

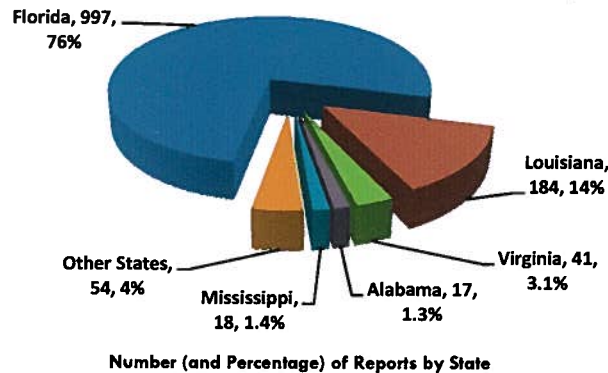
# IMPORTED DRYWALL FACT SHEET

September 2009



## Background

In late December 2008, CPSC first received complaints from consumers related to the presence of drywall produced in China. The chief complaints were of noxious, "rotten egg" odors; corrosion of metal items inside the home, especially copper air conditioning coils; and short-term adverse health effects generally involving the upper respiratory tract. State and local authorities have also received similar reports. CPSC staff first contacted the Florida Department of Health about the drywall issue on Jan. 23, 2009. As of September 17, 2009, CPSC had received 1311 incident reports from residents in 26 states plus the District of Columbia. Reports have primarily originated from Florida, Louisiana, and Virginia. Consumers largely report that their homes were built in 2006 to 2007, when an unprecedented increase in new construction occurred in part due to the hurricanes of 2004 and 2005.



## Federal Coordination

CPSC is leading a federal drywall team to investigate the corrosion and health issues presented by the imported drywall. The federal team, which includes the Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR), the U.S. Department of Housing and Urban Development (HUD), and U.S. Immigration and Customs Enforcement (ICE), coordinates regularly with state partners, including state departments of health and attorneys general. CPSC, EPA, CDC/ATSDR, HUD and ICE have weekly calls to discuss and share information about the investigation and to review technical data.

## International Efforts

Since the beginning of the investigation, it has been apparent that some answers to the cause of the drywall problem will have to come from sources in China through cooperation with the Chinese government. With that in mind, CPSC staff took steps early on to involve AQSIQ (CPSC's Chinese counterpart) in our investigation to the extent possible. In June 2009, two Chinese experts joined CPSC staff on inspections of homes in Florida and Louisiana, followed by technical discussions at CPSC headquarters and meetings with EPA and CDC. During the week of August 17, 2009, CPSC staff visited China and met with Chinese government officials as well as management from several sites that we believe to be of interest. The team inspected gypsum mines and drywall manufacturing plants in China with Chinese government officials. During the trip, the team collected samples of raw materials and finished products from both mine/manufacturing establishments and retailers and met with the China Building Materials Academy, a state-owned research and development institute. CPSC continues to engage with its Chinese counterpart to exchange information related to the investigation.

## Public Information

The combined federal agency team has focused on ensuring that the information disseminated to the public has been consistent, informative, and coordinated to ensure consistency and uniformity of messaging to the public and media. CPSC has developed a [Drywall Information Center](#), linked to the agency homepage, which provides the latest information on technical developments and news about the investigation, including the number of consumer reports received and States involved. The information center has received more than 17,000 visits since its launch. Additionally, an e-mail distribution (listserv) has been established to disseminate noteworthy developments directly to interested parties. This e-mail list has 600+ members and updates have been sent approximately bi-weekly.

## Progress in the Investigation

The multi-pronged investigation has concurrent inquiries (1) to diagnose the health and corrosion issues encountered by home owners with imported drywall and (2) to trace the chain of commerce of the drywall from manufacture, through importation, to installation. This investigation includes field measurements in affected homes; chamber studies to isolate the emissions from the drywall; and laboratory studies on the elemental composition of the drywall. At this time, we expect that some preliminary results from these tests will be available by late October 2009, as further detailed on the next page. As the results come in, the CPSC will continue to work aggressively with its federal partners for scientific data that links specific emissions from the drywall to the reported corrosion and health issues.

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The investigation is proceeding simultaneously on two tracks:

		Timeline	Results/ Evaluation
<b>Track 1</b>  <i>Technical evaluation of the relationship between drywall and health symptoms, electrical and fire safety issues.</i>	<b>Elemental and Chemical Testing</b> <i>(CPSC &amp; EPA's Environmental Response Team)</i>  Purpose: to characterize the components of uninstalled drywall, including imported drywall, domestic calcined drywall, and domestic synthetic drywall collected from warehouses, suppliers and manufacturers. The drywall samples will be analyzed for organic and inorganic compounds, metals, and other properties.	EPA to complete testing of 15 samples collected by CPSC by end of Sept. '09	Analysis completed by end of Oct. '09
	<b>Chamber Testing</b> <i>(CPSC interagency agreement with Lawrence Berkeley National Laboratory)</i>  Purpose: to isolate the drywall's chemical emissions from those of other products (e.g., carpets, cleaners, paint, adhesives & beauty products). Investigations will provide data to model exposure and perform a preliminary health risk assessment. <b>Phase I:</b> screen drywall samples in controlled chambers to identify the chemicals (particularly sulfur-containing but also major volatile organic compounds and other irritant gases) emitted from uninstalled drywall. <b>Phase II:</b> focus on a limited number of higher emitting materials identified in the Phase I studies. The Phase II studies will characterize the factors that affect long-term emissions such as temperature, moisture, ventilation, and wall treatments.	Phase I will be completed by LBNL by mid Oct. '09. Phase II to follow.	Preliminary health risk assessment will be completed by CPSC staff by end of Oct. 2009.
	<b>In-Home Indoor Air Sampling</b> <i>(CPSC contract with Environmental Health and Engineering)</i>  50 homes. The sampling consists of building characterization and indoor environmental measurements. This work will help provide input for future chamber studies and begin to inform on corrosivity on a range of affected and control homes in the most-affected states (Phase II and Engineering Analysis).	In-home testing completed by end of Sept. '09, laboratory analyses completed by mid Oct. '09	Contractor report to CPSC by early Nov. '09.
	<b>Engineering Analyses: Electrical and Fire Safety</b> <i>(CPSC interagency agreements with Sandia National Laboratory and the National Institute for Standards and Technology)</i>  Purpose: to determine possible risk of electrocution and fire hazards, via metallurgical analysis of components harvested from affected homes to characterize any damage, and by exposure of new components to elevated levels of gases identified in the drywall chamber studies to determine long-term exposure safety implications. The components of interest include: <ul style="list-style-type: none"> <li>• Electrical - residential wiring, receptacles, switches, circuit breakers, panel boards, ground fault circuit interrupters (GFCIs), and arc fault circuit interrupters (AFCIs).</li> <li>• Gas service - flexible connectors and copper piping.</li> <li>• Fire safety - smoke alarms and fire sprinklers.</li> </ul>	Majority of CPSC engineering sample collection is expected to be completed by late Sept. '09. Staff will continue to collect important samples as discovered.	Studies to commence after chamber study & air sampling (which provide necessary inputs)
<b>Track 2</b>  <i>Tracing the drywall chain of commerce.</i>	CPSC is pursuing a detailed investigation into where the imports of drywall originated and where they went. The inquiry involves well over 100 manufacturers, importers, drywall distributors and builders. The staff is also gathering detailed information from home owners about the composition of their homes and the health and corrosion effects experienced.		

## **INVESTIGATION OF IMPORTED DRYWALL STATUS UPDATE, SEPTEMBER 2009**

### **I. Overview**

This update describes new developments in the ongoing investigation of imported drywall and supplements the previous reports provided to the Committee:

- <http://www.cpsc.gov/info/drywall/drywallstatus07092009.pdf>
- <http://www.cpsc.gov/info/drywall/drywallstatus08112009.pdf>

Since the August report, the Consumer Product Safety Commission (“CPSC”) has received an additional 382 incident reports related to drywall, raising the total number of incident reports to 1192. We also had reports from one new state, South Carolina, making a total of 24 states and the District of Columbia where problem drywall has been reported. The majority of the reports continue to be from Florida, Louisiana, and Virginia.

The focus of the federal drywall team has remained on pursuing the scientific bases of this problem, through the several studies described in previous reports, and tracing the chain of commerce of the drywall. Highlights this past month:

- conducted investigative visit to China including meetings with government officials,
- completed principal field work for 50 home indoor air sampling program,
- coordinated a rapid state and federal response to allegations of radioactive phosphogypsum in Chinese drywall,
- followed-up with more than 500 consumers to update the data submitted in their initial incident reports and
- completed 75 “in-depth investigations” with another 20 in progress.

### **II. Federal and State Coordination**

Regular coordination and information sharing continues among the federal drywall team and our state partners. Immigration and Customs Enforcement (ICE) has joined the federal partnership with CPSC, EPA, CDC, and HUD as a regular participant in information sharing.

CPSC coordinated testing and reporting results for radioactive phosphogypsum contamination in drywall with the Florida Department of Health and the EPA National Air and Radiation Environmental Laboratory.

The CPSC updated the *Drywall Information Center* website to include a new report form that allows consumers to directly input detailed information about imported drywall in their homes. For those consumers who do not have access to the Internet, the CPSC also takes consumer calls regarding drywall on its Hotline and handled 158 such calls during the month of August.

### **III. International Efforts**

CPSC staff visited China and met with Chinese government officials as well as management from several sites that we believe to be of interest. The team inspected gypsum mines and drywall manufacturing plants in China with Chinese government officials. During the trip, the team collected samples of raw materials and finished products from both mine/manufacturing establishments and retailers and met with the China Building Materials Academy, a state-owned research and development institute.

### **IV. Progress in the Investigation**

#### **A. Investigation into Scope of Affected Homes and Chain of Commerce**

CPSC continues to analyze the information received from consumers, builders, importers, manufacturers and suppliers of drywall to determine how much imported drywall is affected and where that drywall has been installed. To date, CPSC staff has confirmed that during 2006, 6,997,456 sheets of Chinese drywall were imported into the U.S. and 28,778 sheets were imported into Guam, Saipan, and American Samoa. The staff is continuing to verify more shipments through our partnerships with CBP and ICE, as well as by investigating importers and distributors.

#### **B. Technical Investigation**

Engineering, health and safety analyses continue as planned and discussed in earlier reports. CPSC engineering staff has visited ten homes in Florida, Louisiana and Virginia to harvest samples of electrical, plumbing and safety systems. To date, we have gathered 110 electrical receptacles, 31 switches, 5 circuit breakers, 26 smoke alarms, and 18 samples of copper piping, among other such components. Eighty pieces of drywall have been collected from affected homes. We continue to have no confirmed fire incidents involving Chinese drywall, but are investigating all reports on this subject.

EPA is conducting elemental analyses of 15 drywall samples. EPA expects to complete its analyses of drywall samples in the next two weeks. An interagency technical committee has been established which will review all test results and interpretations for the drywall investigation to ensure sound science is employed. We anticipate that the technical committee will complete its review and report its findings to the CPSC in October.

In July, CPSC staff became aware of allegations of the use of radioactive phosphogypsum in some imported drywall. Radioactive materials are outside of the CPSC's authorities under the Federal Hazardous Substances Act, and as such are also outside of our expertise. CPSC staff immediately arranged for testing in the radiation labs of our partner agencies in the State of Florida and with the EPA, and we provided samples to these laboratories for analysis. The data from these tests were reviewed by the interagency technical committee. The results along with the technical review showing that no radiological hazard was found were released on our *Drywall Information Center*.

The chamber studies at Lawrence Berkeley National Laboratory to isolate drywall emissions, as described in the July report, have begun and remain in progress. Additional samples collected in China will be added to the study and additional time will be needed for that work. For the in-home indoor air sampling study, the contractor, Environmental Health and Engineering, has already conducted air sampling in all 50 homes, but additional long-term sampling has been added to the tests to improve detection capabilities, and those longer-term tests will be completed later this month. The evaluation of the results is expected to be complete by October. The results of both of these studies will be evaluated by the technical committee prior to public release.

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