by Mayor Michael Udine of Parkland, Florida, one municipality particularly impacted by this catastrophe.

Communities and homeowners in the United States have been hit by a "silent hurricane". In South Florida, we have become accustomed to warnings of impending hurricanes. We had no warning for this "silent hurricane". Homeowners had no time to prepare to move their families or protect their property. They never saw it coming. But, the affects are disastrous for some and certainly to the community as a whole.

It has been estimated that tens of thousands of homes must be gutted right down to the concrete block. While there are no water marks on the outside of the homes and no trees damaged, the damage to each home is measured in hundreds of thousands of dollars. In a way, this is worse than a hurricane. Homeowners' insurance

and Bonded Builder Warranty are refusing to cover the damage. Those responsible for the “silent hurricane” in many communities are refusing to accept responsibility and help rebuild because they are bankrupt or lack the resources or are foreign companies.

The “silent hurricane” was caused by toxic and defective drywall. In one community, Parkland, Florida, the builder who bought and used this toxic defective drywall is bankrupt. The predicament for those homeowners in Parkland is mirrored by other homeowners and communities around the United States where the builders are refusing or unable to accept responsibility.

We, in South Florida, are not alone in this crisis. It is estimated that between 60,000 and 100,000 homes across the United States are impacted by this defective drywall. This estimate is based upon the nearly 500,000,000 pounds of drywall manufactured by the Chinese companies and imported to the United States between 2004 and 2007. Almost 200,000,000 pounds entered the ports in Southeast Florida. However, we wonder if the estimate of the number of homes impacted is too low; there are homes that only have a portion of the house where the defective drywall was installed. The affects are pronounced in those homes, too. There is no dispute some gutting of the home will be necessary for those homeowners as well. Throughout the country, some builders are agreeing to some form of remediation, others are abandoning the homeowners.

Most distressing, the homeowners impacted by this defective drywall did nothing wrong. The homeowners could have not have done anything more to protect their homes and families. The builders never told the homeowners they were using defective drywall in their homes.

The “silent hurricane” gases are corrosive to metals. Repeated failures of air conditioning evaporator coils, visible evidence of corrosion of copper ground wires in the house, evidence of corrosion of the copper plumbing, and a noxious smell of gases that acutely and chronically affects the nose, throat and eyes are all signs of the “silent hurricane”. There are reports of the circuitry in home appliances failing. Samples of drywall board pulled from the homes displaying the names of the Chinese companies or the German manufacturer, Knauf, only confirm what homeowners already know: they have been hit by defective drywall.

Meaningful steps have been taken by Senator Bill Nelson, Congressman Robert Wexler and others in Congress to prevent this from happening again. And, yet again, there are calls for the changes in how we allow Chinese imports into our country. Lawsuits and litigation are beginning. There will be time to hold accountable those responsible for this disaster in courts of law.

However, pregnant women today are being told by their trusted physicians they must leave the house to protect the health of their unborn child. There are elderly on fixed incomes who feel the affects of the toxic gases but who have nowhere to go. There are families with young children told by their pediatricians that the repeated sinus infections and respiratory problems are potentially made worse or caused by the toxic gases.

While the health departments, the EPA, and the science community debate the long term health affects of this “silent hurricane”, people are at risk of losing their homes. Most homeowners can not afford to continue paying mortgages for home in which they can no longer live and yet also pay rent on a home to which they must relocate their family. The homes with confirmed defective Chinese drywall can not be sold as the market rightfully demands disclosure of the defective Chinese drywall. Banks can not meaningfully assess the costs of remediation to lend to a homeowner because there is no consensus as to what fix is truly a fix; no one is telling the community how to rebuild safely and effectively to remove forever the toxic affects of the “silent hurricane”. All the while, stellar credit of homeowners will be destroyed, foreclosures may begin, banks will own truly “toxic assets”, and blight of abandonment threatens the entire community.

I have literally watched tight-knit subdivisions transformed under the stress of this catastrophe. Streets where children pedaled their bikes until sunset under the watchful eyes of friendly neighbors and adoring parents have been replaced with moving trucks and abandoned homes.

Our communities need a comprehensive plan to save those hit by this silent hurricane. We need help now.

First, we need to be able to give assistance to those who have nowhere to go when builders are refusing to accept responsibility. These homeowners did nothing wrong. They were current on their mortgages. They were in homes they could afford. They were raising families responsibly, paying their taxes, and are productive members of our community. They are not asking for a bailout like so many others, they are screaming for a life raft. This is the highest calling of government—to help those in crisis. Most of the banks are not responding to our requests for abatement. Two

banks have agreed to interim abatement and to not report the abatement to the credit reporting agencies. These banks, HSBC and SunTrust, recognize that foreclosure is in nobody's best interest, least of all the banks, and that this is not a problem of credit worthiness—it is a disaster. However, other banks are initiating foreclosure and are refusing to timely respond to the cries of these homeowners. I have provided to Senator Nelson's Office a list of mortgage lenders who have not yet been adequately responsive to this crisis.

Second, we need to bring together the stakeholders in this process—the banks who are partners in this disaster, the realtors, the contractors, the builders, the insurance companies, the homeowners, and the cities—so we can devise and agree upon a true fix. We need to be confident the market will accept these homes as fixed when the remediation is complete so families can move back in and willing buyers in the future will be confident in their purchases.

Third, we need to make sure the process of rebuilding from this “silent hurricane” does not cause more problems. What are the health risks to construction workers? What are the disposal requirements to make sure cities and local governments do not become dumping grounds for toxic material that would be better shipped back to China? How are the building departments to inspect the remediation process to ensure integrity and transparency? When do we truly know a house is fixed?

If the Federal Government and the stakeholders in this process do not respond with a greater sense of urgency, entire city blocks, subdivisions, and municipalities will be destroyed for years as homeowners abandon their property and the cities are left to pick up the mess. Unfortunately, because most of the big lenders are not responding to the cries of the homeowners, the shelf life on patience and hope is measured by the next month when families sit down around their kitchen table to decide whether or not to pay the next month's mortgage on a destroyed home.

We know we will rebuild because we have always picked ourselves up. We have the same hope that was tested by the victims of Katrina and other natural disasters. Sadly, those same victims are tested again because some of their homes were even rebuilt with this toxic drywall. We, as Americans, always come through times of challenge even when it is a national disaster. We see neighbors offering available rooms in their homes to those who have nowhere else to turn during this time of crisis. We see subdivisions organizing themselves to call upon government for help. We see the heart-warming spirit of community all too common after a disaster.

This does give some homeowners hope. It is not the life raft they deserve, but hopefully they can tread water while we all work together to find a solution. I implore you to send help with all the due haste and urgency this catastrophe demands.

Thank you again for permitting to share these thoughts with you and I am looking forward to answering any questions you may have.

