

**Senate Committee on Commerce, Science and Transportation  
Subcommittee on Consumer Protection, Product Safety and Insurance**

***Contaminated Drywall:  
Examining the Current Health, Housing and Product Safety Issues Facing Homeowners***

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Good morning, my name is Bill Shelton. I am the Director of the Virginia Department of Housing and Community Development (DHCD). The agency administers a comprehensive set of housing and community development programs that help create safe, affordable, and prosperous communities where Virginians can live, work and do business. The agency is also responsible for the administration of the state’s major building safety regulations, most notably the Uniform Statewide Building Code (USBC). This latter role led to our involvement in understanding and responding to some of the serious problems that resulted from the use of defective drywall in residential construction during the last decade. I am here today at the invitation of Chairman Rockefeller to speak about Virginia’s experience with defective drywall products.

**Background**

Drywall, sometimes referred to as plasterboard or gypsum board, is one of the most common building materials. Builders use it for walls and ceilings in home and commercial construction. It consists of a sandwich panel made of gypsum (hydrated calcium sulfate [CaSO<sub>4</sub>·2H<sub>2</sub>O]) pressed between two thick sheets of paper. For decades, builders have used drywall as a safe and economical alternative to traditional lath and plaster. However, during the latter half of the last decade, owners and occupants of single-family and condominium units constructed at mid-decade in Virginia and elsewhere began to report problems with significant and unexpected levels of corrosion in HVAC, electrical and plumbing systems, and appliances. Over time, the apparent cause of these and other problems such as the presence of strong odors (“burning matches” or

“rotten eggs”) were traced to excessive levels of gaseous sulfur compounds such as hydrogen sulfide (H<sub>2</sub>S) emitted by specific brands of drywall. While the offending products were ultimately identified with reasonable certainty, numerous questions remained. These included:

- Determining where and how many residential units were affected,
- Preventing the continued use of defective drywall products,
- Developing and applying appropriate remediation standards to eliminate current and future problems,
- Providing assurance that homes can be remediated and reoccupied safely,
- Estimating the total and unit costs for remediation activities, and
- Determining who would pay for property remediation and other losses incurred by homeowners, contractors, developers and others.

That the problems of defective drywall appeared when and where they did was the result of a kind of perfect storm of circumstances, if you will. These included the need for massive rebuilding in the Gulf Coast following two very real storms—Katrina and Rita—and the red-hot (some would say in retrospect “overheated”) housing market found in many parts of the country (including Virginia) during the middle of the last decade. Demand for drywall simply outpaced domestic sources of supply. American distributors of building materials seeking new sources found them in half a dozen or more manufacturers based in China. Their products appeared to be functional equivalents of the familiar domestic materials. In southeast Virginia, one building materials supplier received 150,000 sheets from a single Chinese source. Builders used them to complete projects throughout the region and elsewhere in the state. This set the stage for the problems that have brought us here today.

## **The Problem Emerges**

By late 2008, the federal Consumer Products Safety Commission (CPSC), as well as state and local officials in Virginia and other southeastern and Gulf States, began

receiving complaints about drywall-related problems. By January 2009, CPSC had received some 1,500 incident reports from 24 states, with the largest numbers attributable to, in descending order, Florida, Louisiana and Virginia. By the summer of 2010, data received by Virginia's Department of Health, the Office of the Attorney General, and DHCD *confirmed* that at least 250 Virginia homes were affected; it appeared very likely that the total might exceed 400.

While the number of affected homes was small relative to the state's 2010 inventory of more than three million occupied housing units, the consequences for homeowners were anything but small. For some households, the presence of defective drywall has rendered the homes uninhabitable. The threat of fire hazards associated with damaged electrical system components, damaged plumbing and gas piping, dysfunctional or damaged HVAC systems, damaged appliances and consumer electronics, nonworking smoke and carbon monoxide detectors, actual or perceived threats to the health of individual family members, persistent and overwhelming foul odors and other factors all contributed to individual decisions to vacate properties.

Relocation might relieve the family of the immediate threats to health and safety, but it could not relieve them of the financial obligations associated with a house that could no longer be called home. Although lien holders could offer temporary moratoria, in most cases to avoid foreclosure and long-term damage to the family's credit, mortgages still needed to be paid—even as the stigma associated with defective drywall erased the owner's equity and the property's marketability. Many of the Virginia homes were large, with values above regional averages. In some cases, they represented the owner's primary asset, often the product of years of saving toward the goal of securing the home of their dreams. In still other cases, owners may have had no recourse except bankruptcy to stave off even worse financial consequences for the family.

Owners soon encountered other problems. The underwriting for most homeowner policies requires that the insured occupy the home. While limited absences might be

permitted and waivers secured in some cases to deal with unforeseen circumstances, in the end homeowners may face the loss of insurance coverage. Because mortgages are predicated on the homeowner maintaining insurance coverage to indemnify the mortgagee in case of destruction or damage to the property, the loss of insurance may ultimately lead to termination of the loan even if payments are being made.

Bad as these circumstances were, the affected homeowners were also caught up in the overall housing market collapse that occurred almost simultaneously with the discovery of widespread drywall problems. Even without defective drywall, homeowners in areas experiencing double-digit declines in property values might have faced the prospect of going “underwater” on their mortgages. With defective drywall present in the home, that prospect became a virtual certainty. This, of course, would preclude seeking conventional refinancing or the leveraging of homeowner equity.

Thus, homeowners generally had limited recourse to the financial resources needed to remedy the problem even if there was an agreed-upon remediation protocol. Some homeowners sought relief from the insurer covering their properties. Except where a specific policy provision covered the risk for faulty materials, insurers generally denied such claims, asserting that the damage to the homeowner was the result of the use of faulty materials by builders and thus specifically *excluded* from coverage. Litigation to overcome this assertion has generally failed in Virginia state courts and in the federal court system, once again leaving the homeowner without the resources needed to address the problem.

Homeowners also brought suit in the federal courts against the manufacturers and distributors of the defective materials. This approach met with limited success. In a noteworthy case brought against a Chinese manufacturer (Tai-Shan Gypsum Co., Ltd.) in the U.S. District Court for the Eastern District of Louisiana, seven Virginia homeowners prevailed. In a default judgment, the trial court awarded damages ranging from \$90,000 to more than \$441,000. The average award was almost \$373,000. However, the plaintiff

families are yet to receive the proceeds of this case. Litigation, including appeals from this decision and additional class actions, continues. Within the past week, a Virginia couple also secured a default judgment against Tai-shan; however, as in the Louisiana trial, actually collecting the award will likely be a prolonged and uncertain process.

Litigation in other states has been somewhat more successful. In Muscogee County (Columbus), Georgia, Lowe's Home Centers, without admitting wrongdoing, liability or fault, agreed to a settlement of a state class action suit that resulted in a total of \$5.5 million being available to qualified claimants. In addition, the same federal court in Louisiana that heard the seven Virginia plaintiffs has agreed to settlements with one of the multinational corporations (Knauf Plasterboard Tianjin Co.) producing drywall in China. It provides funding for the repair of hundreds of homes in four states (Florida, Louisiana, Mississippi and Texas). This case does not affect Virginia claimants directly. It involved products made by a different manufacturer and one that is not a solely Chinese enterprise as was the apparent case in Virginia.

## **The State Response in Virginia**

The legal and factual circumstances surrounding defective drywall claims differ from state to state. Once the nature and the potential scope of the problem in Virginia became apparent, the legislature and executive branch agencies became actively involved in responding to defective drywall issues.

### *Notice to Local Building Officials*

As early as 2009, the Division of Building and Fire Regulation at DHCD, responding to initial reports from the CPSC and other sources, sent an advisory memorandum to all local building officials, the parties charged with enforcement of the USBC. This alerted the officials to the emerging problems associated with certain Chinese-manufactured drywall products. The memorandum noted the potential for the corrosion of metals by sulfur compounds and the hazards that such corrosion presented to

occupants from a host of causes including malfunctioning smoke and carbon monoxide detectors. The advisory noted that while the CPSC and other agencies were just beginning their research into the problem, the use of the suspect materials should be discontinued and that segments of the construction industry be so advised.

### *Defective Drywall Task Force*

In early 2010, as the scope of the problem continued to grow, Governor Bob McDonnell assembled a drywall task force to learn more about the problem, hear from homeowners and other affected parties, determine the numbers of affected properties and consider possible areas for action at the state level. Task Force meetings and subsequent town hall events brought together local officials, homeowners, other affected parties and state agencies with potential roles to play in responding to the issue. These sessions revealed more fully and poignantly the extent to which defective drywall had disrupted the lives of hundreds of Virginians. They also began to outline priority areas for state action. These included the urgent need to provide homeowners and contractors with authoritative guidance on appropriate remediation steps as soon as possible. Participants registered their concerns about whether potential homebuyers and renters were receiving proper notice from sellers or landlords when properties contained defective drywall products were offered for sale or lease. Finally, homeowners—frustrated by the response of insurers, manufacturers and the courts—looked to the state to identify funding to support remediation activities once guidance was in place. This proved to be the thorniest issue in a time of overall financial stringency.

### *State Legislation*

During its most recent two legislative sessions, Virginia enacted measures that responded directly to aspects of the defective drywall problem. Earlier this year, the Governor signed HB 1610 and SB 942 into law. These bills, which the Virginia Housing Commission recommended, responded to concerns about the possible lack of disclosure

of the presence of defective drywall in properties offered for sale or lease. Real estate professionals engaged by sellers and buyers, individual sellers and landlords with actual knowledge of defective drywall in a dwelling unit must disclose that fact to prospective buyers or tenants. Failure to disclose can have real financial and regulatory consequences. These identical bills went further to establish a reassessment process and other provisions that localities could use to grant property tax relief to homes with defective drywall.

Also in 2011, SB 1294 brought defective drywall under the aegis of the Virginia Consumer Protection Act. The law prohibits suppliers, after March 25, 2011, from selling, offering for sale, or using defective drywall in the construction, remodeling, or repair of any residential dwelling in Virginia. This prohibition does not apply to the sale or offering for sale of buildings or structures in which the drywall was already in place.

The first legislative attempt to address funding for remediation took place during the 2010 session. HB 46 created the Virginia Defective Drywall Correction and Restoration Assistance Fund for residential property. Loans and grants from the Fund could be used to pay reasonable and necessary costs for: (i) the remediation of a contaminated property to remove hazardous substances, hazardous wastes, or solid wastes, (ii) the stabilization or restoration of such structures or (iii) the demolition and removal of the existing structures or other work necessary to remediate or reuse the property. However, without an actual source of money, and with few prospects for a direct infusion of state funds given the current fiscal environment, the Fund remains empty. A key provision of the bill established a statutory definition of “defective drywall” that drew upon the extant research and findings published by the CPSC.

Other initiatives that the legislature chose, for a variety of reasons, not to enact during the past two years would have:

- Compelled insurers to provide coverage for the damaged property,

- Barred the cancellation of insurance coverage for property that became vacant due to the presence of defective drywall,
- Barred the nonrenewal of insurance coverage or changes in rate structures based on the presence of defective drywall, and
- Required the State Corporation Commission to levy an assessment against state-regulated property and casualty insurers to provide financial support for the Defective Drywall Correction and Restoration Assistance Fund.

### *Regulatory Initiatives*

During much of 2010, affected parties continued to await authoritative guidance on the remediation of defective drywall properties from a variety of sources, including the CPSC. Based on information developed at CPSC and elsewhere, DHCD, following consultation with the state's Office of the Attorney General, concluded that it—or, more accurately, its Board—could act under existing statutory authority to bar the use of defective drywall products and provide remediation standards through an amendment to the Uniform Statewide Building Code.

Following statutory procedures specifically intended to address defective or deficient building materials, DHCD and its Board conducted a process to define defective drywall, bar its use within the Commonwealth, and provide remediation standards that would allow the safe removal of the offending product and the restoration of property to a safe condition. With the participation of representatives of the building industry, the building materials industry, affected homeowners and other interested parties, the Department developed a proposal that was ultimately considered and approved for final publication in the *Virginia Register of Regulations* on August 29, 2011. The new regulation:

- Prohibits the use of defective drywall in new construction,
- Establishes a remediation standard for the removal of defective drywall and the rebuilding of buildings affected by the installation of defective drywall,



- Defines defective drywall for the purposes of applying the interim performance and remediation standards,
- Requires a building permit for the remediation of defective drywall,
- Requires use of the remediation standards when defective drywall is replaced and clarifies that the local building official has authority to consider modifications to the standards,
- Requires the removal of defective drywall when remediation is undertaken while permitting non-defective drywall to remain in place under certain conditions,
- Addresses the conditions for the removal and replacement of insulation and flooring materials,
- Addresses the conditions for the removal and replacement of electrical wiring and plumbing and mechanical system components and equipment,
- Establishes cleaning, airing out, and clearance testing criteria post remediation and prior to re-occupancy,
- Establishes standards for agencies conducting pre-rebuilding or post-rebuilding clearance testing,
- Establishes standards for post-rebuilding clearance testing,
- Addresses final approval by the local building official, and
- Addresses the approval of remediation work undertaken prior to the approval of remediation standards.

As far as we are aware, these were the first general remediation standards for defective drywall to use the medium of uniform building regulations to give effective guidance for contractors and homeowners restoring residential properties to a safe condition. They are comprehensive in scope. Perhaps most importantly, they provide standards for post-remediation testing. Current and subsequent occupants of remediated residential property must have assurance that the problems associated with defective drywall have been eliminated so that these houses can once again become homes.

### **Other Sources of Remediation Guidance**

While DHCD was considering the provisions for a remediation standard, the CPSC continued to work on its recommended guidance. The National Association of

Homebuilders (NAHB) and the Knauf Company (a global supplier of building products) also proposed varying responses. The U.S. District Court for the Eastern District of Louisiana included its own scope of remediation in conjunction with the *Taishan Gypsum Co., Ltd.* case. While there was considerable overlap among these proposals, there were also some significant differences. The most notable of these concerned the appropriate handling of electrical wiring in affected properties. The District Court generally required the most extensive remediation steps, going beyond not only the NAHB but also the most recent CPSC recommendations. The Court included the removal and replacement of all electrical wiring as well as removal and replacement of various hard-surfaced components of homes, such as cabinetry and tile floors.

The most significant difference between the standard incorporated in the Virginia building code and those of the Louisiana court probably occurs in connection with electrical wiring and hard-surfaced components. Virginia does not *require* the complete removal of electrical wiring components or of woodwork, cabinets, tile or wood floors. Instead, wiring may be left in place so long as exposed ends are removed or cleaned to reveal clean or uncorroded surfaces. Hard-surfaced-materials *may* be left in place or reused. On the other hand, the CPSC guidance does not go as far as the Virginia regulations in addressing the removal and replacement of items such as HVAC components and water service plumbing. These variations in applicable guidance do have implications for the cost of remediation.

### **Costs of Remediation**

It is perhaps no surprise that the Louisiana Court's remediation protocol, which required the most sweeping actions, appears to carry the highest cost—pegged at \$86 per square foot. That would amount to more than \$200,000 for a 2,400 square foot home—exclusive of temporary relocation costs and other ancillary charges. The National Association of Homebuilders suggested guidelines would fall well below that range (perhaps closer to \$35-\$50 per square foot) as would Virginia's new regulations.

Several factors influence any estimate of the aggregate cost of remediating defective drywall in Virginia. These include the actual number of affected properties, the size of the housing unit, the extent to which the offending material is actually present, the number of sheets of new material needed to replace the defective product and the remediation standard. Homes where relatively little of the material was actually present or where it was limited to a specific area may not require as extensive a response. However, where the material is mixed with other drywall or scattered throughout the dwelling unit, the safest and most expeditious response is to remove and replace all drywall.

Assuming that there are at least 400 affected housing units in Virginia, the estimated cost of remediation could reach or exceed \$32 million depending on whether only limited amounts of material were present in affected homes or if all drywall and other affected materials and systems had to be removed and replaced. Given what we know about the extent of the problem, it is likely that the costs would reach the estimate. Following the Louisiana Court's protocol would likely double this sum. Note that this only addresses the work done to the property itself and not costs associated with reimbursing residents for the time they would be relocated during the remediation process and other potential costs.

## **Funding Remediation**

Regardless of the specific dollar amount associated with varying remediation standards, the most salient fact is that, for a variety of reasons, most of the parties affected by defective drywall lack the resources to pursue remediation without assistance. Further, at least in the case of Virginia, few viable sources of funding appear to be available. Unless the manufacturer associated with the materials implicated in the affected Virginia homes agrees to a broad settlement, litigation is likely to be long and frustrating with no certainty that claimants will ever be made whole. While the state

and its local governments have offered tax relief to affected owners, such relief cannot provide the front end funding needed to begin the remediation process.

The straitened financial circumstances of state and local governments make them less able to offer financial assistance to homeowners than might have been the case in earlier times. Annual funding available to states and affected entitlement jurisdictions from formula-driven federal program sources, such as those administered by HUD, fall well short of the scope of the problem in Virginia and include features that may limit their direct use in the response to the drywall issue.

Virginia has explored other options, including the possibility of setting up a low/no-interest loan fund to give affected homeowners access to the front-end money needed to pursue remediation. Unfortunately, the wider decline in housing market values as well as the even more catastrophic losses associated with property identified as containing defective drywall, means that there is almost no equity in these homes to provide security for loans under current circumstances.

Virginia has used low/no-interest loan programs successfully for many years to finance low-income home purchases, the remediation of indoor plumbing deficiencies and more general home rehabilitation initiatives. In each of these cases, however, the expectation built into the projects was that at some point in the future—whether by a subsequent sale of the property, a market rate refinancing, or even in the case of delinquency and ultimate foreclosure—some equity would be available to return to the underlying program. That assurance does not appear to present in the case of defective drywall homes. As a result, any financial aid might effectively amount to a grant in aid at a time when the state, like other governmental entities is working hard to meet its existing obligations for a wide array of vital public services.

As an alternative, Virginia is also exploring the possible use of HUD Section 108 Loan Guarantees authorized under the Community Development Block Grant Program to

provide loans to affected homeowners. It is unclear whether such a mechanism is feasible. Program requirements may limit the availability of this option to some affected parties or communities. The ability of homeowners to repay even loans at this relatively favorable rate is a practical constraint. Despite their nominal incomes, many households could find it difficult to repay loans while continuing to remain current with mortgages—especially when those homes have little or no remaining equity in their current state. Success might depend on the willingness or ability of the original mortgagee to agree to a modification based upon the potential benefits of a successful remediation effort, including more stable home values, the restoration of equity, and an increased likelihood of future mortgage payments. Nonetheless, even this approach faces long odds and is unlikely to offer a broad remedy for the bulk of affected homeowners.

## **Closing Thoughts**

The circumstances surrounding defective drywall are nearly unprecedented. Previous instances of the failure of construction materials have generally involved domestic manufacturers and suppliers of new products. Defective drywall involves international trade in what was seemingly one of the most mundane commodities used in construction. The fact that some of the manufacturers have virtually no legal or business presence within the United States severely constrains the ability of individuals, or their home states for that matter, to attain redress. The scale of the aggregate costs of the product and the fact that its effects and substantial costs extend across several states strongly suggests that there is a need for the federal government to become even more active in responding to this issue. The CPSC and other agencies have provided valuable information that helped identify the source and nature of the problem and lay out a technical path for the safe remediation of affected homes. Now the federal government needs to consider putting its shoulder to the wheel in addressing the next step of the process—marshalling the financial resources that enable homeowners to undertake remediation.

Virginia, like its sister states, will continue to pursue workable methods for getting the product out of homes and people back into them. In the end, of course, the best solution would be for those who produced a product that has disrupted the lives of our citizens to take financial responsibility for those consequences.