Testimony of

Terry Schimmel
Vice President, Technical Services
Boral Bricks, Inc.
on behalf of the Brick Industry Association
before the
Subcommittee on Regulatory Affairs, Stimulus Oversight, and Government Spending
Committee on Oversight and Government Reform
United States House of Representatives

Hearing on "Assessing the Cumulative Impact of Regulation on U.S. Manufacturers"

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Chairman Jordan, Ranking Member Kucinich, and members of the subcommittee, thank you for the privilege of testifying about the cumulative impact of regulation on a small, essential U.S. industry — the clay brick industry. Brick helps create long-lasting, sustainable construction across the country, from the brick used on homes, schools, churches, hospitals, and office buildings to the clay pavers on sidewalks and crosswalks, including Pennsylvania Avenue from the Capitol to the White House.

My name is Terry Schimmel, and I am Vice President of Technical Services at Boral Bricks. Boral is one of the largest brick manufacturers in the country, and we operate 22 manufacturing plants in nine states and 55 distribution centers in 11 states, including distribution locations in the districts of Congressmen Cooper and DesJarlais who serve on the subcommittee. I have been in the brick making business for 39 years. I have done virtually every job in a brick plant from supervisor to plant manager and served as Boral's Vice President of Engineering for 16 years. My responsibilities include the purchase and installation of emission control equipment and the company's compliance with environment, health, and safety regulations at the state and federal level.

Small brick companies comprise more than half of the industry, and like Boral's plants, they typically have been located in rural communities for more than 100 years and provide good-paying jobs where opportunities are limited. We live and raise our children in these communities, and Boral and the brick industry are committed to environmental stewardship. Clay brick are made from naturally abundant clay and shale that is locally mined. The mines are reclaimed according to federal and state guidelines that often include wetlands restoration, tree and natural habitat replanting, or watershed development. Clay brick has an unsurpassed life cycle and is completely recyclable. More than 80 percent of kilns are fired with natural gas, and the industry has reduced the overall energy needed to produce a brick to a fraction of what it was a few decades ago – to an average of 1,239 Btu (British thermal unit) per pound at peak capacity today compared to 4,000 Btu per pound used at some facilities in the 1970s.

Boral's state-of-the-art equipment and energy efficient kilns have reduced energy usage 15 percent over the past five years. We have adopted green building practices as part of our corporate identity and are a member of the U.S. Green Building Council (USGBC). We built the only LEED® (Leadership in Energy and Environmental Design) Gold certified brick manufacturing facility in the world in Terre Haute, Indiana. The facility utilizes methane gas from a nearby landfill as a substitute for natural gas, and it is a zero waste plant where nearly all

materials used in the process are recycled. Boral's Union City, Oklahoma facility also uses landfill gas, and our Salisbury, North Carolina plant is 100 percent waste-fired. Facilities in Augusta, Georgia, Phenix City, Alabama, and Gleason, Tennessee use high percentages of wood waste energy. In 2008, Boral became a Founding Reporter of The Climate Registry, a non-profit organization established to measure and publicly report greenhouse gas (GHG) emissions in a common, accurate and transparent manner across industry sectors and borders.

These steps were taken voluntarily without government mandates because they not only strengthen our business; they are the right thing to do. We strive to be an environmentally responsible company and a good neighbor, and we are mindful that we cannot do anything to help if we are no longer in business.

Any discussion of regulatory impact should consider the tremendous economic hit the industry has taken. At full production, Boral employs approximately 2,000 Americans, but today, nearly 1,100 of Boral's U.S. jobs, or 55 percent, have been temporarily or permanently lost due to the severe construction recession. According to the most recent U.S. Census, brick production nationwide has dropped 66 percent since 2005, reaching the lowest level in three decades. Historically, the brick industry has generated employment for approximately 200,000 Americans and contributed more than $9 billion in revenue, wages and goods to the U.S. economy annually. Today, it's approximately $5 billion with a 45 percent job loss. Approximately 9,000 direct brick manufacturing jobs and approximately 86,000 indirect brick jobs in distribution, design, installation and related fields have been lost since 2006.

Brick business volumes are only very slowly beginning to pick up in certain regions of the country, yet there seems to be no end to the escalation in the cost of doing business due to increasing government regulations. We are deeply troubled by the cumulative burden of expensive, complex regulations that provide no commensurate benefit to environment, health and safety, yet further jeopardize any glimmer of recovery for brick jobs and production. We believe reasonable regulations can be developed to protect both environment and health without further substantial job loss. Yet, both the mounting number of rulemakings in the pipeline and their anticipated mandates based on similar finalized regulations threaten our livelihoods and the future of our industry. Two regulations currently being developed would have the greatest industry-specific negative impact on jobs unless changes are made to the agencies' signaled approaches. These regulations alone could overwhelm the industry, and taken together with other pending economy-wide rules, the regulatory burden becomes unsustainable.

EPA Brick MACT Rulemaking

Of greatest regulatory concern under the Clean Air Act (CAA) Amendments of 1990, the U.S. Environmental Protection Agency (EPA) is redeveloping a Maximum Achievable Control Technology (MACT) rule for clay brick and tile that is expected in 2011 or early 2012. The key word is "redeveloping" as the industry recently spent more than $100 million in capital costs alone, a significant amount for a small industry, to come into compliance with the original Brick MACT rule that EPA finalized in 2003. The rule regulated hydrogen fluoride (HF), hydrogen chloride (HCl), and particulate matter (PM) that might be produced when the raw materials (clay and shale containing natural minerals) are fired in kilns to make bricks. Boral spent more than $12 million to install federally mandated control devices to meet the 2006 compliance date. Although the D.C. Circuit vacated the original Brick MACT in 2007, more than a year after the compliance date, most states continue to enforce these MACT limits as part of existing Title V permits, resulting in millions of dollars in ongoing annual costs even today for these controls. In

total, the brick industry has spent approximately $170 million in cumulative costs for purchase, installation, financing, operation and maintenance of control devices since 2002 due to the now-vacated Brick MACT, based on the number of years the devices have been controlling brick kilns.

U.S. brick makers now face an enormous inequity because the rule was vacated *after* the compliance date. Our previous good faith compliance is being used against the industry to further ratchet down the allowed emission levels in the revised rule. We have no assurance that EPA will not force compliance on a new rule that could be vacated yet again. For the new Brick MACT, EPA is using the reduced emission levels achieved by kilns with control devices installed for the now-vacated rule to calculate a new, even more stringent baseline for all kilns which could result in an unachievable rule.

In April 2010, EPA estimated the revised Brick MACT would cost the industry approximately $188 million per year[1]. Based on data from the U.S. Census Bureau, brick manufacturers' total revenue in 2009 was approximately $940 million. EPA's estimate results in a devastating 20 percent cost-to-sales ratio for this single regulation. The outcome will be higher costs and lost jobs as some brick companies may be forced to close plants because they cannot afford to even borrow the money required to replace existing controls or add newly mandated controls. The technology to meet the final standard may not even exist if EPA cherry picks single pollutant data to establish a multi-pollutant standard that no real-world brick kiln has actually achieved. While EPA has expressed its intent not to require existing viable controls to be removed and replaced, EPA's approach to establishing the new limits could lead to such a requirement.

Small plants of both small and large manufacturers are particularly vulnerable, and even the largest brick makers like Boral weigh the basic economics of continuing to invest millions in a plant that has been shut down for months out of the past two years. Boral Limited, Boral Bricks' parent company, is an international, publicly traded company, and each business unit and plant within that business unit must be viable on its own and return shareholder value. If we do not return a profit for shareholders, the company will move resources to other divisions in the U.S. or other countries, along with those jobs.

It does not have to be this way. Congress provided flexibility in the CAA to allow for reasonable rules, including basing the MACT floor on emission limits that real-world best performing sources can actually achieve; excluding mined, mineral-bearing raw materials from the MACT limit evaluation; including a health-based standard for pollutants that do not pose a risk because concentrations are below an established safe threshold; and excluding non-major sources when calculating the MACT floor for a category of "major" sources.

As Boral and the Brick Industry Association (BIA) continue to work with EPA on this rule, we appreciate the Agency's willingness to discuss a health-based compliance approach, which could provide the best chance of guaranteeing that controls are installed when needed to protect the environment, while also ensuring that controls are not needlessly mandated due to an imperfect database. We encourage EPA to use its discretion under the CAA to find additional solutions that avoid further job losses and unwarranted expenditures that provide little to no benefit to the environment.

[1] EPA presentation at Pre-Panel Outreach Meeting with Potential Small Entity Representatives, April 20, 2010.

OSHA Crystalline Silica Rulemaking

The Occupational Safety and Health Administration (OSHA) is expected to propose a rule in April 2011 on occupational exposure to crystalline silica that will substantially decrease the Permissible Exposure Limit (PEL) across general industry. However, extensive scientific evidence demonstrates that the risks from exposure to silica from quartz in brick clays and shale are not the same as risks from quartz used in other industrial settings. Decades of studies indicate that silicosis caused by exposure to crystalline silica is essentially non-existent in brick manufacturing workers in the U.S. and elsewhere. We are concerned that OSHA undertook the peer review of its crystalline silica health effects analysis and quantitative risk assessment without providing an opportunity for input from potentially impacted industries. A transparent process would have allowed this brick-specific evidence to be considered prior to development of the proposed rule.

Occupational Safety Health Act rulemaking case law has made it clear that OSHA cannot ignore data as it relates to specific industries when regulating across a broad spectrum of industries. The brick industry should not be regulated based on quantitative risk assessment derived from exposure-response data from other industries handling silica-containing materials because the risks are different between industries. The current crystalline silica PEL is amply protective of brick workers, and any reduction in the PEL for the brick manufacturing industry would be unwarranted. The increased cost burden of new control requirements would provide no demonstrated health benefit for brick workers and jeopardize jobs. Based on a preponderance of evidence, OSHA should differentiate brick operations from other industries for the silica PEL. OSHA has the statutory authority to maintain the current crystalline silica PEL for brick manufacturing workers, even if OSHA reduces the PEL for industry in general.

EPA Greenhouse Gas Emission Regulations

When EPA issued its greenhouse gas (GHG) regulations for motor vehicles, it deemed GHGs to be "regulated pollutants." This action triggered a complex New Source Review/Prevention of Significant Deterioration (NSR/PSD) program for stationary sources under the CAA, including carbon pollution standards. These rules have the potential to require significant investments in air pollution control devices or process modifications while providing uncertain environmental benefits. EPA established initial PSD and Title V applicability thresholds of 100,000 tons per year (tpy) for GHG emissions (measured on a carbon dioxide equivalent (CO_2e) basis). However, EPA is committed to lowering that level over the next several years, potentially to as low as the 25,000 tpy limit initially proposed. Thus, although only power plants and the largest industrial sources (potentially including the largest brick plants) are currently impacted under EPA's NSR/PSD pre-construction permit program, the stage is set for smaller sources, including numerous brick kilns, to be regulated in the next few years.

A single ten ton per hour (tph) brick kiln is estimated to emit more than 17,000 tpy of GHGs at full production. If the limit is reduced to 25,000 tpy, EPA's GHG rule could potentially cover a majority of brick facilities because NSR is based on the potential to emit, e.g., at full capacity, for all kilns at a single facility. The Best Available Control Technology (BACT) guidance being developed by EPA for implementation of the GHG NSR/PSD assessments may well be based on natural gas firing, but there is no exemption from the rigorous, costly permitting for natural gas units so prevalent in the brick industry. An exemption for these natural gas sources would recognize that the facilities are already employing BACT. Without it, the industry could be negatively impacted by the resulting protracted, expensive permit review processes as states

struggle to keep pace with the new requirements. Even if EPA ultimately requires little or no change to brick operations, significant permitting delays will stifle job creation and the industry's recovery. EPA also has indicated its intent to begin regulation of GHG emissions from specific industrial categories under other sections of the CAA, e.g., Part 60 New Source Performance Standards (NSPS). While the brick industry is not the first industry for which NSPS and other rules will be developed, it is an energy-intensive industry that likely would be targeted soon.

EPA NAAQS Review of SO_2 and PM (Particulate Matter)

In order to protect the overall air quality in our country, Congress directed EPA to establish and review National Ambient Air Quality Standards (NAAQS) for specific air pollutants known as "criteria pollutants." EPA is tightening all of the NAAQS which set maximum allowable air concentrations of sulfur dioxide (SO_2), particulate matter (PM), ozone, nitrogen dioxide, carbon monoxide and lead. Once these standards are established, states ensure that NAAQS are attained by developing and implementing a State Implementation Plan (SIP) for each air quality control region within the state. In addition, major facilities that build or modify large criteria pollutant emission sources must conduct an NSR/BACT review.

We are concerned that EPA's NAAQS approach could cause significant permitting issues for facilities that are considered "major" sources for any of these pollutants, as well as impact smaller brick kilns. In the past, SIPs to address NAAQS levels were generally able to demonstrate that they could reach "attainment" levels by focusing on regulation of "major" sources. However, some of the reduced levels that EPA is considering, such as for SO_2, are so close to current "background" levels that EPA's potential new standard could virtually eliminate future job growth in certain states and regions.

EPA also is changing how "attainment" with these standards is determined. For example, under the SO_2 NAAQS, an area could not certify that it is in "attainment" with the new levels if a computer model shows that there could be non-compliance, even when all existing actual monitors show the area to be in compliance with the new level. EPA should evaluate both past and future benefits of the current NAAQS programs that have yet to be fully implemented before it continues to reduce attainment levels that could stunt industries' economic recovery for limited health and environmental benefits.

Conclusion

These pending regulations create considerable economic uncertainty and could result in great expense and more lost jobs for the brick industry. The Brick MACT, in particular, has a chilling effect because the original rule was vacated after the compliance date. It is a good example of how companies who want to do the right thing to minimize emissions are penalized when the regulatory goalposts are moved despite good faith compliance. Congressional oversight is needed to ensure maximum benefit per dollar invested to comply with regulations to prevent small, historical U.S. industries like brick makers from being regulated out of existence.

Federal agencies such as EPA and OSHA have helped guide important improvements in environmental protection and worker safety over the past several decades. Given the vast progress that we have made, future steps should demonstrate reasonable costs for potential improvements in order to restore U.S economic growth. If small brick plants close in rural communities and consolidation occurs because regulations become prohibitively expensive for limited or no additional health benefits, residential and commercial brick construction becomes less affordable and less accessible for all Americans.

Committee on Oversight and Government Reform
Witness Disclosure Requirement – "Truth in Testimony"
Required by House Rule XI, Clause 2(g)(5)

Name: Bernard T. Schimmel (Terry)

1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2008. Include the source and amount of each grant or contract.

None

2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

1) BIA - Brick Industry Association as member and Chair of MACT Task Force and also E, H & S Committee.
2) Boral Bricks Inc. as V.P. Technical Services

3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2008, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

None

I certify that the above information is true and correct.
Signature: B. Schimmel Date: 3-7-11

BERNARD T. SCHIMMEL

EDUCATION

Joliet Township High School East
Joliet, Illinois
Graduated 1967

Georgia Institute of Technology
Graduated 1971 with Bachelor of Science in Physics

Numerous technical and management courses and training spanning 39 years

WORK ASSOCIATIONS AND RECOGNITIONS

Past chairman and current management subcommittee member and active member of the National Brick Research Center at Clemson University in Anderson, South Carolina

Active member of the Brick Industry Association and have served as chairman of its Brick MACT (Maximum Achievable Control Technology) Task Force for 12 years, as well as being an active member of its Environment, Health, and Safety Task Force and Public Sector Committee

Awarded the Brick Industry Association Outstanding Achievement Award in 2004

WORK HISTORY

1971-1973
Jenkins Brick and Tile
Atlanta, Georgia

Manufacturing and Packaging Supervisor

1973-1988
Bickerstaff Clay Products
Smyrna, Georgia

I worked virtually every job at this plant, including being the assistant plant manager and then the plant manager for 7 years.

1988-1995
Bickerstaff Clay Products
Phenix City, Alabama

Functioned as Chief Engineer with technical oversight of 6 plants in Alabama and Georgia

1995 to Present
Boral Bricks
Phenix City, Alabama

Bickerstaff was acquired in 1995 by Boral Industries Inc. headquartered in Alpharetta, Georgia. Boral Industries is the U.S. subsidiary of Boral Limited located in Sydney, Australia. At Boral Bricks, I function as Vice President of Technical Services with responsibility and oversight of all capital spending; new plant specifications and construction; environment, health and safety compliance requirements, primarily from an operational and capital perspective; and manufacturing and operational support. Other responsibilities include a technical support group that serves both Boral Industries in the U.S., as well as our brick and concrete plants in Australia.