

**Statement of Mike Nagel, on behalf of the  
National Association of Home Builders**

**Before the**

**Senate Environment and Public Works Committee**

**October 18, 2007**

This written statement is respectfully submitted on behalf of the National Association of Home Builders (NAHB) on the issue of children's health and lead. NAHB is a national federation representing more than 235,000 members involved in single family and multifamily home building, remodeling, light commercial construction and housing finance. This testimony, as presented by Mike Nagel, a professional remodeler from Chicago, Illinois, and the current Chairman of the NAHB Remodelers, a 14,000-member organization within NAHB, details facts about the strides that are being made by professionally-trained remodelers to reduce lead exposure for children living in older homes throughout the United States.

**Introduction**

Despite decades of effort and more than ten years of continually declining lead levels, lead poisoning remains an important problem facing some of our nation's youth. According to the Centers for Disease Control and Prevention (CDC), as reported by the U.S. Environmental Protection Agency (EPA), approximately 40% of all U.S. housing units (about 38 million homes) have some lead-based paint.<sup>1</sup> For the most part, older homes are more likely to have lead-based paint hazards because of the use of lead as a primary ingredient in many oil-based interior and exterior house paints used throughout the 1940s and 1950s.<sup>2</sup> Though the Consumer Product Safety Commission (CPSC) finally imposed strict limitations on the use of lead in paint for toys, residences, and public areas in 1978, the nation's stock of pre-1980 housing continues to age and deteriorate, and the deteriorated paint creates pathways for lead exposure to the residents in our homes who are the most easily susceptible to the damaging effects of lead poisoning – children.<sup>3</sup>

Children are more sensitive to health problems from lead exposure, often attributable to contact with lead in their home. Young children are the most affected by lead in the home, first because they are more likely to ingest contaminants and other toxics by virtue of hand-to-mouth contact, and second, because their central nervous system is still developing. The most likely source is ingestion from peeling or cracking paint, paint chips, chewing, mouthing painted surfaces, or through leaded dust on the

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<sup>1</sup> U.S. EPA, 2006. *Economic Analysis for the Renovation, Repair, and Painting Program Proposed Rule*. Chapter 3.2.3, page 10.

<sup>2</sup> *Ibid.*, Chapter 3.1.1, page 1.

<sup>3</sup> *Ibid.*, Chapter 3.1.1, page 1.

hands. Additionally, outside the home, lead can arrive on the property through airborne emissions from lead smelting, battery manufacturing, solid waste incineration,<sup>4</sup> or even transportation. In whatever instance it occurs, children with elevated blood lead levels are reported to have lower IQ scores and face other challenges in mental and intellectual development. Therefore, it is imperative that something be done to address childhood lead exposure in older homes that may be in disrepair, or that may contain lead-based paint.

Following passage in 1992 of Title X Lead-Based Paint Hazard Reduction Act,<sup>5</sup> three federal agencies – U.S. EPA, Department of Housing and Urban Development (HUD), and OSHA – and one presidential taskforce<sup>6</sup> conducted research, developed policies and regulations, and made recommendations on how to reduce the risks of childhood lead-based paint poisonings from deteriorated lead-based paint. Some important findings came from national surveys for lead-based paint in housing conducted in 1990 and again in 2001 by HUD. For example, HUD’s surveys found only 2% of the homes built after 1960 were likely to contain any deteriorated lead-based paint, however that percentage increased to 25% for homes built between 1940 and 1959, and finally increased to 56% for homes built before 1940.<sup>7</sup>

Armed with this data, it makes sense for federal agencies to target their control strategies on housing and areas of the country where the greatest risks are known to exist. HUD’s findings, coupled with numerous government and university studies, confirm that the focus should clearly rest on addressing the housing of primary concern. As identified in extensive research by CDC, HUD, and the President’s Task Force on Lead-Based Paint: *“The program (elimination of [Lead-Based Paint] poisoning in children) should continue to emphasize control of lead paint hazards in pre-1960 low-income privately-owned housing units where young children are expected to reside.”*<sup>8</sup>

Thus, the challenge before us today is to recommend the best way to leverage the combined resources of private and government sectors to focus on those residential structures (pre-1960) that pose the most significant risks of lead-based paint exposure to children while still providing an adequate level of protection for children across all income levels in all housing built before 1980. NAHB’s response to this challenge is to ensure that all contractors and homeowners are aware of lead-safe work practices and to recommend that federal and state agencies continue to focus their limited resources on finding and eradicating lead hazards in child-occupied housing built prior to 1960.

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<sup>4</sup> U.S. EPA. 2006. *Economic Analysis for the Renovation, Repair, and Painting Program Proposed Rule*. Chapter 3.1.1, page 2.

<sup>5</sup> Title X (pronounced Title Ten) of the Lead-Based Paint Hazard Reduction Act of 1992, P.L. 102-550

<sup>6</sup> Presidential Task Force Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards, February 2000.

<sup>7</sup> U.S. Department of Housing and Urban Development, National Survey of Lead & Allergens in Housing: Final Report, Volume I: Analysis of Lead Hazards. Office of Lead Hazards Control, Washington, D.C., Page(s) 4-6 and 4-7, April 18, 2001.

<sup>8</sup> President’s Task Force on Environmental Health Risks & Safety Risks to Children, Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards, Washington, D.C., Page 29. February 2000.

## **Professional Remodeling Improves Lead Hazards**

Extensive public debate has already taken place about who should ultimately be held responsible for children's exposure to lead-based paint in homes. While this debate goes on, NAHB Remodelers are improving the conditions of our nation's older homes by renovating, repairing, and repainting with lead-safe work practices performed by trained remodeling professionals. Furthermore, NAHB members continue to educate consumers about the dangers of lead hazards in homes and the potential consequences of unprofessional or unsafe do-it-yourself remodeling activities that can exacerbate lead hazards and actually create more health problems in the long term.

In 2006, NAHB commissioned a substantial research project to measure the amount of lead dust generated by home improvement contractors using typical renovation/remodeling activities and to assess whether these routine activities increased lead dust levels in the work area and the property. This research was conducted by Atrium Environmental Health and Safety Services, LLC (Atrium), an environmental research services firm that employs a staff of Certified Industrial Hygienists and environmental and health safety specialists who evaluate, develop, and implement programs to minimize hazards and comply with current environmental, health and safety regulations, standards and guidelines.

The Atrium project consisted of onsite field data collection from actual homes containing lead-based paint in the Northeast and Midwest. During the data collection phase, 342 air samples and 407 surface dust samples were collected during 60 typical R&R activities in five separate, unoccupied residential properties located in Roselle, Illinois; Wallingford, Connecticut; Farmington, Connecticut; Cheshire, Connecticut; and Milwaukee, Wisconsin. The project was designed to evaluate routine remodeling and renovation activities that normally occur in the marketplace and that represent the most common jobs performed by renovation and remodeling firms. Lead dust loadings were measured on the surfaces and in the air both before *and* after the work took place. The remodeling and renovation work itself was performed by trained and licensed professional renovation and remodeling contractors in each of the areas where the property was located and the final survey data was reviewed by the National Center for Healthy Housing (NCHH) as a means of quality control, in which NCHH conducted statistical analyses of the sampling results.<sup>9</sup>

The results of the research showed a clear improvement in the amount of lead dust loadings from nearly every type of typical remodeling activity, with the exception of mechanized sanding events<sup>10</sup>. The Atrium project data revealed that renovation and remodeling activities did not create new lead hazards and in all properties except one (Farmington, Connecticut, where an unshrouded power sander was used extensively), the lead dust loadings on surfaces were lower after the remodeling contractors completed

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<sup>9</sup> Attached is a copy of the Executive Summary of the Atrium survey project. NAHB is happy to provide the entire Atrium report, which is a comprehensive and substantive analysis detailing the entire work project including all recordable data collection results.

<sup>10</sup> Additionally, work practices identified by HUD as "prohibited" – including open-flame burning, torching, or the use of volatile paint strippers in an enclosed space – were explicitly avoided in this project.

the work than when they arrived. As for air exposure, the results also showed a trend of reductions in airborne lead based on personal breathing zone air sample results.

In addition to these results, the Atrium project data also demonstrated that several practices, associated with lead-safe remodeling and renovation generally, produced remarkable reductions in overall lead dust loadings. For example, misting surfaces with water during the renovation work showed a significant reduction in airborne lead dust levels when compared to events where no misting was used. Furthermore, the use of a HEPA filter-equipped vacuum cleaner, combined with either wet wiping or Swiffer® mops during post-work clean-up showed the greatest effect on reducing lead loading in surface dust. Combining these two activities could reap even greater benefits for reducing lead dust and further improving pre-work conditions in lead-affected homes.

The overall conclusions of the Atrium project reinforce what has been commonly believed among remodelers for a long time: lead-safe remodeling and renovation activities performed by a trained professional can remarkably improve lead dust loadings in older homes. It is also our belief that it can improve the health and welfare of the home's residents, particularly young children. Ultimately, lead-safe professional remodeling is one of the best lines of defense for reducing lead exposure for children living in older homes and it should be encouraged. The CDC agrees that the "*use of leadsafe work practices during renovation can advance the goal of primary prevention of lead poisoning.*"<sup>11</sup> As leaders in the fight to reduce lead hazards in homes, and reduce pathways to childhood lead poisoning, we applaud the work of professional remodelers and the substantial improvements they make to older homes.

### **The Dangers of Do-It-Yourself and Lead**

In the U.S. today, there are approximately 120 million existing homes that embody the full range of structural and environmental soundness. Many of these homes and older housing units need serious renovation and repair work, but often this work cannot be undertaken due to cost limitations, especially for lower-income households. To their own detriment, some individuals attempt to undertake this work via untrained contractors or do-it-yourself projects, and consequently dramatically increase instances of lead exposure for the home's residents. In this regard, Congress has a real opportunity to protect the health, safety, and welfare of its citizens by prescribing methods by which professional remodeling using lead-safe work practices becomes the viable alternative to any potentially harmful do-it-yourself venture, or worse, the hiring of cheap contractors who are not adequately trained to undertake the work.

Unfortunately, there are many cases in which lead poisoning has resulted from home renovation activities undertaken by well-intentioned homeowners who simply want, or need, to save some money. In reality, hiring a professional trained in lead-safe work practices usually costs more than doing it alone, or contracting an untrained handyman. Professionals are more careful, which increases the length of time of the

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<sup>11</sup> U.S. EPA, 2006. *Economic Analysis for the Renovation, Repair, and Painting Program Proposed Rule*. Chapter 3.2.3, page 10.

project; require specialized equipment (respirators, HEPA vacuums, etc.); and often employ highly-skilled laborers. For homeowners who want to be frugal, or that want to complete a project in a faster timeframe, it may seem infeasible or less desirable to hire a professional. The option of choosing the untrained contractor, or undertaking dangerous work alone, can become a real, albeit worrisome, alternative because it appears to be more affordable.

In light of this situation, there are a number of regulatory factors that need careful consideration for addressing childhood lead poisoning in older homes. For example, the EPA will soon issue new regulations for contractors conducting renovations, repair, and painting for pre-1978 homes. Initial drafts of these proposed regulations have included a mandatory testing requirement called a “clearance test,” or third-party verification requirement. This clearance test will supposedly demonstrate that the contractor took the necessary steps to ensure that the home is below abatement-level lead levels after remodeling and renovation activities are completed. NAHB has substantive concerns with the concept of a “clearance test,” as well as the impacts of such a test’s cost on consumer decision-making when remodeling their home.

A clearance test is basically designed to prove an elimination of the presence of lead in the home, which is technically the task of abatement work not remodeling. The law already deals separately with abatement regulations. Because clearance testing cannot distinguish between lead from remodeling versus lead that may have blown in the window, been tracked in from outdoors on someone’s shoes, or is present in the house from some other source, the requirement seems inappropriate in a remodeling context. The results of a clearance test depend on the entire history of the house and its neighborhood, and a remodeler simply is not responsible for having this breadth of information.

Compliance with clearance test requirements will only be enforced upon trained remodeling professionals – the very people who are most likely to do the work safely. Unlike these individuals, the law does not apply to homeowners who do the work themselves or to untrained contractors. Neither of these two groups has the adequate knowledge, equipment, nor training to undertake lead-safe work practices, nor will they be required to verify or confirm that the presence of lead in the home has been eliminated. This is an incredibly important distinction because clearance testing will add additional costs only for the professionally-trained remodeler. So, choosing a professional, in this instance, who will be subject to clearance testing requirements is even less affordable to consumers who may already have cost constraints.

It has been established that lead-safe remodeling activities performed by professionally-trained remodelers improve the condition of the home, in terms of lead exposure. This should be good for the health and quality of life for the home’s occupants, especially children. If the government imposes a regulatory requirement like a clearance test on professional remodelers that further increases costs of hiring them, it could create a real disincentive for residents to get lead-safe remodeling in the homes with the most critical repair and renovation needs. Specifically, lower-income households that lack the financial resources to pay for lead-safe professional remodeling are disproportionately the ones who live in homes that are in the greatest need of repair.

Potentially, the higher cost could create an incentive for low-income consumers to do nothing at all, which further undercuts the broader goal of eradicating childhood exposure to lead.

### **Recommendations – Education and Training Programs**

There is clear benefit to the safety of children and proven reductions in lead exposures in older homes from professional remodeling. NAHB recommends that a combined public and private education and training program for homebuyers, homeowners, remodelers and home improvement contractors would help increase public awareness of the dangers of lead exposure in older homes. This effort has already begun in the remodeling industry, but additional help is needed.

At the national level, NAHB has taken several steps in the last twenty years to increase consumer education on lead-safe work practices. NAHB has distributed materials to all its members about training and lead-safe work practices from HUD, the U.S. EPA, and OSHA. In 1993, NAHB began distributing its own publication *What Remodelers Need to Know and Do About Lead* regarding the dangers of prohibited practices (torching, belt-sanding, scraping) and the importance of proper post-work clean-up techniques that minimize lead dust exposure in both the work area and the property. NAHB began a public/private partnership with EPA in the late 1990s to establish a voluntary program to address lead-based paint issues during remodeling and renovation and has continually supported robust training programs for remodelers and renovators that work in pre-1978 homes.

NAHB also sponsors education courses for builders and remodelers at its annual International Builders Show, and in other conference settings. In fact, many NAHB Remodeler members teach courses in lead-safe work training and mastering lead-safe work techniques. Education and training has been incredibly successful and continues to highlight the importance of having adequately trained and knowledgeable remodeling professionals to perform renovation and repair work in older homes.

In addition to the efforts noted above, NAHB urges Congress to do the following:

- Instruct and ensure that HUD and the U.S. EPA target the limited resources and enforcement assets concerning mandatory lead hazard evaluation and reduction towards those units constructed prior to 1960 and likely to be occupied by a child under the age of six.
- Support the development and use of voluntary training and lead-safe work practices for owners of multifamily properties and remodelers who work in residential properties built from 1960-1978 and are believed to contain lead-based paint.
- Direct HUD, the U.S. EPA, and OSHA to work together to reconcile the differences in work practices and allow reciprocity for training and certification requirements for remodelers and multifamily property

owners to facilitate achieving the goals of eliminating childhood lead poisoning in the most efficient and cost-effective manner.

- Fully fund the training requirements in the HUD and U.S. EPA lead-based paint regulations so that they can operate and function as Congress intended.

## **Conclusions**

Professional remodeling, renovation, and repair work, performed by knowledgeable, trained contractors, can serve as an agent against spreading lead hazards in older homes and further endangering the health and welfare of our nation's children. NAHB urges Congress to work with the relevant federal agencies (HUD, U.S. EPA, and OSHA) to coordinate efforts, to fully fund important lead-safe training programs, and to effectively use the combined resources in a way that maximizes outcomes. NAHB cautions against imposing inappropriate and costly regulatory burdens on professional remodelers that would be cost-prohibitive for consumers to hire trained professionals or that could lead to further proliferation of potentially harmful do-it-yourself projects. NAHB is working hard to promote the value of lead-safe work practices and the benefits of professional remodeling for older homes and encourages effort by Congress.

NAHB Remodelers are working hard to educate consumers, train professionals, and perform lead-safe work practices. Research data confirms that lead-safe remodeling and renovation improves lead levels in older homes, and that new hazards are not created when typical remodeling and renovation activities are undertaken by trained professionals. NAHB has invested significant resources in both education and research about the benefits of lead-safe work practices and looks forward to working with Congress to expand on efforts like these in the future.