AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

REVIEWING RECENT CHANGES TO OSHA'S SILICA STANDARDS

HEARING

BEFORE THE

SUBCOMMITTEE ON WORKFORCE PROTECTIONS

COMMITTEE ON EDUCATION AND THE WORKFORCE

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

HEARING HELD IN WASHINGTON, DC, APRIL 19, 2016

Serial No. 114–46

Printed for the use of the Committee on Education and the Workforce

Available via the World Wide Web:
www.gpo.gov/fdsys/browse/committee.action?chamber=house&committee=education
or
Committee address: *http://edworkforce.house.gov*

U.S. GOVERNMENT PUBLISHING OFFICE

99–775 PDF WASHINGTON : 2016

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON EDUCATION AND THE WORKFORCE

JOHN KLINE, Minnesota, *Chairman*

Joe Wilson, South Carolina
Virginia Foxx, North Carolina
Duncan Hunter, California
David P. Roe, Tennessee
Glenn Thompson, Pennsylvania
Tim Walberg, Michigan
Matt Salmon, Arizona
Brett Guthrie, Kentucky
Todd Rokita, Indiana
Lou Barletta, Pennsylvania
Joseph J. Heck, Nevada
Luke Messer, Indiana
Bradley Byrne, Alabama
David Brat, Virginia
Buddy Carter, Georgia
Michael D. Bishop, Michigan
Glenn Grothman, Wisconsin
Steve Russell, Oklahoma
Carlos Curbelo, Florida
Elise Stefanik, New York
Rick Allen, Georgia

Robert C. "Bobby" Scott, Virginia
Ranking Member
Rubén Hinojosa, Texas
Susan A. Davis, California
Raúl M. Grijalva, Arizona
Joe Courtney, Connecticut
Marcia L. Fudge, Ohio
Jared Polis, Colorado
Gregorio Kilili Camacho Sablan, Northern Mariana Islands
Frederica S. Wilson, Florida
Suzanne Bonamici, Oregon
Mark Pocan, Wisconsin
Mark Takano, California
Hakeem S. Jeffries, New York
Katherine M. Clark, Massachusetts
Alma S. Adams, North Carolina
Mark DeSaulnier, California

Juliane Sullivan, *Staff Director*
Denise Forte, *Minority Staff Director*

SUBCOMMITTEE ON WORKFORCE PROTECTIONS

TIM WALBERG, Michigan, *Chairman*

Duncan Hunter, California
Glenn Thompson, Pennsylvania
Todd Rokita, Indiana
Dave Brat, Virginia
Michael D. Bishop, Michigan
Steve Russell, Oklahoma
Elise Stefanik, New York

Frederica S. Wilson, Florida,
Ranking Member
Mark Pocan, Wisconsin
Katherine M. Clark, Massachusetts
Alma S. Adams, North Carolina
Mark DeSaulnier, California
Marcia L. Fudge, Ohio

C O N T E N T S

	Page
Hearing held on April 19, 2016	1
Statement of Members:	
Walberg, Hon. Tim, Chairman, Subcommittee on Workforce Protections	1
Prepared statement of	3
Wilson, Hon. Frederica S., Ranking Member, Subcommittee on Workforce Protections	4
Prepared statement of	6
Statement of Witnesses:	
Brady, Mr. Ed, President, Brady Homes of Illinois, Bloomington, IL	22
Prepared statement of	24
Chajet, Mr. Henry, Shareholder, Jackson Lewis P.C., Reston, VA	57
Prepared statement of	59
Herschkowitz, Ms. Janis, President and CEO, PRL Inc., President, Regal Cast, Lebanon, PA	36
Prepared statement of	38
Melius, Dr. James, Director of Research, Laborers' Health and Safety Fund of North America, Albany, NY	45
Prepared statement of	47
Additional Submissions:	
Mr. Chajet:	
Silicosis: Number of deaths, crude and age-adjusted death rates, U.S. residents age 15 and over, 1968-2010, source: NIOSH (CDC), September 11, 2014	106
DeSaulnier, Hon. Mark, a Representative in Congress from the State of California:	
Control of Silica Exposure in Foundries	79
Ms. Herschkowitz:	
OSHA Fact Sheet	70
Mr. Walberg:	
Regulatory Report from U.S. Chamber of Commerce entitled Regulatory Indifference Hurts Vulnerable Communities	108
Article from The Hill: Regular dust monitoring can help prevent silicosis - not more regulation	136
Prepared statement from The National Stone, Sand and Gravel Association (NSSGA)	137
Letter dated April 19, 2016, from The Associated General Contractors (AGC) of America	141
Letter dated April 28, 2016, from National Industrial Sand Association (NISA)	143
Ms. Wilson:	
Prepared statement from Brown, Mr. Tim	18
Prepared statement from McNabb, Mr. Dale	11
Prepared statement from Ward, Mr. Tom	15
Letter dated April 18, 2016, from United Steelworkers USW	84
Letter dated April 19, 2016, from BlueGreen Alliance	86
Letter dated April 19, 2016, from Public Citizen	88
Letter dated April 18, 2016, from American Association for Justice	90
Press release dated March 24, 2016, from American Public Health Association (APHA) celebrates OSHA silica rule	92
Letter dated April 18, 2016, from Englewood Construction - Management	94
Letter dated April 19, 2016, from Motley Rice LLC	95
Prepared statement from America's Agenda	97

Page

Additional Submissions—Continued
Ms. Wilson—Continued
Prepared statement from International Union of Bricklayers and Allied Craftworkers 101
Prepared statement from USW Local Union 593 147
Prepared statement from Union of Concerned Scientists 150
Prepared statement from North America's Building Trades Unions 153

REVIEWING RECENT CHANGES TO OSHA'S SILICA STANDARDS

Tuesday, April 19, 2016
U.S. House of Representatives
Committee on Education and the Workforce
Subcommittee on Workforce Protections
Washington, D.C.

The subcommittee met, pursuant to call, at 10:01 a.m., in Room 2175, Rayburn House Office Building, Hon. Tim Walberg [Chairman of the subcommittee] presiding.

Present: Representatives Walberg, Rokita, Brat, Bishop, Wilson, Pocan, Adams, and DeSaulnier.

Also Present: Representatives Kline and Scott.

Staff Present: Bethany Aronhalt, Press Secretary; Janelle Belland, Coalitions and Members Services Coordinator; Ed Gilroy, Director of Workforce Policy; Jessica Goodman, Legislative Assistant; Callie Harman, Legislative Assistant; Tyler Hernandez, Deputy Communications Director; Nancy Locke, Chief Clerk; John Martin, Professional Staff Member; Dominique McKay, Deputy Press Secretary; Krisann Pearce, General Counsel; Molly McLaughlin Salmi, Deputy Director of Workforce Policy; Alissa Strawcutter, Deputy Clerk; Loren Sweatt, Senior Policy Advisor; Olivia Voslow, Staff Assistant; Joseph Wheeler, Professional Staff Member; Tylease Alli, Minority Clerk/Intern and Fellow Coordinator; Austin Barbera, Minority Press Assistant; Pierce Blue, Minority Labor Detailee; Denise Forte, Minority Staff Director; Christine Godinez, Minority Staff Assistant; Carolyn Hughes, Minority Senior Labor Policy Advisor; Brian Kennedy, Minority General Counsel; Richard Miller, Minority Senior Labor Policy Advisor; Veronique Pluviose, Minority Civil Rights Counsel; Marni von Wilpert, Minority Labor Detailee; and Elizabeth Watson, Minority Director of Labor Policy.

Chairman WALBERG. A quorum being present, the subcommittee will come to order. Good morning, everyone. I would like to begin by welcoming our witnesses. Thank you for joining us to discuss an issue important to everyone in this room, protecting the health and safety of American workers.

We are here today because we all agree that hard-working men and women should be able to earn a paycheck without risking a serious injury or being exposed to a deadly disease. Every family deserves the peace of mind that their loved ones are safe on the job.

We also agree that Federal policies play a role in meeting that shared goal.

This hearing is timely because next week marks 45 years that the Occupational Safety and Health Administration has helped keep American workers safe. As part of this Committee's oversight efforts, we were pleased to have Assistant Secretary Michaels join us last October to discuss what more can be done to promote safe and healthy working conditions.

The question before the Committee then and today is whether the workplace rules and regulations coming out of Washington serve the best interests of employees and their employers. Are they practical? Are they responsible? Are they fair? Are they created with transparency and enforced effectively?

These are important questions because the strongest health and safety rules will do little to protect America's workers if the rules are not followed and enforced, or if they are too confusing and complex to even implement in the first place.

I hope we have a thoughtful discussion today that addresses these points, particularly as they relate to OSHA's new silica standard.

In March, OSHA issued a final rule that significantly reduces the permissible exposure limit to crystalline silica. Silica is the second most common element found in the Earth's crust and a key component of manufactured products and construction materials. Exposure to high concentrations of silica dust can lead to a dangerous debilitating and even life-threatening disease. We have witnessed important progress in recent years, but we know there is more that can be done to keep workers out of harm's way.

That is why this Committee has pressed OSHA to use the tools at its disposal to enforce existing standards. Unfortunately, the agency has failed to do so. OSHA itself admits that 30 percent of tested job sites have not complied with the existing exposure limit for silica. The existing exposure limit for silica. Did I mention it was the existing exposure limit for silica?

This is an alarmingly high figure. Instead of enforcing the rules already on the books, the department spent significant time and resources crafting an entirely new regulatory regime. The department's first priority should have been enforcing existing standards, and some potentially in the room today may question whether these rules were followed and if indeed, as a result of not being enforced across the board, they experienced the results of silicosis.

If OSHA is unable or unwilling to enforce the current limit for silica exposure, why should we expect the results under these new standards to be any different?

Related to enforcement, some have raised concerns about whether the new standards can be responsibly enforced. It has been suggested that silica cannot be accurately measured at the reduced limit prescribed in the new law or new rule because many labs do not have the technology necessary to provide reliable results.

Will employers acting in good faith and trying to do the right thing be held accountable for an enforcement regime that is not feasible or practical?

These are important questions about enforcement, but there are also serious questions concerning implementation. Can these new

rules be effectively implemented on the ground and under the time frame prescribed by OSHA? Employers may lack the time and resources necessary to adjust their workplaces to the requirements of the new rule. Others may find new controls simply unworkable. This is especially true for small businesses.

According to the National Federation of Independent Business, this rule will cost workplaces more than $7 billion each year. These costs will be borne by consumers and taxpayers, and may I suggest employees with a loss of jobs or loss of security in their jobs. They will be borne by all of these people in the form of higher prices for homes, bridges, roads, et cetera. These costs will be borne by workers in the form of fewer jobs. These are significant consequences for a rule that may do little to enhance worker health and safety, which is our key priority.

Hundreds of thousands of workplaces nationwide will be impacted by these new rules. We owe it to our Nation's job creators to provide the clarity and certainty they need to expand, hire, and succeed.

Just as importantly, we owe it to workers and their families to promote smart, responsible regulatory policies that are implemented and enforced in a way that serves their best interests. The workers with us today, and those working on countless job sites across the country deserve more than our good intentions and political rhetoric at times. They deserve good policies that lead to good results.

I know that we can work together to protect their health and well-being. It has happened here. It has happened here before and it can happen now, the well-being of hard-working men and women of this country.

I look forward to today's discussion, and will now yield to Ranking Member Wilson for her opening remarks.

[The statement of Chairman Walberg follows:]

Prepared Statement of Hon. Tim Walberg, Subcommittee on Workforce Protections

We're here today because we all agree that hardworking men and women should be able to earn a paycheck without risking a serious injury or being exposed to a deadly disease. And every family deserves the peace of mind that their loved ones are safe on the job.

We also agree that federal policies play a role in meeting that shared goal. This hearing is timely, because next week marks 45 years that the Occupational Safety and Health Administration has helped keep America's workers safe. As part of this committee's oversight efforts, we were pleased to have Assistant Secretary Michaels join us last October to discuss what more can be done to promote safe and healthy working conditions.

The question before the committee then and today is whether the workplace rules and regulations coming out of Washington serve the best interests of employees and their employers. Are they practical, responsible, and fair? Are they created with transparency and enforced effectively?

These are important questions, because the strongest health and safety rules will do little to protect America's workers if the rules are not followed and enforced—or if they're too confusing and complex to even implement in the first place. I hope we can have a thoughtful discussion today that addresses these points, particularly as they relate to OSHA's new silica standard.

In March, OSHA issued a final rule that significantly reduces the permissible exposure limit to crystalline silica. Silica is the second most common element found in the Earth's crust, and a key component of manufactured products and construction materials. But exposure to high concentrations of silica dust can lead to a dangerous, debilitating—and even life-threatening—disease. We have witnessed impor-

tant progress in recent years, but we know there's more that can be done to keep workers out of harm's way.

That is why this committee has pressed OSHA to use the tools at its disposal to enforce existing standards. Unfortunately, the agency has failed to do so.

OSHA itself admits that 30 percent of tested jobsites have not complied with the existing exposure limit for silica. This is an alarmingly high figure. But instead of enforcing the rules already on the books, the department spent significant time and resources crafting an entirely new regulatory regime.

The department's first priority should have been enforcing existing standards. If OSHA is unable—or unwilling—to enforce the current limit for silica exposure, why should we expect the results under these new standards to be any different?

Related to enforcement, some have raised concerns about whether the new standards can be responsibly enforced. It has been suggested that silica cannot be accurately measured at the reduced limit prescribed in the new rule, because many labs don't have the technology necessary to provide reliable results. Will employers—acting in good faith and trying to do the right thing—be held accountable for an enforcement regime that isn't feasible or practical?

These are important questions about enforcement, but there are also serious questions concerning implementation. Can these new rules be effectively implemented on the ground and under the timeframe prescribed by OSHA? Employers may lack the time and resources necessary to adjust their workplaces to the requirements of the new rule. Others may find new controls simply unworkable.

This is especially true for small businesses. According to the National Federation of Independent Business, this rule will cost workplaces more than $7 billion each year. These costs will be borne by consumers and taxpayers in the form of higher prices for homes, bridges, and roads. And these costs will be borne by workers in the form of fewer jobs. These are significant consequences for a rule that may do little to enhance worker health and safety.

We are fortunate to have a second-generation home builder and owner of a small family business with us who can speak more to this today. They will also speak to the fear of unintended safety consequences stemming from these new rules. In trying to address significant health and safety concerns, we must ensure federal policies do not in any way create new hazards in America's workplaces.

Hundreds of thousands of workplaces nationwide will be impacted by these new rules. We owe it to our nation's job creators to provide the clarity and certainty they need to expand, hire, and succeed. And, just as importantly, we owe it to workers and their families to promote smart, responsible regulatory policies that are implemented and enforced in a way that serves their best interests. The workers with us today—and those working on countless jobsites across the country—deserve more than our good intentions, they deserve good policies that lead to good results.

I know that we can work together to protect the health and well-being of the hardworking men and women of this country. I look forward to today's discussion, and will now yield to Ranking Member Wilson for her opening remarks.

Ms. WILSON. Mr. Chairman, thank you for holding this hearing today to review OSHA's long-awaited rule updating the silica standard. The science is clear. Since 1974, the National Institute for Occupational Safety and Health has called for OSHA to cut the permissible exposure limit for general industry from 100 micrograms per cubic meter to 50. It took 42 years for OSHA's rule to catch up with the science.

In 1997, the World Health Organization's International Agency for Research on Cancer determined crystalline silica dust is causing damage to humans. The Department of Health and Human Services declared the same in 2000.

Silica dust causes silicosis, lung cancer, respiratory illnesses, such as COPD, and kidney disease. Yet, scientific research demonstrates OSHA's previous 40-year-old silica standard fails to adequately protect workers from these preventable diseases. Let me repeat, preventable. These diseases are preventable.

Extensive scientific evidence shows lung cancer and silicosis occur at exposure levels below OSHA's previous permissible exposure limit of 100 micrograms per cubic meter in general industry.

Surprisingly, the alarmingly out-of-date construction industry standard of 250 micrograms per cubic meter stems from a 1929 Public Health Service recommendation that the government acknowledged was not set at a level to protect workers from silicosis, but rather based solely on feasibility considerations of 1920s' technology and management methods.

OSHA's new silica dust standard reflects current science and technology. It will save lives. Over 800,000 construction workers and another 295,000 workers in general industry and maritime are exposed to crystalline silica in excess of the new more protective standard of 50 micrograms per cubic meter.

OSHA estimates this new standard, which includes engineering controls, training, prohibitions on dry sweeping, and medical surveillance, will save more than 600 lives each year, and prevent more than 900 cases of silicosis each year.

I just want to show here on the screen pictures of airborne silica. This is dust generated by a power saw cutting through concrete block with and without engineering controls. All it takes is water or air to control silica dust. These pictures make it abundantly clear how using simple controls reduces workers' exposure to silica dust, but useful statistics and the pictures fail to communicate the true toll on affected workers and their families.

This includes workers like Dale McNabb, Tom Ward, and Tim Brown, who have submitted statements for the record. I ask unanimous consent to include the statements of Mr. McNabb, Mr. Ward, and Mr. Brown into the record.

[The information follows:]

COMMITTEE ON
EDUCATION AND THE WORKFORCE
SUBCOMMITTEES
HEALTH, EMPLOYMENT, LABOR, AND PENSIONS
WORKFORCE PROTECTIONS - RANKING MEMBER

FREDERICA S. WILSON
CONGRESS OF THE UNITED STATES
24TH DISTRICT, FLORIDA

Opening Statement

Ranking Member Frederica S. Wilson
Workforce Protections Subcommittee Hearing
"Reviewing Recent Changes to OSHA's Silica Standards"
Tuesday, April 19, 2016

Mr. Chairman, thank you for holding this hearing today to review OSHA's long-awaited rule updating the silica standard.

The science is clear.

Since 1974, the National Institute for Occupational Safety and Health, or NIOSH, has called for OSHA to cut the permissible exposure limit for general industry from 100 micrograms per cubic meter to 50. It took 42 years for OSHA's rule to catch up with the science.

In 1997, the World Health Organization's International Agency for Research on Cancer determined crystalline silica dust is "carcinogenic to humans." The Department of Health and Human Services declared the same in 2000.

Silica dust causes silicosis, lung cancer, respirable illnesses such as COPD, and kidney disease.

Yet, scientific research demonstrates OSHA's previous 40-year-old silica standard fails to adequately protect workers from these preventable diseases.

Extensive scientific evidence shows lung cancer and silicosis occur at exposure levels below OSHA's previous permissible exposure limit of 100 micrograms per cubic meter for workers in general industry. Surprisingly, the alarmingly out of date construction industry standard of 250 micrograms per cubic meter stems from a 1929 Public Health Service recommendation that the government acknowledged was not set at a level to protect workers from silicosis, but rather based solely on feasibility considerations of 1920s technology and measurement methods.

WASHINGTON, DC OFFICE
208 CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-4506
FAX: (202) 226-0777

MIAMI GARDENS OFFICE
18425 NW 2ND AVENUE
SUITE #355
MIAMI GARDENS, FL 33169
(305) 690-5905

PEMBROKE PINES OFFICE
PEMBROKE PINES CITY HALL
10100 PINES BOULEVARD
BUILDING B, 3RD FLOOR
PEMBROKE PINES, FL 33026
(954) 450-6767

WEST PARK OFFICE
WEST PARK CITY HALL
1965 SOUTH STATE ROAD 7
WEST PARK, FL 33023
(954) 989-2688

MIRAMAR OFFICE
MIRAMAR CITY HALL
2300 CIVIC CENTER PLACE
MIRAMAR, FL 33025
(954) 602-4357

WWW.WILSON.HOUSE.GOV

OSHA's new silica dust standard reflects current science and technology. It will save lives.

Over 800,000 construction workers and another 295,000 workers in general industry and maritime are exposed to crystalline silica in excess of the new, more protective standard of 50 micrograms per cubic meter.

OSHA estimates this new standard, which includes engineering controls, training, prohibitions on dry sweeping, and medical surveillance, will save more than 600 lives each year and prevent more than 900 cases of silicosis each year.

I just want to show here on the screen pictures of airborne silica dust generated by a power saw cutting through concrete block with and without engineering controls. All it takes is water or air to control silica dust. These pictures make it abundantly clear how using simple controls reduces workers' and bystanders' exposure to silica dust.

While useful, statistics and pictures fail to communicate the true toll on affected workers and their families.

This includes workers like Dale McNabb, Tom Ward, and Tim Brown, who have submitted statements for the record. I ask unanimous consent to include the statements of Mr. McNabb, Mr. Ward, and Mr. Brown into the record.

Dale McNabb, who has joined us here today, is a tile setter from Warren, Michigan and a member of Bricklayers Local 2 in Michigan.

In his statement, Dale recounts his exposure to silica dust while working as a tile helper mixing cement and making cuts.

After Dale started wheezing, he went to doctors who confirmed his respiratory problems were caused by silica exposure.

Dale writes, "I loved my job and I took a lot of pride in my work. I would still be doing it today if my doctor hadn't told me I couldn't and that I might never work again because I breathed in silica dust."

"When I get exposed to dust now – and not just silica dust – it feels like I have a plastic bag over my head and someone's pulling it shut."

Also with us today is Tom Ward, a bricklayer from Detroit, Michigan. At thirteen, Tom lost his father to silicosis. In his statement, Tom shares this painful story.

Tom writes, "We got the official diagnosis – silicosis – when he was 34 years old. The hardest memory to live with is the last day he worked – he came in the door, fell to the floor and started crying. He said 'I can't do it anymore.'"

"It took just 5 years for silicosis to kill him. It was a slow and very painful process for my dad to experience at far too young an age, and for me, my sisters and for my mother to witness. In the end, his disease suffocated him."

Tom, who is himself a construction worker exposed to silica dust, remains stunned at the lack of training on and awareness of the dangers of silica dust and the inconsistent use of engineering controls and personal protective equipment.

We are also joined by Tim Brown, a bricklayer from Milwaukee, Wisconsin and member of Bricklayers Local 8 who has worked in dust producing trades his entire life. In his statement, Tim recounts the lack of proper engineering controls on worksites and his eventual diagnosis of silicosis and sarcoidosis.

Tim writes, "I have a six year old daughter, Kai. She knows I'm sick, and she worries about me – she doesn't want me to return to construction, but I'm not sure how to provide for her if I can't."

Dale, Tom, and Tim have testified in support of the new OSHA standard, so that others would not go through what they have endured.

As we deliberate today, Mr. Chairman, I hope we can keep in mind what these and so many other hard working Americans faced because OSHA's silica standards were not protective enough. The 2.3 million workers, mostly in construction, who will gain protection under OSHA's updated rule deserve our support.

I want to thank our witnesses for being here today, and look forward to their testimony.

Cutting a Concrete Block
Handheld Masonry Saw
without control
Hand held Masonry Saw
with control (water)

Chairman WALBERG. Hearing no objection, they will be included.

Ms. WILSON. Dale McNabb, who has joined us here today, is a tile setter from Warren, Michigan, and a member of Bricklayers Local Number 2 in Michigan. In his statement, Dale recounts his exposure to silica dust while working as a tile helper mixing cement and making cuts. After Dale started wheezing, he went to doctors who confirmed his respiratory problems were caused by silica exposure.

Dale writes, "I loved my job, and I took a lot of pride in my work. I would still be doing it today if my doctors had not told me I could not, and that I might never work again because I breathed in silica dust. When I get exposed to dust now, and not just silica dust, it feels like I have a plastic bag over my head, and someone is pulling it shut."

Also, with us today is Tom Ward. Raise your hand, Tom. Tom is a bricklayer from Detroit, Michigan. At 13, Tom lost his father to silicosis. In his statement, Tom shares this painful story. Tom writes, "We got the official diagnosis, silicosis, when my dad was 34 years old. The hardest memory to live with is the last day he worked. He came in the door, fell to the floor, and started crying. He said I cannot do it anymore. It took just five years for silicosis to kill him. It was a slow and very painful process for my dad to experience at far too young an age, 34 years old. It was hard for me, my sisters, and my mother to witness. In the end, his disease actually suffocated him."

Tom, who is himself a construction worker exposed to silica dust, remains stunned at the lack of training on and awareness of the dangers of silica dust, and the inconsistent use of engineering controls and personal protective equipment.

We are also joined by Tim Brown. Raise your hand, Tim. Tim is a bricklayer from Milwaukee, and a member of Bricklayers Local 8, who has worked in dust-producing trades his entire life. In his statement, Tim recounts the lack of proper engineering controls on worksites and his eventual diagnosis of silicosis.

Tim writes, "I have a six-year-old daughter. She knows I am sick, and she worries about me. She does not want me to return to construction, but I am not sure how to provide for her if I cannot."

Dale, Tom, and Tim have testified in support of the new OSHA standards so that others would not go through what they have endured. As we deliberate today, Mr. Chairman, I hope that we can keep in mind what these and so many other hard-working Americans faced because OSHA's silica standards were not protective enough.

The 2.3 million workers, mostly in construction, who will gain protection under OSHA's updated rule deserve our support.

I want to thank our witnesses for being here today, and look forward to their testimony. I want to thank the 50 members of the International Union of Bricklayers and Allied Craftworkers who have also joined us here today. Raise your hands. Welcome. You are our constituents. This is your committee, Workforce Protections, and that is our job.

Thank you, Mr. Chair.

[The information follows:]

DALE MCNABB

Good afternoon. My name is Dale McNabb. I am a tile setter from Warren, Michigan and a proud member of BAC Local 2 Michigan.

I started my tile career in the late 1980s, first in the residential construction market and then in the commercial, union, trade. When I first joined the Union, I worked as a tile helper, mixing cement, making cuts; tasks that exposed me to silica dust. When I became a journeyman, my main responsibility was setting tile; and I worked alongside the helpers.

Some contractors I worked for did provide engineering controls for safe work environments. Most did not.

The atmosphere on projects was to get the job done, get it done fast, turn a profit for the employer and for God's sake don't complain. Everyone knew that if you spoke up or complained too much, we probably wouldn't be rehired by that contractor; or there would be a possibility you wouldn't get hired on by another contractor either.

I loved my job and I took a lot of pride in my work. I would still be doing it today if my doctor hadn't told me I couldn't and that I might never work again because I breathed in silica dust.

In my twenties, I noticed that I had breathing problems at night. By the time I was in my thirties, I felt it more. I could hear my own labored breathing and wheezing. It was a shock to me – I've always been athletic, and kept myself in shape – but I was feeling worse and worse.

In 2008, when I was 42, I was working on a project where I was the only guy on the crew strong enough to hold a grinder up against the wall to grind silica-based thinset off

the walls. Even though the task wasn't my responsibility, I did it. For two or maybe three weeks, I was on the grinder every day. I bought myself some paper masks to try to keep myself from inhaling so much dust. At the end of that project, I was feeling pretty bad. I thought I had a cold – but no matter what I tried, I couldn't shake it.

So, I went to the doctor, who ordered medical tests after he heard me wheezing. The tests showed shadowing in my pleural membrane so severe that the membrane was opaque and several lesions on my lungs. I went to an occupational specialist after that, Dr. Michael Harbut. He told me that my respiratory problems were caused by silica exposure. When I get exposed to dust now – and not just silica dust – it feels like I have a plastic bag over my head and it being pulled closed.

Worse than the physical symptoms was the depression. I loved my job. I intended to retire after a long career as a tile setter. I had twenty-two years in and I couldn't imagine not getting twenty years more. Now what was I?

For more than eight months after my diagnosis, I was in a deep depression. The stress of my health condition, of my uncertain prognosis, of the financial burden of losing an income was unbearable. In the end, silica exposure cost me not only my job and my health, but my marriage – my wife and I separated 14 months after diagnosis.

My health was so bad that my doctor advised me to apply for social security, but I just couldn't stand that. I knew that I had to find a new job that I could do, for my state of mind.

Through all of this, I never lost my faith. And trusting in that faith, I went out and found work. I spent a year as a shuttle bus driver.

I had two prayers – the first one was that God could put me in a place where I could help people who went through the financial difficulties that I had gone through. Two

weeks later, I ran into an old friend who gave me an opportunity to work in the financial services industry. And that's where I'm working today. I'm so thankful for this job, but I still think of myself as a tile setter and that's still what I'd be doing today if I could.

My second prayer was that God would put me in a place where I could help prevent even one person from going through the same health situation. And we can prevent many more workers from experiencing the same thing – just by allowing the final Rule to take effect.

No worker should go through what I did for a job. I'd like to say I'm lucky because I got back on my feet; I found a new career; I'm here today. But the truth is, I don't know what's going to happen next.
My voice is raspy from the dust, I'm always a little congested and I don't know what my long term prognosis is. On top of that I still have a lot of anxiety about what might come.

I kept up my union card, even though I no longer work at the trade because, in my mind, I am a tile setter; because when no one could do anything to help, I still had the camaraderie and friendship of my brothers and sisters; and because I always hoped that it would be a way that I could help the generations coming up behind me.

We must allow the new Standard to take effect before it's too late for future generations of workers. I hope that this Committee will do just that.

I consider myself a strong person. Over the past couple of years, helping my Union with our efforts to see a final silica standard, I got to know several fellow members, who are also strong men, who have suffered or are suffering as well. I am not, and we are not, the only ones going through struggles related to Silica. But we rise to represent all of the masonry craftworkers who have been injured and who are not able to be here, and those who are not able to stand up and speak out. None of us signed up for this, but we

are here today to share our message. We aren't the only ones! But it's within this government's power to make us the last ones.

Tom Ward

My name is Tom Ward, I am a bricklayer from Detroit Michigan. Four years ago today we spoke to the Senate HELP Committee about the delays in OSHA's Standard-Setting Process and the Impact on Worker Safety. Today I am pleased that OSHA has issued a final silica standard, but I am deeply troubled that some are determined to delay it, and fight against common sense controls of the hazard. Simple control measures are built into most equipment and if properly applied, will prevent Silicosis and other illnesses caused by silica. It is important you remember two things, 1 – the controls already exist, 2 – they're easy to implement.

Silica exposure is important to my family and the millions exposed to this hazard. Before I continue, I want to share the first two sentences from 1910.134 *Permissible practice.*
In the control of those occupational diseases caused by breathing air contaminated with harmful dust, fogs, fumes, mists, gases, smokes, sprays or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures. It goes on to mention that when not feasible, appropriate respirators shall be used. This has been the rule for decades.

This vial contains the PEL under the old standard that you are allowed to breathe without wearing a respirator – for an entire year (based on 240 days). Over the course of a career, breathing this much each year has a nearly 100% likelihood of causing silica related disease. Under the new standard, this is the amount permitted over 5 years without a respirator.

I was about 13 when my dad died from silicosis. He worked as a sandblaster for a few years in his twenties, I remember going to work with him a couple times and thought, like most kids, "my dad is superman". Rusty old truck frames were made to look brand new, I remember being amazed at what he could do with his hands.

He wouldn't let me get too close while he was blasting, and as I played on a sand hill at a safe distance I had no idea that I was playing in his kryptonite. He eventually left for a better job where he earned good pay and benefits that we relied on. A couple years into his new job, he started getting short of breath. I remember him having phenomena and also suffered from a collapsed lung, my mom said the doctors suspected lung infections. The official diagnosis – silicosis – came when he was only 34 years old, it took 5 years to kill him, and we got to watch. In the end, the disease suffocated him, he was only 39 years old. The hardest memory to live with is the last day he worked – he came in the door, fell to the floor and started crying. He said "I can't do it anymore."

I started my apprenticeship in 1991, coming into the trade was easy for me, like my dad, I love working with my hands and thanks to him, have a strong work ethic. Little did I know - the same hazard that killed my father was flying under the radar on construction sites everywhere. To this day, I wonder if I will develop silicosis myself.

When I started, there wasn't much said about the dangers of silica or respiratory protection. Workers and companies alike were completely unaware of the seriousness of silica exposure. Contractors weren't consistent with with dust controls or PPE because the standard was completely lacking and difficult to understand. It's inconceivable to me that some feel the old standard is enough.

Once I became aware of the silica hazard, I did what I could to protect myself. Unfortunately this meant wearing the only option made available to me for 20 years, a N95 disposable filtering face piece (dust mask). My last contractor was progressive when it came to health and safety on the job and must have actually read the first two sentences of 1910.134. We did not use any quickie (or chop) saws at all for the five years I worked there. It was a breath of fresh air. Literally.

All brick and block were wet cut with masonry table saws, the system is built right in, it just needs to be hooked up and turned on. We used a garden hose attachment and did

not recirculate the water, this eliminates the pump as well as flow and slurry issues. We were safe and always made money. Our mantra was that proper planning protects workers and profit.

Part of my job now is teaching apprentices and journeyworkers of the many health hazards they will face throughout their career.
We give them a good understanding of silica hazards, how control them and when to use PPE. The power of proper training cannot be underestimated; it is time to empower them to speak up and it is time to help employers with a standard they can understand.

We are already working together – very successfully – with our contractors, but the reality is that without the new standard and enforcement efforts, there is nothing compelling employers to keep their employees safe from silica.

Most jobsite conditions can be accommodated if planned for – it just takes a little effort. What we can't lose sight of is the fact that too many are falling ill and dying needlessly from this preventable disease.

I am honored to have the opportunity to be here and speak to all of you. We MUST make sure this new comprehensive standard takes full effect.

Tim Brown

My name is Tim Brown. I am a bricklayer from Milwaukee, Wisconsin and a member of BAC Local 8 Wisconsin and the Wisconsin Administrative District Council. For my entire career, I've worked in a dust producing trade, engaged in dust producing tasks; working alongside other craftworkers in dust producing trades, engaged in dust-producing tasks.

I started my four year apprenticeship in May 2000. As an apprentice, my employers often had me cutting brick, block and stone, with whatever tool in whatever condition my employer provided and told me to use – usually a chop saw (also called a quickie saw) – and a paper mask. Sometimes I was given a wet saw, but most of the time, the wet saw attachments weren't working properly. So I cut dry on a wet saw. The paper half mask was often my only protection.

Around the end of my second year, my apprenticeship program told me I was spending too much time on the saw and needed to do more work on the line to progress in my apprenticeship. My supervisor had encouraged me to change my time cards to show less time on the saw, but I refused. Instead, when the apprenticeship committee called me in, I went in to explain what was happening to the full board. A superintendent of my company happened to be a member of that board. When he was confronted by the rest of the board, he turned beet red. I believe that's the only reason I got more time on the wall during the rest of my apprenticeship. And this was in a privately regulated labor-management environment, one which will still benefit from a comprehensive standard.

In 2004, I became a journeyman bricklayer. I still made cuts in masonry materials regularly, but not nearly as often or for the same duration as I did as an apprentice. The vast majority of the time, though, I still used a chop saw to make the cuts, and was only provided a water hookup a handful of times. As a journeyman, though, I spent much more time laying brick and block.

In 2009, I started doing restoration work. This was the first time I was fitted with a respirator, which I used every day.

A few years ago, when I was 32, after about 14 years working at the trade, I visited the doctor – I had a cold with a cough that I couldn't shake. The doctors initially diagnosed me with pneumonia, and prescribed medication. I took it as recommended, but my symptoms persisted, particularly my cough.

About a year later, I started to notice that I couldn't carry the loads I used to handle on the job; the loads being carried by the guys around me on the job. I started to have difficulty breathing – I got winded quickly, and I had a hard time using my respirator while working.

One day, I woke up early in the morning with a nosebleed that I couldn't stop. I went to work as usual, trying to keep my nose bleed from interfering with my work. Around noon, my supervisor told me to go to the doctor.

The doctor sent me right in for additional medical testing. They found abnormalities in my lungs, including nodules up to 8 mm in size. I've had several painful and scarring biopsies, operations and tests. The doctors found silica, scarring and sarcoids in the biopsied tissue. I've been diagnosed with both silicosis and sarcoidosis by my pulmonologist. Neither condition is curable – doctors can only help reduce my symptoms. There's no history of lung conditions in my family, and my doctors are convinced that my conditions are related to my occupational exposure to silica.

I have a six year old daughter, Kai. She knows I'm sick, and she worries about me – she doesn't want me to return to construction, but I'm not sure how to provide for her if I can't. At 6, she has more energy than me, like most kids with their parents. But I lose my breath faster than the other dads, and I can't chase her around. She wants me around, and I want to be there for her. I want to enjoy her childhood, to see her

graduate from school, and to walk her down the aisle one day. I want to provide her with a happy, healthy life, and I worry that I won't be able to do as much for her as I want to.

Today, I'm 35 years old. I've been sick for three years. It's hard to breathe. I can't do what I love, what I've done for many years. What do I do now? I can't do the job I know, and was trained for years to do. And next month my disability benefits run out. Now I'm faced with retraining and an uncertain future.

We must prevent this from happening to any other bricklayers, to my fellow union members, and to my unorganized colleagues. No worker should suffer what I have. The current standard did not protect me. But if we enforce the new comprehensive rule, what happened to me will not happen to other bricklayers. We cannot let others suffer and become ill just for doing an honest day's work.

Chairman WALBERG. I thank the gentlelady. Pursuant to Committee Rule 7(c), all subcommittee members will be permitted to submit written statements to be included in the permanent hearing record. Without objection, the hearing will remain open for 14 days to allow statements, questions for the record, and other extraneous material referenced during the hearing to be submitted in the official hearing record.

It is now my pleasure to introduce today's witnesses. Mr. Ed Brady is president of Brady Homes of Illinois in Bloomington, Illinois. Mr. Brady serves as NAHB's 2016 chairman of the board.

Brady Homes is a family-owned, second-generation building and development company founded by his father, William Brady. Mr. Brady will also testify on behalf of the National Association of Home Builders. Welcome.

Janis Herschkowitz is president and CEO of PRL Inc., a family-owned, second-generation company located in Lebanon, Pennsylvania. She is also president of Regal Cast, an operating company under PRL Inc., that manufactures high-quality specification metal castings, fabrications, and metal casting machine components to the defense, nuclear, and energy industries. Ms. Herschkowitz will also testify on behalf of the American Foundry Society. Welcome.

Dr. Jim Melius is the director of research for the Laborers' Health and Safety Fund of North America. Dr. Melius is an occupational physician and epidemiologist. He spent several years directing occupational and environmental health programs for the National Institute for Occupational Safety and Health, and for the New York State Department of Health. Welcome.

Finally, Henry Chajet, a shareholder in the Washington, D.C., regional office of Jackson Lewis, P.C., will testify on behalf of the U.S. Chamber of Commerce. Mr. Chajet is well-versed in environmental safety and health law involving Federal entities such as OSHA, MSHA, and EPA. Welcome.

I will now ask our witnesses to stand and raise your right hands.

[Witnesses sworn.]

Chairman WALBERG. You may be seated. Let the record reflect the witnesses answered in the affirmative, and we appreciate that.

Before I recognize you for your testimony, let me briefly explain our lighting system, very simple, like the traffic lights on the roadway. You have five minutes to testify. Keep it as close that as humanly possible. If it comes to the end of the time and you have a finishing sentence or paragraph, go ahead and do that. You will each have five minutes to present. When you see the yellow light go on, that means you have a minute left in your testimony time. The red light, you know what that means.

After you testify, the members will have five minutes each to ask questions as well. We will attempt to keep that as well to five-minute questioning so we can get through as much as possible this morning in the hearing time.

So, now it is time to recognize the witnesses for their five minutes of testimony. Mr. Brady, I recognize you now for five minutes.

TESTIMONY OF ED BRADY, PRESIDENT, BRADY HOMES ILLINOIS, BLOOMINGTON, IL, TESTIFYING ON BEHALF OF THE NATIONAL ASSOCIATION OF HOME BUILDERS

Mr. BRADY. Thank you, Chairman Walberg, Ranking Member Wilson, members of the Committee. On behalf of the 140,000 members of the National Association of Home Builders, I appreciate the opportunity to testify here today.

OSHA's new silica rule is the most significant health and safety standard ever issued for the construction industry. Throughout the rulemaking process, NAHB sought to engage with OSHA to create a workable rule which protects our workers. Unfortunately, OSHA failed to address many of the industry concerns, and the final rule reflects a fundamental lack of understanding of construction and is technologically and economically infeasible.

We strongly urge OSHA to revisit the rule and work with us to create a new rule that protects workers while also balancing the technological and economic challenges in the residential construction sector. Absent that, Congress must move swiftly to stop this flawed rule.

OSHA's new silica standard requires a staggering 80 percent reduction in the permissible exposure limit, or PEL, for the construction industry. To achieve this dramatically lower PEL, OSHA has concocted an aggressive compliance regime of engineering and work practice controls that in many cases cannot be applied in residential construction.

If this rule goes into effect, we will have two options to comply. The first option is to measure the amount of silica a worker is exposed to. This is incredibly challenging to do in the field where multiple workers may be performing multiple tasks and where many environmental factors play a significant role.

Employers would need to track individual employees and would be required to pay for the worker to receive a thorough medical checkup, even though the medical checkup and the results will not tell what tasks or even on which jobsite might, and I emphasize "might" be contributing to the potential health problems.

The second option is for employers to follow the engineering and work practice control requirements in Table 1. Unfortunately, these requirements are often impractical and at times impossible to implement in the field.

For example, Table 1 relies heavily on wet cutting methods. That seems simple, but, frankly, we might not even have water service to the jobsite for weeks or possibly months after the job starts. Wet cutting is also impractical indoors, adding water to an indoor environment, and during the winter months, can unrealistically or could potentially create even greater hazards outdoors.

It is also important to consider the economic impact of this rule on the construction industry. OSHA estimates that the total costs of the final rule are just over $1 billion annually. This estimate drastically underestimates the impact this rule will have on our industry.

An independent analysis of the rule, which NAHB helped fund, estimated the true cost at nearly $5 billion. Residential construction's share of this cost means nearly 25 percent of the profits for the industry would be consumed by this single rule.

You might have a notion that homebuilders have high profit margins. The reality is the typical margin is around 6.4 percent. I raise this point because OSHA's guidelines for justifying a new rule is the cost should be no more than 10 percent of the industry's profits. They missed the mark here.

To see how far they are off, let's look quickly at the health screening I mentioned earlier. OSHA estimates the screening will run at least $377 per test, each. There are 3.2 million construction workers. If each construction employee required one screening per year, that cost alone would be roughly $1.2 billion a year.

OSHA also severely underestimated other compliance costs. Most of our members at NAHB are small firms, family businesses, and do not have the expertise to comply with some of the requirements of the rule. Many will need to contract for the services of recordkeeping. OSHA's economic analysis identifies just over 477,000 affected businesses in the construction industry. If you assume a minimal cost of routine bookkeeping services at $200 a month, it would work out to $1.1 billion per year just for the recordkeeping compliance.

We feel that OSHA simply failed to account for the true costs of these expenses in their economic analysis.

Let me be clear. NAHB joins OSHA in its stated goal of reducing workplace illnesses and injuries. The debate is not over whether to protect our workers, but how best to protect our workers.

I urge Congress to consider ways to forestall the implementation of this deeply flawed rule until OSHA has revisited the potential burden this rule will put on small businesses.

I thank you for the opportunity to share my views, Mr. Chairman.

[The statement of Mr. Brady follows:]

Testimony of

Ed Brady

On Behalf of the
National Association of Home Builders

Before the
United States House of Representatives
Education and Workforce Committee
Subcommittee on Workforce Protections

Hearing on
"Reviewing Recent Changes to OSHA's Silica Standards."

April 19, 2016

Chairman Walberg, Ranking Member Wilson, members of the committee, I appreciate the opportunity to appear before you today to discuss OSHA's new crystalline silica standard. My name is Ed Brady, and I am a home builder from Bloomington, Illinois, and the 2016 Chairman of the Board of the National Association of Home Builders (NAHB).

I have nearly 30 years of experience in the housing industry. Like many in this industry, mine is a family business. My father, William Brady Sr., founded the company in 1962. I have served as the president of Brady Homes for the past 15 years. We primarily build single-family homes, but we have also constructed several light commercial projects.

I am also here today representing the over 140,000 NAHB members involved in single-family and multifamily building and remodeling, as well as other aspects of residential and light commercial construction. Each year, NAHB's builder members construct approximately 80 percent of all new housing in America. To do so, they must navigate, at considerable cost, an ever-growing and increasingly complex thicket of government regulations. On average, regulations imposed at all levels of government account for 25 percent of the final price of a new single-family home.[1] This is particularly concerning in an industry with thin margins[2] and acute consumer sensitivity to price fluctuation.

I would like to thank the Committee for taking a closer look at OSHA's new rule on crystalline silica. Eighty-five percent of the businesses affected by this rule are involved in construction or construction-related activities. NAHB is a founding member of the Construction Industry Safety Coalition (CISC), 25 trade associations representing members from all facets of the construction industry. The coalition was formed so the construction industry could work collectively with OSHA as it drafted the new rule. Unfortunately, OSHA failed to address many of the concerns of the construction community in the final rule.

My business, like so many in the construction industry, thrives because our most valued assest is our employees. They are our friends, sometimes our family, and occasionally both. Sensible regulations play a vital role in ensuring their health and safety. But those rules must be practical and feasible, economically and technically, to be truly effective.

We strongly urge OSHA to re-examine and reassess how its final rule will harm the construction industry, job growth, consumers and the economy while doing little to improve the health and safety of industry workers. However, it is unlikely that the agency will change course. Therefore, we believe that Congress must take the lead and move swiftly to craft legislation that will keep this fundamentally flawed rule from taking effect.

---

[1] http://www.nahb.org/generic.aspx?genericContentID=161065&channelID=311

[2] In FY2014, builders realized, on average, a pre-tax, net profit margin of 6.4%. http://eyeonhousing.org/2016/03/whats-the-average-profit-margin-of-single-family-builders/

OSHA's Crystalline Silica Rule: The Most Significant Health and Safety Rule Ever Issued for Construction

Silica is everywhere. It is a basic component of soil, sand and granite. Quartz is the most common form of crystalline silica, while cristobalite and tridymite are two other forms. Although the percentage of silica content varies, it may be present in many commonly used building products such as mortar, cement, stucco, plaster, bricks, concrete blocks, tile, rock, stones, granite, insulation, roofing felt and shingles, grout, foundation and basement waterproof coatings, fiber-cement board; fiber-cement siding; and even in the soil that homes are built on. Because silica is ubiquitous and makes up a core component in many building materials, the industry is unable to use substitutes.

On a typical jobsite, nearly every activity involves workers interacting with silica-containing materials. Because silica is found in soil, clearing, grading and excavating land, digging trenches, landscaping, and foundation work are all affected by this rule. Cutting brick or stone, installing roofing materials, tile work, and even installing granite counter tops involves potential silica exposure. As an industry, we have a responsibility to keep our workers safe, and we already take steps to ensure that our workers are not exposed to excessive levels of silica.

Based on current protective practices, crystalline silica is measured by a Permissible Exposure Limit (PEL), which is the maximum amount of respirable (breathable) silica dust a worker may be exposed to during an 8-hour shift of a 40-hour week. OSHA's PEL for silica exposure in construction is generally calculated to be 250 micrograms per cubic meter of air ($\mu g/m^3$). Employers are required to ensure that employees are not exposed to silica levels above the PEL by using administrative or engineering controls, such as a dust collection system, wet-cutting, or local exhaust ventilation. In addition, if administrative or engineering controls are not feasible to keep workers' exposure below the PEL, they must still be used and supplemented with protective equipment (*i.e.*, respirators).

OSHA's new silica rule will reduce the PEL to 50 $\mu g/m^3$, which means that over the course of any 8-hour work shift, the average worker exposure to respirable crystalline silica cannot exceed 50 $\mu g/m^3$. The rule also incorporates an action level of 25 $\mu g/m^3$ for an 8-hour time weighted average.[3] Once an exposure reaches the action level, additional exposure assessments are required. The rule also requires employers to measure worker explosure to silica. The exposures will have to reflect each shift, each job category, and each designated work area over an 8-hour time weighted average.

O5HA is also mandating recordkeeping and retention of air monitoring and objective data on employee exposure. These records must be maintained for at least 30 years.

For construction, employers are able to choose one of two compliance options: (1) use a control method provided in Table 1 of the standard;[4] or (2) conduct exposure assessments to measure their workers' exposure to silica and independently decide which dust controls work best in their workplaces. Due to

[3] 81 Fed. Reg. at 1687
[4] 81 Fed. Reg. at 16876

the difficulty of constantly measuring a workers' exposure to silica, NAHB anticipates most builders will be forced to rely on the control methods provided in Table 1.

Within Table 1, the construction standard matches common construction operations with engineering and work practice control methods, and respiratory protection. These include using the following equipment: stationary masonry saws; handheld power saws; handheld power saws for cutting fiber-cement board; walk-behind saws; drivable saws; rig-mounted core saws or drills; handheld and stand-mounted drills; dowel drilling rigs for concrete; vehicle-mounted drilling rigs for rock and concrete; jackhammers and handheld powered chipping tools; handheld grinders for mortar removal (i.e., tuckpointing); handheld grinders for uses other than mortar removal; walk-behind milling machines and floor grinders; small and large drivable milling machines; crushing machines; and heavy equipment and utility vehicles used to abrade or fracture silica containing materials (e.g., hoe-ramming, rock ripping) and for tasks such as grading and excavating but not including: demolishing, abrading, or fracturing silica-containing material.[5]

Employers choosing to follow the engineering and work practice control requirements of Table 1 would be considered to be in compliance with the new PEL exposure limits and would not be required to conduct exposure monitoring activities. Unfortunately, the engineering and workplace practice control requirements are often technologically infeasible.

The Rule is Not Technologically Feasible

OSHA's final silica rule demonstrates a fundamental lack of understanding for how the construction industry and in particular, residential construction operates. OSHA developed a rule designed for workers who perform the same tasks on the same sites every day. That is not the pattern on jobsites where workers perform many and varied tasks in a variety of different environments. The net result is a rule that, particularly for the small builders that make up NAHB's core membership, will at best be impracticable to comply with on a residential construction site, and at worst impossible to comply with.

For example, Table 1 would require the use of water as a dust suppression method when cutting roofing tiles. Yet doing so may create a greater hazard for the employee performing that function. Imagine installing tiles on a slippery, wet roof. This practice would also create quality-control issues by introducing water to areas of the roof not designed for moisture. Furthermore, when working indoors, or in freezing weather, using a water suppression system will not be possible. But from a practical standpoint, even if the builder can deal with the safety and quality-control issues, we do not typically get a water meter hooked up for use on our jobsite for at least 2 to 3 months *after* construction is started. The local municipality controls when water service is provided, and it is often delayed well into the construction process. Any silica controls requiring a continuous water source would not be feasible during this time. In spite of all of this, the final version of Table 1 <u>does not</u> allow for dust collection

[5] Ibid.

systems (i.e. vacuum with a HEPA filter) to be used and only allows the use of wet methods (i.e., saw equipped with integrated water delivery system).

Additionally, the final version of Table 1 requires the operation of heavy equipment for tasks such as grading and excavating to: 1) Apply water and/or dust suppressants as necessary to minimize dust emissions; or 2) operate equipment from within an enclosed cab that is free from dust; heated, cooled, and HEPA-filtered; under positive pressure maintained through the continuous delivery of fresh air; and, has door seals that are working properly. Such equipment with an enclosed cab with heating/air conditioning may exist, but rarely are they fitted with an airtight door seal or HEPA-filtered positive pressure enclosure.

One final example looks at remodelers and the level of absurdity they will face in an effort to comply with this rule. Suppose a remodeler is selected for a job that involves the demolition of a concrete wall along with some framing and drywall acitivities. Given demolition is not an activity included in Table 1, remodelers will be forced to ensure their teams are complying with the PEL. That means remodelers will have to contract with a licensed industrial hygienist to conduct exposure assessments – not an inexpensive proposition and one that will eat away significantly (or completely) at the profitability of the job. What's more, the samples will likely not be returned before they have moved onto another job, thus defeating the entire purpose of monitoring while doing nothing to improve worker safety and health.

The Rule is Not Economically Feasible

OSHA's final economic analysis estimates that the total costs of the final rule are just over 1 billion dollars annually. That estimate, which is higher than the agency's estimate in the preliminary economic analysis, is still woefully below the true costs of the final rule. The CISC estimated that the total costs of the rule would be nearly 5 billion dollars annually. While we are still reviewing the extensive final economic analysis, it is clear that significant problems underlying OSHA's preliminary economic analysis resulted in final estimates that are not reflective of the true costs of the rule.

OSHA's supporting documentation does not portray the true economic impacts of the rule, especially for the home building industry. First, the economic arguments which were used to support this rule, OSHA's Preliminary Economic Analysis (PEA), failed to recognize the fundamental structure of residential construction, such as the distinction between new construction and remodeling, or the relationship between a general contractor and its subcontractors. OSHA also overlooked a number of different job titles, and most bizarrely, lumped single-family and multifamily together, although the size of the projects and materials and techniques used may differ.

In fact, residential building construction consists of several distinct categories of activities—new single-family construction, new multifamily construction and remodeling. The median price of a new single-

family home sold in 2012 was $245,000.[6] In contrast, nearly half (46 percent) of the dollar volume of NAHB Remodelers comes from remodeling jobs under $25,000 and 19 percent from jobs under $5,000.[7] Multifamily projects tend to be much larger.

The differences are apparent in NAHB's builder member census for 2012. For example, median annual revenue was $1.8 million for single-family builders, $4.4 million for multifamily builders, and under $600,000 for residential remodelers. The median number of construction employees was 2. The ratio of employees to revenue varies widely across categories, largely because of differential reliance on subcontractors, who do most of the work in residential construction. These calculations are critical because OSHA's test for economic feasibility is 1 percent of revenue or 10 percent of profit. Fudging the math by lumping all residential construction together skews the basic data underpinning the agency's analysis.

The PEA also identified the following job categories in construction as being affected: abrasive blasters; heavy equipment operators; hole drillers using hand-held drills; jackhammer and impact drillers; masonry cutters using portable saws; masonry cutters using stationary saws; millers using portable or mobile machines; rock and concrete drillers; rock-crushing machine operators and tenders; tuckpointers and grinders; and underground construction workers. While these activities might be found on construction sites, from the perspective of creating a credible PEA, none of these job categories correspond to occupations in BLS's Occupational Employment Statistics (OES) Survey or North American Industry Classification System (NAICS) trade contractor categories. In order to estimate industry impacts, the PEA maps the above tasks first to "representative" jobs based on RS Means Heavy Construction Cost Data—which includes highways, bridges, utilities, rails and marine projects, but not residential.

Another problem with this method of mapping tasks to industries is that it is very narrow and limited, showing a relatively small subset of construction employees being affected, and this does not reflect the broad and general language in the rule. For example, the mapping produces no costs for electrical or plumbing and HVAC contractors—two large subcategories of the specialty trades each with hundreds of thousands of employees. Yet these workers face exposure to silica in performing their jobs. There is nothing in the rule that exempts either plumbers, HVAC contractors or electricians, so this data should have been considered.

Subcontractors represent a large share of the total cost to builders. For that reason, it is impossible to analyze labor-associated costs in Residential Building Construction in any meaningful way without accounting for increased costs to subcontractors and passing these costs downstream to the builders and remodelers who obviously bear them. Because the PEA ignores the implications of subcontracting, all its cost estimates for the residential building construction industry are fundamentally flawed and not credible.

---

[6] U.S. Census Bureau, *Characteristics of New Single-Family Houses Sold*, available at http://www.census.gov/construction/chars/sold.html

[7] Remodeling Market Index, Third Quarter 2011, report available on request from NAHB's Economics and Housing Policy Group.

Failure to Account for the Assessment and Recordkeeping Costs

There is nothing in OSHA's silica rule that limits applicability exclusively to builders, remodelers or subcontractors. Rather, the language tends to be extremely broad and general:

> Each employer covered by this section shall assess the exposure of employees who are or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level. Except as provided for in paragraph (d)(8) of this section, each employer covered by this section shall assess the exposure of employees who are or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level.[8]

The rule thus places all burdens on the employer and offers no guidance on how to determine if employees may reasonably be expected to be exposed. In the absence of such guidance, the employer's only option is to perform health screening at a cost that the PEA estimated at $377.77 to $396.90 per screening.

The BLS data the PEA is using shows about 3.2 million construction workers. As noted above, virtually all construction employees will cut and drill during the course of their work, often not knowing the silica content of the material they are working on. Construction employees often also sweep, and do not always know the precise origin of dust. If each construction employee required only one screening per year at $377.77, the total cost would be roughly $1.2 billion.

In response to a SBREFA commenter, the PEA argues that only a fraction of employees require assessment:

> OSHA notes that the proposed standard, at paragraph (d)(1)(iii), permits representative sampling of employees who are or may be exposed to respirable crystalline silica at or above the action level. Specifically, proposed paragraph (d)(1)(iii) requires: 8-hour TWA employee exposures [to be determined] on the basis of one or more samples that reflect the full-shift exposures on each shift, for each job classification, in each work area. Where several employees perform the same job tasks on the same shift and in the same work area, the employer may sample a representative fraction of the employees in order to meet this requirement. In representative sampling, the employer shall sample the employee(s) who are expected to have the highest exposure to respirable crystalline silica. (emphasis added) Consistent

[8] *See, e.g.,* 78 Fed. Reg. at 56487, 56494

> with the language in the proposed standard, Eastern Research Group (ERG) estimated that one out of every four workers would be sampled.[9]

This mischaracterizes the situation in the construction industry—especially in residential construction, where projects tend to be relatively small and subcontractors often visit multiple dissimilar sites during the course of a week, or even a day. Workers rarely work in regular shifts in the same work area next to the same co-workers for an entire year. This means that the typical employee in residential construction (most often working for a subcontractor) is likely to require more than one assessment. This also seems clear from the broad and general language in the rule:

> The employer shall conduct additional exposure assessments as required under paragraph (d)(3) of this section whenever a change in the production, process, control equipment, personnel or work practices may reasonably be expected to result in new or additional exposures at or above the action level.[10]

The situation is particularly acute in remodeling, where millions of projects costing only a few thousand dollars apiece are undertaken every year, and contractors often don't know the nature of building products they are replacing and can't predict at the start of a project how many surfaces they will eventually need to cut or drill into. There is nothing in the regulation that exempts residential remodelers or limits the amount of assessments.

Nor is there anything that exempts general contractors from OSHA's multi-employer citations, which have the effect of making general contractors responsible for the actions of their subcontractors. The simplest way for many general contractors to comply may be to perform assessments for all workers on their sites, resulting in multiple employers performing assessments for the same worker. This also potentially brings non-employers (businesses without payroll employees) into play. According to the Census Bureau's latest estimates, there are 2.4 million non-employers in construction, 1.7 million of them specialty trade contractors. Although these specialty trade contractors are technically outside the scope of the silica rule, general contractors will have trouble distinguishing among small subcontractors depending on whether or not they have payrolls.

Even if it were possible for general contractors and subcontractors to avoid performing multiple assessments for the same employee and avoid performing assessments on the hundreds of thousands of non-employers in the construction industry, this would require a substantial new accounting system beyond the current state in the industry. In any event, the rule places a significant recordkeeping burden on contractors:

---

[9] PEA at 812.
[10] 78 Fed. Reg. at 56495.

> The employer shall maintain an accurate record of all exposure measurement results used or relied on to characterize employee exposure to respirable crystalline silica, as prescribed in paragraph (d) of this section.[11]

The record must include at least the following:

> (A) The date of measurement for each sample taken; (B) The operation monitored; (C) Sampling and analytical methods used; (D) Number, duration, and results of samples taken; (E) Identity of the laboratory that performed the analysis; (F) Type of personal protective equipment, such as respirators, worn by the employees monitored; and (G) Name, social security number, and job classification of all employees represented by the monitoring, indicating which employees were actually monitored.[12]

These are only the recordkeeping requirements for air monitoring. The rule also has specific requirements for tracking materials and processes:

> (A) The crystalline silica-containing material in question; (B) The source of the objective data; (C) The testing protocol and results of testing; (D) A description of the process, operation, or activity and how the data support the assessment; and (E) Other data relevant to the process, operation, activity, material, or employee exposures.[13]

There are also substantial requirements for maintaining medical surveillance records where required, but the rule places no limits on the requirements listed above. They appear to apply to all employers and cover all workers on all construction sites.

Despite the fairly obvious onerous nature of the accounting requirements, the PEA has no explicit analysis for recordkeeping costs. The PEA identifies 477,476 affected establishments in the construction industry. If you assume a minimal cost for routine bookkeeping services of $200 per month to comply with the regulation, it would work out to an aggregate cost of about $1.1 billion per year.

The bottom line is that reasonable back-of-the-envelope calculations produce cost estimates orders of magnitude greater than those estimated in the PEA.

Use of Inappropriate Assumptions and Non-representative Profit Data When Analyzing Economic Feasibility

OSHA has established a minimum threshold of 1 percent of revenue, or 10 percent of profit, below which the agency assumes economic viability of an industry is not threatened. In Residential Building

---

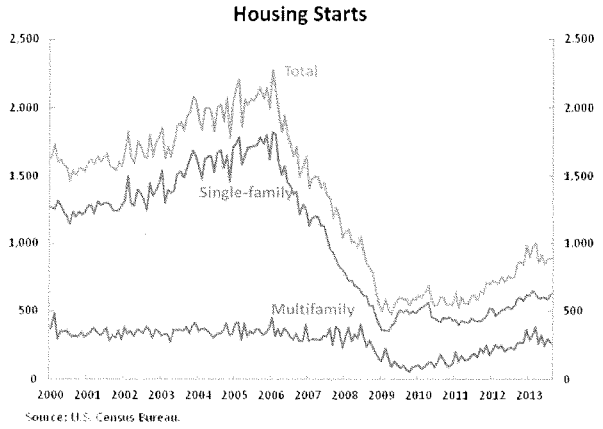
[11] 78 Fed. Reg. at 56501.
[12] ibid
[13] ibid

Construction, however, most of the work and labor-related costs are associated with subcontractors. In fact, increased costs to subcontractors and manufacturers of building products would typically be passed onto the businesses in residential building construction with a mark-up to account for overhead and a normal rate of profit. Because the PEA ignores increased costs of building products and subcontractors, none of its ratios of cost to revenue or profit for the Residential Building Construction industry are valid.

To calculate costs as a percentage of profits, the PEA uses rates from the Internal Revenue Service (IRS) Corporation Source Book, using average profit rates over the seven-year period 2000-2006.

One issue is that these profits are based on balance sheet data for C corporations (or certain other business entities that choose to be taxed as C corporations). However, approximately 80 percent of NAHB's members are structured as pass-through entities, meaning this excludes the majority of businesses in residential building construction that are organized as S corporations or sole proprietorships or partnerships. Nonetheless, the corporate profit rates are applied across the board without consideration of other entities.

However, the main problem with the profit data is the time period from which it is drawn, which is a period of atypically high production and associated profits. The PEA's justification for the 2000-2006 period is "because of the weakness of the profitability data (e.g., missing data points) and the desire to average out short-term profit swings over a full business cycle."[14] In residential construction, 2000-2006 comes nowhere near capturing a business cycle. In the four decades between 1960 and 2000, total housing starts averaged about 1.5 million per year. In 2000-2006, starts were above 1.5 million every year, and above 1.8 million for the last four of those years.



[14] PEA at 1128

In contrast, 2008, 2009, 2010, 2011, 2012 and 2013 have been the six worst years for housing starts since World War II. This severe downturn was accompanied by a decline in nominal house prices at the national level, something that was also unprecedented since World War II.

The drastic changes in the industry after 2006 are also apparent in the average profit rates (owner's compensation and net income before taxes as a share of revenue) from NAHB's *Cost of Doing Business Study*:

Average Profit for Home Builders

2000	2002	2004	2006	2008	2010	2012
8.1%	9.9%	9.3%	9.0%	-1.3%	2.1%	5.7%

Source: NAHB Cost of Doing Business Study, various years

Not only did profit rates decline markedly for the home building industry as a whole after 2006, the relationship between large and small builders reversed itself (larger builders tended to be more profitable through 2006, smaller builders thereafter).

Average Profit for Single-family Home Builders, Based on Number of Starts

	2002	2004	2006	2008	2010	2012
Small Volume Builders (<26 starts)	10.3%	7.9%	6.7%	1.4%	4.7%	6.0%
Production Builders (26+ starts)	10.7%	9.5%	9.4%	-2.6%	1.2%	5.6%

Source: NAHB Cost of Doing Business Study, various years

Thus, the PEA uses C corporation profit from a 6-year boom period, mischaracterizes it as a full business cycle, applies the same rate indiscriminately to pass-through entities, and ignores the drastically different state of the industry that has prevailed since 2006. For this reason, the economic feasibility section of the PEA for the Residential Construction Industry is not credible.

The construction industry estimates that compliance with OSHA's standard would cost the construction industry nearly $4.9 billion per year ($718 million per year for "Residential Building Construction"), an amount nearly ten times larger than OSHA's initial estimate.[15] OSHA has grossly underestimated the costs that construction employers will incur to comply with the proposal. Furthermore, the construction industry re-analysis shows that seven of the ten construction industries defined by OSHA—including the residential construction industry—(in its aggregated manner that dilutes and reduces the calculated impact of the regulatory costs) will face compliance costs from the rule that exceed the revenue/profits threshold typically utilized by OSHA in determining economic feasibility.

[15] The Construction Industry Safety Coalition (CISC), of which NAHB is a member, retained Environomics, Inc., to analyze OSHA's economic estimates and develop other re-estimates, both for engineering controls (wet methods, local exhaust ventilation (LEV), etc.) and for the proposed ancillary requirements. Environomics is an economic consulting firm that provides analysis on the benefits, costs, economic feasibility, economic impacts, and cost effectiveness of policies, programs, regulations, and legislation involving the environment, energy, and occupational safety and health.

Estimated Total Costs Exceed 10% of Profits for 8 of 10 Construction Industries

NAICS	Construction Industries	Total Costs (CISC) as a % of Revised* Profits	OSHA Costs as a Percentage of Revised* Profits
236100	Residential Building Construction	23.63%	0.94%
236200	Nonresidential Building Construction	7.37%	0.53%
237100	Utility System Construction	10.96%	1.43%
237200	Land Subdivision	-12.28%	-0.62%
237300	Highway, Street, and Bridge Construction	9.19%	0.96%
237900	Other Heavy and Civil Engineering Construction	12.44%	1.11%
238100	Foundation, Structure, and Building Exterior Contractors	15.15%	3.90%
238200	Building Equipment Contractors	38.62%	0.47%
238300	Building Finishing Contractors	15.96%	1.42%
238900	Other Specialty Trade Contractors	25.97%	2.30%
999000	State and Local Governments	N/A	N/A
	Total	15.52%	1.70%

* "Revised" profits extend the averaging period for profits from 2000 - 2006 (OSHA) to 2000 - 2011 (revised) and calculate profitability for an industry across all corporations in that industry, not only those that were profitable in the year in question (as OSHA did)

The PEA misses the mark for residential construction time and time again. This is not nitpicking small data errors, but rather the difference of whether small builders and subcontractors can continue to operate in light of the huge financial burden imposed by this rule.

Conclusion

OSHA has not met its obligation of producing a technologically and economically feasible standard with its new crystalline silica rule. The final rule demonstrates a fundamental lack understanding of the contruction industry, and residential construction in particular. The engineering and work practice controls offered in Table 1 will be impractical at best and, in some cases, impossible for small builders to implement. The alternative exposure control measures are no suitable substitute and constitute the bulk of the the true expense of this rule that will be devastating for the construction industry.

NAHB joins OSHA in its stated goal of reducing workplace illnesses and disease. We are not questioning the need to protect our workers. The debate is over how to protect our workers. Unfortunately, this one-size-fits-all rule is more likely to protect residential construction workers by putting them out of work.

I urge Congress to consider ways to forstall the implementation of this deeply flawed rule until such time as OSHA has revisited the potential burden this rule will set upon small businesses. Thank you again for the opportunity to share my views with you today.

Chairman WALBERG. Thank you, Mr. Brady. I recognize Ms. Herschkowitz for your five minutes of testimony.

TESTIMONY OF JANIS HERSCHKOWITZ, PRESIDENT AND CEO OF PRL INC., PRESIDENT, REGAL CAST, LEBANON, PA, TESTIFYING ON BEHALF OF THE AMERICAN FOUNDRY SOCIETY

Ms. HERSCHKOWITZ. Thank you, Chairman Walberg, Ranking Member Wilson, and members of the subcommittee. Thank you for the opportunity to discuss OSHA's recently published silica rule and its detrimental impact on the U.S. metal casting industry.

My name is Jan Herschkowitz, president of PRL, Inc. My family moved to the States from Bolivia in 1971 to pursue the American dream. My father purchased a small company with 13 employees, which he eventually grew to three companies. In 1988, I moved back to Pennsylvania from Chicago to run the family business after he was diagnosed with cancer. Following his death in 1989, I opened a foundry which is one of the cleanest and most advanced foundries in the U.S.

Today, we have four manufacturing facilities, are a key military supplier, and proudly employ 150 highly skilled workers who play a vital role in our success.

I am testifying before you today as a member of the American Foundry Society, our industry's trade association, which is comprised of more than 7,500 members.

Our industry employs over 200,000 workers who are proud that their metal castings have applications in virtually every capital and consumer good produced. Eighty percent of all foundries employ fewer workers than 100, including ours.

As a Nation, we depend on castings in all facets of our lives, including transportation, heating our homes, and, most importantly, providing us with power, and playing a critical role in our Nation's defense, including submarines and carriers. PRL's key customers include Electric Boat, Northrop-Grumman, and Curtiss-Wright.

AFS members are highly committed to protecting their employees and implementing sound safety policies. PRL's culture is one of safety first above all else, as the risks of pouring molten metal are taken very seriously by every co-worker, and we continually invest in safety equipment, experts, preventive maintenance, and training. We also have a certified safety committee which consists of co-workers from every level of our organization.

Realizing the silica sand we are talking about today is used by foundries to make molten metal, and it is the same sand that is found on our beaches. I will only discuss a few of the ways this regulation will impact the foundry industry as my submitted testimony is much more detailed.

Under the rule, the sharply reduced permissible exposure levels of 50 micrograms and an action level of 25 micrograms equates to the contents of a packet of Sweet'N Low sugar over a football field 13 feet high. This is the same air quality requirements of a clean room. Metal casting operations are simply not capable of achieving this level of dust control.

The rule also mandates extensive and costly engineering controls. Metal casters will have to exhaust all feasible engineering and work practice controls to meet the expense of requirements be-

fore we are allowed to use respirators. This means we could be forced to spend well over $1.4 million with no guarantee they will work.

There are certain operations in the foundry, such as grinding, where no matter how much is spent on controls, consistent compliance will not be achieved. Under the rule, regulated areas with control access and mandatory respirator usage will need to be established. This presents a logistical nightmare as it means that a forklift operator or a manager who may be in the area for just a minute will need to put on a respirator and will not be able to talk.

Under the regulation, dry vacuuming is not allowed and a wet vac will now be required. This is wrong. As everybody knows, you never, ever want to introduce water in an area where molten metal is poured. An explosion could occur, and workers lives' would be jeopardized. Also, other metal objects which may be wet, might not even be wet, but may be wet, can no longer be recycled and will go into our landfills.

OSHA drastically underestimates the cost to comply, and disregards the intent of SBREFA. In reality, the actual costs of the rule are 50 times higher than OSHA estimates, and in the final rule, OSHA estimated costs of compliance for the foundry industry was at $47 million or $32,000 per foundry. Our independent analysis shows the rule actually costs the industry over $2.2 billion, which equates to over $1 million per foundry.

Additional costs include capital equipment, plant modifications, lost production time, recordkeeping, training, legal, medical, permits, engineering, monitoring, cleaning, and sand disposal expenses.

In closing, although very well intended, our concern is that OSHA's silica regulation will cause significant foundry closures which will shift production offshore to countries like China, who have minimum worker safety rules.

I firmly believe that this rule not only poses a threat to our national security, but it will also cause many good, highly skilled people from numerous manufacturing sectors to lose their jobs.

Mr. Chairman, I would submit this is simply wrong. Thank you for the opportunity to be here today, and I would be happy to respond to any questions.

[The statement of Ms. Herschkowitz follows:]

TESTIMONY
OF
JANIS HERSCHKOWITZ
PRESIDENT
PRL INC.
ON BEHALF OF THE AMERICAN FOUNDRY SOCIETY

BEFORE THE
HOUSE EDUCATION AND WORKFORCE COMMITTEE
SUBCOMMITTEE ON WORKFORCE PROTECTIONS

HEARING
REVIEWING RECENT CHANGES TO OSHA'S SILICA STANDARDS

April 19, 2016

Chairman Walberg, Ranking Member Wilson and members of the Subcommittee, thank you for the opportunity to testify before you today to discuss the Occupational Safety and Health Administration's (OSHA) final crystalline silica rule published on March 25 and its significant impact on the U.S. metalcasting industry.

Good morning. I'm Janis Herschkowitz, President and CEO of PRL Inc. I am a second generation Pennsylvania small business metalcaster employing 150 team members in Lebanon County. My mom, sister, and I are the sole owners of our business. My family moved to the United States from Bolivia in 1971 to live the American dream. In 1972, my father purchased a small company with 13 employees, which he eventually grew to three companies. I became President following his untimely death in 1989, and under my tutelage we opened a small foundry later that year Our foundry, which is one of the last stainless steel sand foundries built from scratch in this country, is one of the cleanest and most technologically advanced in the U.S.

Today, we operate four manufacturing locations which are comprised of a foundry, two machine shops, and an upgrading facility and we proudly employ 150 highly skilled craftsmen. They are highly dedicated, and play a vital role in PRLs' success.

I am testifying today on behalf of the American Foundry Society (AFS), our industry's major trade and technical association, which is comprised of nearly 8,000 members representing over 2,000 metalcasting firms, their suppliers and customers throughout the U.S. The American metalcasting industry provides employment for over 200,000 men and women directly and supports thousands of other jobs indirectly. Our industry is dominated by small businesses, with over 80 percent of U.S. metalcasters employing 100 workers or less. In fact, many are still family-owned, like mine.

More than 90 percent of all manufactured goods and capital equipment use metal castings as engineered components or rely on castings for their manufacture. In fact, we depend on castings in

all facets of our lives, including all modes of transportation, cooling and heating our homes, and most importantly providing us with power and playing a critical role in our nation's defense.

Our foundry, which employs only 13 coworkers, pours stainless steel and other alloys to produce metal castings ranging in weight from 10 to 12,000 pounds. Our castings are utilized in numerous applications, including valves, pumps, impellers, diffusers and turbines for the military, nuclear, power generation, petro-chemical, and commercial sectors.

PRL is a critical supplier to our national defense, including the nation's nuclear submarine program. We are an important supplier to Electric Boat, Northrop-Grumman, and Curtiss-Wright. Due to size limitations, I was unable to bring any of the castings we produce. However, there are several pictures of the castings we produce which are attached to my written testimony [Attachment A].

Examples of PRL's safety initiatives include:

- A safety committee which is certified by the State of Pennsylvania with representatives from every level of our organization;
- A safety manager as well as safety leaders at each location;
- Mandatory safety and health training for all employees provided by an outside safety trainer;
- Open communication regarding safety so any co-worker can report a safety violation to their co-worker for review;
- A mentoring program where more experienced workers are tasked with teaching our younger co-workers about safety:
- The utilization of an outside safety experts who specialize in the metalcasting industry and is available 24/7 respond to any questions;
- A voluntary respirator program for our co-workers, which was instituted based upon a recommendation from the Indiana University of Pennsylvania, who PRL brought in based upon OSHA's referral; and,
- A robust preventive maintenance program to ensure equipment is safe.

PRL offers a strong benefits package and we continually invest in our co-workers, as we believe they are our biggest asset.

U.S. Foundry Industry is Critical to the U.S. Economy

The U.S. metalcasting industry is the sixth largest industry in America and the second largest supplier of castings in the world, after China. The industry produces both simple and complex components of infinite variety. From key components for aircraft carriers and automobiles to home appliances and surgical equipment, cast metal products are integral to our economy and our way of life. U.S. metalcasters ship cast products valued at more than $28 billion in sales in 2015. The industry is widely dispersed throughout the country, with the highest geographic concentration of facilities located in Ohio, Alabama, Pennsylvania, Indiana, Illinois, Michigan, California, Texas, and Wisconsin. Metal castings have applications in virtually every capital and consumer good and are truly the foundation for all other manufacturing.

Today, there are 1,961 operating casting facilities, which is down from 2,170 five years ago and, 3,200 plants in 1991. This reduction can be attributed to the recession, technological advances, foreign competition and tightening of federal, state and local regulations. More than 500 foundries produce iron and steel castings, while over 1,300 make aluminum, brass and bronze castings.

The foundry industry remains vital to the automotive and transportation sectors. In fact, automobiles, trucks, rail cars, and other transportation equipment utilize 35 percent of all castings produced in the U.S. These type of castings include engine blocks, crankshafts, camshafts, cylinder heads, brake drums or calipers, intake manifolds, transmission housings, differential casings, U-joints, suspension parts, flywheels, engine mount brackets, front-wheel steering knuckles, hydraulic valves, and a multitude of other castings.

Foundries are also the mainstay of national defense. All sectors of the U.S. military are reliant on metal castings for submarines, jet fighters, ships, tanks, trucks, weapon systems and other vital components. Metalcasters are experts in making new, engineered components by re-melting old ones. Discarded appliances, sewer grates, water meters, automobiles, and other metal objects once destined for the landfill are valuable materials to our industry. In fact, our industry uses scrap metal for 85% of its feedstock for iron and steel castings. This practice results in the diversion of 10 million tons of material from disposal in domestic landfills every year.

Occupational Safety & Health Administration's Final Crystalline Silica Rule

Crystalline silica sand, the kind of sand found on lake shores, is essential to the metalcasting process. Nearly 70% of all U.S. foundries utilize the sand casting method to produce hundreds of thousands of different types of metal castings every year. Annually, the foundry industry uses and recycles millions of tons of sand.

OSHA's recently finalized silica rule will have far-reaching implications for foundries. The rule sharply reduces, by half, the existing permissible exposure limit (PEL) for crystalline silica to 100 micrograms per cubic meter (μg/m3) of air averaged over an eight-hour shift, to 50 μg/m3 for general industry. In addition, employers in general industry must measure silica levels if workers may be exposed at or above an "action level" of 25 μg/m3. Among other provisions, the rule imposes requirements for exposure assessment, methods for controlling exposure, respiratory protection where engineering controls do not sufficiently reduce exposure, medical surveillance, hazard communication and training, and massive of amounts of recordkeeping.

Key Foundry Concerns with OSHA's Silica Rulemaking:

1. **OSHA's Final Rule is Technologically and Economically Infeasible**

   The sharply reduced PEL presents enormous feasibility challenges. Foundries will have to exhaust **all** feasible engineering and work practice controls to meet the new reduced PEL. There is not a one-size-fits all solution that is guaranteed to work. Some foundries may spend millions of dollars retrofitting and/or rebuilding in order to implement the various types of engineering controls (essentially trial and error) while attempting to comply with the new standard.

   OSHA completely dismisses the use of personal protective equipment (PPE), as a primary approach to protecting employees; instead, relies on the outdated "hierarchy of controls" that emphasizes much more costly engineering and work practice controls. There are certain operations in a foundry, such as grinding and knock-off/sorting, where no matter how much is spent on controls, consistent compliance will not be achieved.

   The OSHA PEL is a not-to-exceed limit, not an average limit. Given the day-to-day variation in exposure levels that are typical of foundry operations, that means we have to achieve average levels below 10 μg/m3 to avoid citations for exceeding the PEL. To achieve that dust level we would need to meet standards typical of clean room operations. Foundry processes are simply not capable of achieving those levels of dust control.

OSHA's final rule requires general industry to establish regulated areas where access is controlled and those who enter, even to pass through briefly, must wear respirators. Establishing and controlling these areas will be essentially impossible. Moving key supplies and the castings with a fork lift, for example, will be very challenging. There may be the need to move entire departments. Employees typically working in the office but who have to come out to the shop floor periodically to check on a customer order or order supplies may now need to be put into a respirator program if there is a restricted area. Trying to operate a foundry with regulated areas will truly upend the day-to-day operations of U.S. foundries.

2. **Underestimated and/or Completely Omitted the Cost of Equipment & Processes**
   A number of pieces of equipment and system costs, such as a new dust collector, which can easily run over $1 million to install, were not accounted for by OSHA in their economic analysis. Other examples of equipment where the costs were omitted or underestimated include:
   - Cleaning— professional wall-to-wall cleaning would cost $1 per square foot of facility, plus $400 million a year for downtime.
   - Ventilation— Ventilation costs are four times higher than OSHA estimated in its proposal and the agency completely omitted engineering, air modeling and permitting costs. OSHA claims to have doubled their earlier estimate in the final economic analysis, but in fact, they actually reduced costs from $5.33 to $5.26 per cubic feet per minute.
   - OSHA failed to consider the effects of compliance on current EPA regulations. Many foundries will be forced to redesign and install new ventilation systems. This will trigger a large number of foundries to make changes to their air permits, which can take at least a year to obtain from their states.
   - OSHA assumes that 30 year old ventilation designs that were meant for the old PEL are capable of meeting the new PEL at little or no additional cost. OSHA seems to believe that these systems can just be "tweaked" by operators to achieve compliance. Unfortunately, that is simply not the case. At these new lower levels, it will be much more challenging and far more costly than OSHA has estimated.

   In addition, OSHA estimated costs for only 30 of the 50 control categories in OSHA's technological feasibility analysis and listed in Table V-A-1 of the Final Economic Analysis. Twenty categories are simply left blank and not provided with a cost even though the industry testimony and comments submitted for the record provided this information. In addition, a case study used by OSHA to demonstrate feasibility of the new proposed PEL is based on a single sample of less than 50ug/m3. To obtain this sample, the foundry implemented a wide variety of controls over several years. None of the costs for these control techniques were included in OSHA's economic analysis. These are just a few of a long list of examples where OSHA underestimated and/or completely omitted the cost of equipment and processes, despite concrete data provided by our industry.

3. **OSHA Drastically Understates Costs to Comply with the Rule – Exceeds 9% of Foundry Industry's Revenue**
   OSHA's cost estimates for the foundry industry are many times below realistic costs. In the final rule, OSHA's estimated cost of the engineering/ancillary provisions for the foundry industry at $47 million and $32,000 per foundry.

   An independent economic analysis performed by engineering and economic experts examined and corrected OSHA's spreadsheets and estimated the cost for foundries to come into

compliance to be more than $2.2 billion annually and over $1 million per foundry. This represents 9.9% of the foundry industry's revenue and 276% of its profits. In reality, the actual costs of the rule are *50 times* higher than OSHA estimates. The economic impact of this rule will disproportionately affect small foundries, since the majority of the industry employs less than 100 employees.

4. **OSHA Utilized Outdated Industry Data and Failed to update its Cost/Benefit Analysis for the Foundry Industry**
   OSHA declined to conduct a second small business panel review under the Small Business Regulatory Enforcement Fairness Act (SBREFA), choosing to let stand the outdated 2003 report. This report and OSHA's own rule relies on data gathered from a set of foundries from the early 1990's, and many in fact have closed. Reliance on a report that solicited input on a different proposal a decade ago is simply not adequate outreach or due diligence to the affected stakeholders.

   Furthermore, it raises serious concerns that OSHA has not used the best available data or techniques to quantify the costs and/or benefits of the rulemaking.

Impact of OSHA's Silica Rule on PRL

PRL estimates OSHA's final silica rule will cost our foundry well over $1 million dollars, which includes the purchase and installation of a new dust collection system, other additional cleaning and filtration equipment, shop modifications, as well as other associated changes in the way we clean and process castings, and how we vacuum the sand within the facility.

Furthermore, this amount does not even include the engineering time, outside lab tests, other plant modifications, new air permits if necessary, including zoning modifications (for the dust collection pad), and most importantly lost production time. Air permit approvals, which are not even guaranteed, can often take over a year from the Department of Environmental Protection in the State of Pennsylvania.

Our company operates off of a credit line, and we will have to attain a capital equipment loan. Realize even if we were able to borrow at least $1 million to try and comply with the regulation, there is no guarantee of being able to meet the lower permissible exposure levels, much less even measure it.

The worst case scenario with OSHA's rule is that if we are unable to meet the requirements, we could be forced to close our doors. This would shut down our other facilities as well, as they are dependent on upgrading and machining the castings supplied by our foundry. Simply put, over 150 highly skilled co-workers would lose their jobs, which would also have a devastating effect on our local economy, and our nation's military who would lose a critical supplier. PRL is just one foundry of many.

OSHA has two immediate, effective means to improve upon current protective practices, which it dismisses in its regulation: (1) provide compliance assistance to companies over the current exposure limits, for which OSHA documents a roughly 30% non-compliance rate across all impacted industries at the current PEL; and, (2) support new technology and policies favoring effective, comfortable respirators and clean filtered air helmets, which provide full protection but are not

favored by OSHA's "hierarchy of control" policy. Unfortunately, the agency would not consider changing that policy, no matter how effective, efficient and economical the protective devices.[1]

However, OSHA's approach to this final rule is misguided and relies upon outdated approaches to addressing safety and health hazards that are inflexible and potentially cost prohibitive, and there is no guarantee they can even be met.

Conclusion

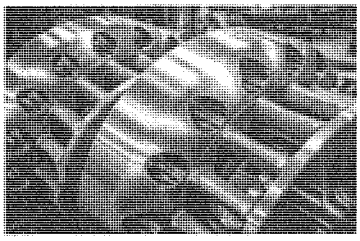
The ramifications of this rule on our nation's foundries and our nation's industrial base are truly staggering. The substantial costs for this rule alone make the foundry industry one of the most heavily impacted industry sectors among all those affected by the rule.

By not providing flexibility in meeting the significant requirements of OSHA's new silica rule, my concern is that it's implementation will cause a significant number of foundries to close, which will shift production offshore, to countries who don't even come close to meeting OSHA's current silica standard. I firmly believe that the silica rule, as written, not only poses a threat to our national security, but it will also cause many well paid jobs with good benefits from numerous manufacturing sectors to be lost.

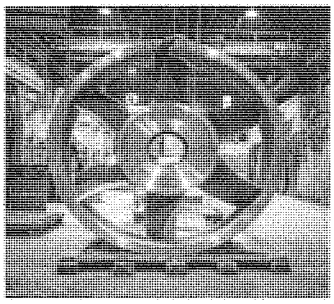
Thank you again for the opportunity to appear before you today. I would be happy to respond to any questions.

[1] 78 FR 56274, 78: "OSHA would like to draw attention to one possible modification to the proposed rule, involving methods of compliance, that the Agency would not consider to be a legitimate regulatory alternative: To permit the use of respiratory protection as an alternative to engineering and work practice controls as a primary means to achieve the PEL."

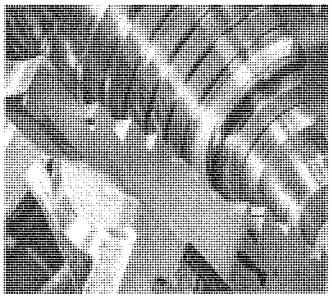
ATTACHMENT A – Examples of Castings Manufactured at PRL Inc.



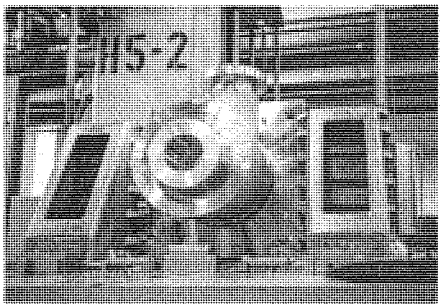
INNER CASING COVER FOR SUBMARINE
- STAINLESS STEEL –



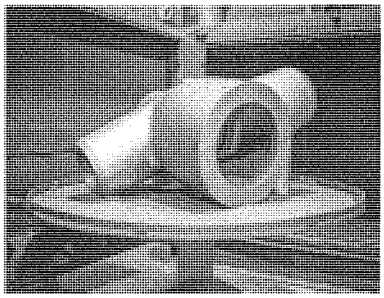
VERTICAL DIFFUSER FOR THE COOLANT SYSTEM
- CN3MN -



STEAM CHAMBER FOR SUBMARINE
- STAINLESS STEEL –



PUMP CASING FOR SUBMARINE
- COPPER NICKEL -



VALVE BODY FOR CARRIER
- CARBON STEEL -

Chairman WALBERG. Thank you, Ms. Herschkowitz. Dr. Melius, your 5 minutes are recognized right now.

TESTIMONY OF JAMES MELIUS, DIRECTOR OF RESEARCH, LABORERS' HEALTH AND SAFETY FUND OF NORTH AMERICA, ALBANY, NY

Dr. MELIUS. Thank you, Honorable Chairman Walberg, Ranking Member Wilson, other members of the subcommittee. I greatly appreciate the opportunity to appear before you today at this hearing.

As you said earlier, I was an occupational physician and epidemiologist. I currently work for labor-management organizations within the unionized construction industry, focusing on health and safety issues in construction.

I have over 40 years of experience in occupational and environmental health. I have been involved, I have followed the development and public review of the recently released OSHA silica standard, submitted comments, and testified at the hearings, and submitted post-hearing comments on the proposed standard.

One of my first patients, while working in an occupational medicine clinic in Chicago in the 1970s, was a young man with severe and rapidly progressive silicosis caused by his work in a foundry. He died while in his early thirties from this disease, leaving a young family.

Throughout my career in occupational health, I have continued to encounter cases of silicosis among foundry and construction workers. As Representative Wilson has already introduced, the three bricklayers and family members of bricklayers are behind me, who experienced in their family or themselves silicosis.

We recently did a small survey of our tunnel workers in New York and found nearly 40 percent of them—again, young tunnel workers—had developed early stages of silicosis as a result of their work building tunnels in the New York City area.

Silicosis is not just a disease of the past. Workers continue to develop this disease and the illness can have a serious impact on their health, their ability to work, and on their families.

I believe that OSHA has done an excellent job of developing the new silicosis standard. I would like to outline a few of the major reasons why I believe this regulation is a significant step forward in addressing this major occupational health problem.

OSHA's review of the available scientific data and additional scientific studies presented during the rulemaking process provide a sound scientific basis for the new standard. They have identified key diseases, and the more recent scientific studies have provided the basis for the new standard that they put forward of 50 micrograms per cubic meter.

The current OSHA standard, as has been mentioned, comes from the 1920s. It was based on a purely practical way of what could be done to deal with some of the extremely high exposures in some of the industries at that time, tunnel, quarry work, and so forth.

That standard has not been changed until recently, and if that standard were still in place and left in place, one could have a very high rate of cancer, silicosis, and other silica related diseases among people working at those levels of exposure.

Some of the extrapolations in the OSHA rulemaking process estimated up to 100 percent of construction workers exposed to silica would at the then-current standard develop silicosis. It is clearly unacceptable not to control this to a much lower limit.

We do not view and I do not view the major problem to be an issue of enforcement. I believe the major problem is that the current standard in place is not adequate to prevent most silica-related illnesses. We need to change the standard, it has gone on for far too long.

I think it is also important as some of the other witnesses have stated, that we need to have practical ways of controlling exposure. As I look at it, whether it is a half- full or half empty glass, I think a major step forward in construction is to have these tasks outlined and to make compliance easier in that industry.

Up here, I am showing two of the pictures. These are people, bricklayers, and the effect of ventilation from the equipment they use. This is a milling machine that is used to take up old pavement. I do not know if you can turn that so it can be seen by the committee. Again, this is a before and after picture.

The asphalt paving industry put a lot of effort into developing proper ventilation controls for their industry in order to be able to meet the silica standards. This work started long before the standard was even proposed.

As you can see in the first picture, and if you have ever been behind a milling machine, you know how much dust is generated, and in the second picture, which I actually believe is a picture from Michigan, by the way, the Upper Peninsula, where some of this research was done, showing that with proper ventilation, ventilation being readily available through all manufacturers, you can control silica exposures. They were able to meet the new standard through this, and at a relatively reasonable price for doing so.

I think this kind of development—I think one thing that is important in looking at costs and effectiveness is not only the fact that people will meet the standard, but they will develop better technology and better approaches to be able to do that.

I think we have to take that into account as we look forward to what is going to happen as a result of this standard going into place.

I will end my oral testimony here. I am out of time, I see. I would be glad to answer any questions later. Thank you.

[The statement and additional submission of Dr. Melius follows:]

TESTIMONY

Before

The United States House of Representatives

Committee on Education and the Workforce

Subcommittee on Workforce Protections

Hearing on

Reviewing Recent Changes to OSHA's Silica Standard

Washington, DC

April 19, 2016

Presented by

James Melius MD, DrPH

Research Director, Laborers' Health and Safety Fund of North America

Administrator, New York State Laborers' Health and

Safety Trust Fund

Honorable Chairman Walberg, Ranking Member Wilson, and other members of the Subcommittee. I greatly appreciate the opportunity to appear before you at this hearing.

I am James Melius, an occupational health physician and epidemiologist, who currently works for labor-management organizations (the Laborers' Health and Safety Fund of North America and the New York State Laborers' Health and Safety Trust Fund) focusing on health and safety issues for union construction laborers in the United States and Canada. I have over forty years of experience in occupational and environmental health including fifteen years with federal and state agencies. For the past twenty years, my work has focused mainly on construction safety and health issues. I also currently serve as Chair of the Advisory Board on Radiation and Worker Health which oversees the federal cancer compensation program for former workers at Department of Energy nuclear facilities and as chair of the Steering Committee for the World Trade Center Responder Compensation Medical Program which advises the federal medical monitoring and treatment program for WTC responders.

I have followed the development and public review of the recently released OSHA silica standard. I submitted comments on the proposed standard, testified at the public hearings, and submitted post-hearing comments.

One of my first patients while working in an occupational medicine clinic in Chicago in the 1970's was a young man with severe and rapidly progressive silicosis caused by his work in a foundry. He died while still in his early 30's from this disease. Throughout my career, I have continued to encounter cases of silicosis among foundry and construction workers. Most recently, I have encountered many cases of silicosis among tunnel workers from our union. A recent small medical survey that we did of younger tunnel workers found that nearly 40% of them had developed early stages of silicosis (report submitted to OSHA). I have sitting behind me three union bricklayers or family members of bricklayers who have developed silicosis from their work. Information on their work histories and illnesses have been submitted for this hearing. Silicosis is not just a disease

of the past. Many workers continue to develop this illness from their work, and the illness can have a serious impact on their health, on their ability to work, and on their families.

Silicosis has been recognized as work-related disease since Roman times, and major epidemics were recognized in the early half of the last century in the United States among foundry, quarry, and tunnel workers. However, despite this history and methods to prevent silica exposure, silicosis and other silica-related illnesses continue to be a serious health problem in the United States. Available surveillance data are incomplete due to limited recognition and reporting of silicosis. Even in the absence of complete data on the extent of these silica-related diseases in our country, we know that many hundreds of workers are found with silicosis every year. In Michigan, which has a very good silicosis surveillance program, African American workers have been have been found to have a much higher rate of silicosis probably because of their higher rate of employment in jobs with high silica exposure .

I believe that OSHA has done an excellent job in developing the new silica standard including their review of the available scientific information on silica and in crafting regulations that will provide better protection for workers exposed to this dangerous material. The implementation of these regulations will lead to a significant reduction in silicosis, cancer, and other diseases related to silica exposure in the workplace. These regulations also provide employers in many different industries with the structure to comply with these new regulations. I would like to outline the major reasons why I believe that this regulation is a significant step forward in addressing a major occupational health problem in our country:

1. **The New Standard Will Significantly Reduce the Incidence of Silicosis and other Silica-related Diseases in the United States.**

OSHA's review of the available scientific data and the additional scientific studies presented during the rulemaking process provide a sound scientific basis for the new standard. Over the last 25 or so years, there have been many new studies published on

health risks from silica exposure including silicosis, other lung disease, kidney disease, and lung cancer. These studies have also provided critical information on these health risks including much better data on the health risks at different levels of exposure. The resulting synthesis of these studies provides the scientific underpinnings for the health risk estimates that OSHA has performed in developing the new standard.

The current OSHA standards are based on recommended limits (and hence the available science) from the 1920's which then formed the basis for the respective recommended limits for construction and general industry adopted by OSHA in 1971. In the 1920's when those standards were first recommended, the United States Public Health Service recognized that those standards were not adequate to prevent silicosis. However, those standards have remained unchanged by OSHA since 1971 at essentially 100 micrograms per cubic meter for general industry and 250 micrograms per cubic meter for construction. Extrapolating from some of the recent individual scientific studies of workers exposed to silica, exposure at these levels could lead to a cumulative risk of developing silicosis from a working lifetime exposed at these levels of up to 100% if exposed at the former construction standard and up to approximately 75% if exposed at the former general industry standard. While these are extrapolations and vary depending on the study used (some of the extrapolations were significantly lower), they demonstrate the potential for a clearly unacceptable risk of developing silicosis at the previous regulatory limits.

For lung cancer, the OSHA estimates at the previous exposure limits were for 11 to 54 excess cancers per 1000 workers if exposed at the former general industry limit and 24 to 657 excess cancers per 1000 workers if exposed at the former construction industry standard. Even with the reduced risk of lung cancer at the exposure level in the new standard, the risk of lung cancer among silica exposed workers will remain significantly higher than for most other OSHA health standards. Simply leaving in place the current standards with improved enforcement would lead to thousands of more silica exposed workers developing silicosis, lung cancer, and other silica-related illnesses. The major

problem is not enforcement. It is that the current standard is not adequate to prevent most silica-related illnesses.

These health risk assessments show a significant reduction in health risks if exposures are reduced to the levels required in the new standard. OSHA estimates that the new regulation will save more than 600 lives each year and prevent nearly 1000 cases of moderate to severe silicosis each year. However, there will still be significant health risks including silicosis even at the exposure level set by the new standard. Further reductions in exposure could prevent those illnesses. However, OSHA found that overall further reduction was not feasible at the present time.

2. The New Silica Standard is Comprehensive

The previous OSHA silica standard was essentially just a number – levels of exposure needed to be controlled to a specific level as measured over an 8 hour work day. There were no other requirements or guidance directly attached to the standard such as training, exposure monitoring, medical surveillance, and specific control requirements that would help to better protect the exposed workers and also assist the employer in complying with the standard. OSHA provides some regulation and guidance for silica control through their other standards (e.g., regulations for respirator use) and through their silica enforcement initiatives, but these are not an adequate replacement for a more comprehensive standard.

The new comprehensive silica standard provides guidelines for an approach to controlling silica exposures including monitoring, medical surveillance, training, and other requirements. The regulations are supplemented by appendices in the current standard providing additional guidelines on certain aspects of the regulation. As the standard goes into effect, I am certain that OSHA will publish more guidance on key aspects of the new standard to employers in different industries affected by the regulation. Industry associations, unions, and other groups will also develop and

distribute additional materials and provide consultation. Our organization and others have already started to do that.

3. The Standard Includes Control Options for Employers

OSHA standards generally require employers to implement measures to control exposures, to regularly monitor exposures, and to adjust their controls, based on the monitoring. The new standard also includes the option for construction industry employers to comply with the new standard by employing specific control measures when conducting certain construction tasks rather than having to regularly monitor exposures from that work and adjust their controls based on this monitoring. This is a major assistance to the construction industry in controlling silica exposures for their workers and for complying with the new standard.

A construction worker may do many different tasks in a given day or week. Some may involve significant silica exposure over the current limit (without controls) while others may not. The current regulation includes a list of 18 construction tasks (along with different circumstances for how that task is performed and the nature of the equipment being used) along with specific control requirements for that task depending on how long that task will be done on a given day. For example, a person working with a handheld grinder (with an integrated water delivery system or dust collector meeting certain specifications) for uses other than mortar removal would be considered compliant with the new standard as would a person working on a drivable milling machine equipped with a specific ventilation system. I have with me pictures of some of this equipment demonstrating the visible reductions in dust (hence silica exposure) when these controls are being used.

To my knowledge, this is the first time that OSHA has used this approach on such a large scale in a health standard. The approach will provide assistance to our employers in complying with the standard and protecting their workers. My understanding is that the task list covers the vast majority of construction tasks involving silica exposure. Those left out include such tasks as tunnel work where conditions leading to significant silica

exposure may vary greatly depending on the type of work, geological conditions, ventilation, etc. Those types of work will still require exposure monitoring to help guide proper controls measures in order to comply with the new standard. Construction employers are not required to use the controls included in the list of tasks set forth in the standard. However, if they do not, they will be required to monitor the work environment and demonstrate that the control measures that they use are adequate to comply with the standard.

There are many examples in the construction industry of efforts to develop effective and feasible silica controls for specific tasks. I will describe a few that I am familiar with, but there are many more.

Our union and other construction unions have worked closely with people in the industry and equipment manufacturers to develop better controls. Several years ago, in parallel to similar work on asphalt paving exposures, our union and the Operating Engineers union began an effort with the National Asphalt Pavement Association (NAPA), the milling machine equipment manufacturers, and NIOSH to better control silica exposures from the milling machines used to remove old pavement from highways in preparation for laying down new pavement. This project led to the development of better ventilation controls on these machines and the demonstration that silica exposures from milling machines with the new ventilation will fall below the new standard. This work helped to provide the basis for the inclusion of milling machines in the list of tasks included in the new standard.

The construction industry has the capability to develop and implement practical controls for many situations where there may be silica exposures that are difficult to control. For example, our Health & Safety Fund in New Jersey has developed a portable system to provide a water spray system for jackhammer operations on road construction projects. This system reduces exposures by over 90% and allows this control to be used in locations where a direct water supply is not available. The low cost system has been supported by the transportation agencies in the state and is being utilized by many highway contractors.

One of the industry groups concerned about the impact of the new silica standard represented companies involved in hydraulic fracturing. Studies have shown the potential for very high exposures to silica during certain operations in that industry, and the industry testified at the OSHA hearings that they were having difficulty controlling those exposures. NIOSH staff at the OSHA hearings with knowledge of hydraulic fracturing operations testified that there were commonly used dust control methods that could be adapted to that industry. In the final standard, OSHA gave this industry additional time (5 years) to develop, evaluate, and implement control measures to comply with the new standard. Based on similar efforts in the construction industry, I believe that such control measures can be successfully put in place in that industry within the time frame allowed.

4. OSHA Incorporated Public Input into the New Standard.

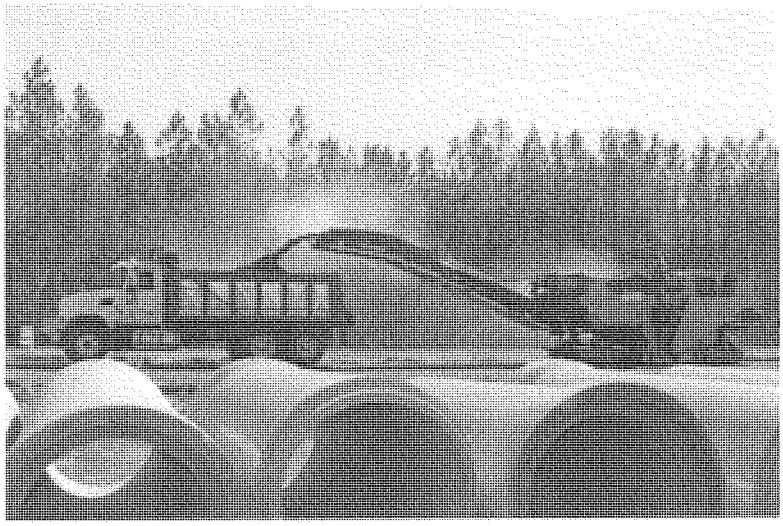
Based on participation in the hearings, reviewing many of the written submissions, and reviewing the final rule publication, it is clear that OSHA modified their original proposal based on the public input from the regulatory process. Even when they did not make the changes recommended by the persons testifying or submitting comments, OSHA reviewed the rationale for these decisions in the publication of the final regulation. Compliance schedules were extended, and significant parts of the standard were rewritten.

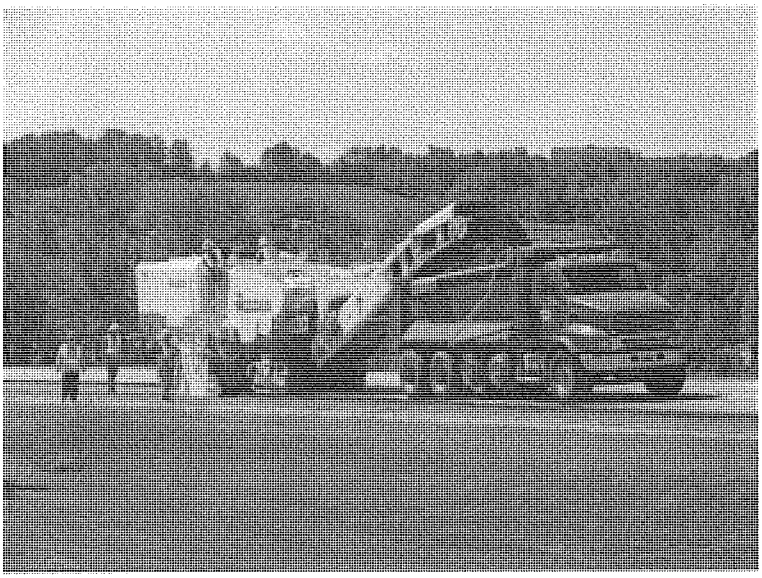
As one example of this, the original OSHA proposal would still have required respirator use if the highway milling machine operator was working over 4 hours in a given day. However, NAPA and the partnership described above were able to demonstrate to OSHA that this was unnecessary as the exposure monitoring that they had done on the "ventilated" milling machines demonstrated exposures below the proposed standard even when the exposure was over 4 hours. Based on their analysis of this and other information, OSHA modified the requirement and no long requires respirator use in that situation.

There were also concerns raised about the sampling methods being proposed to monitor silica exposures could adequately and accurately measure silica exposures at the levels required by the new standard. In the final standard, OSHA has provided a lengthy evaluation supporting that monitoring at such levels is feasible. Industry was also concerned about whether an adequate number of laboratories would be available the increased exposure monitoring stimulated by the new standard. OSHA evaluated these issues and provided a two year extension for meeting the laboratory requirements in the new standard.

There are many other examples of modifications of the proposed standard by OSHA in response to the public comments. I believe that the proposed standard has been significantly improved by OSHA's efforts to obtain public comment and then review and incorporate that input into their final rule.

In summary, I believe that the new OSHA silica standard is a major milestone in preventing a significant occupational health problem in the United States. The new exposure standard for silica is comprehensive, and the regulations implement is feasible to implement, and OSHA has incorporated some new approaches into the standard that will make compliance less burdensome for many employers. Most importantly, the over two million workers in the United States exposed to silica will be at much lower risk of developing silicosis and other silica related diseases.





Chairman WALBERG. Thank you, Doctor, and thank you for bringing my thoughts back to Pure Michigan. Now, for your five minutes of testimony, we recognize Mr. Chajet.

TESTIMONY OF HENRY CHAJET, SHAREHOLDER, JACKSON LEWIS P.C., RESTON, VA, TESTIFYING ON BEHALF OF THE U.S. CHAMBER OF COMMERCE

Mr. CHAJET. Thank you, Mr. Chairman, and members of the Committee.

Chairman WALBERG. Turn your microphone on there, if you would, please.

Mr. CHAJET. Thank you, Mr. Chairman, and members of the Committee. We appreciate the opportunity to present the views of the U.S. Chamber of Commerce on this new OSHA rule impacting silica.

If I may, I would like to start with the concept that this is about sand. Silica, essentially, is sand. One of the things that we do not see in these pictures is the hundreds of trillions of tons of sand that exists all over the world. This rule impacts millions of people, and perhaps millions of employment sites as well.

Sand is an essential, critical element in a variety of consumer products, construction products, national defense products, home builder products. It is extensively used. I think OSHA lists over 30 industry groups, and there are many more that are impacted by this rule. At least two million people work in areas where sand or silica is present, disturbed, or used. This is a massive rule.

That is a little bit of perspective. Much of this product or material is used in truckloads. The amount of silica dust that it would take to exceed the exposure limit is an eye drop in this room. One eye drop in a teaspoon dispersed over the size of this room would essentially exceed the exposure limit. It is an infinitesimal small amount of dust.

In addition, it is not just the fact that we are concerned about silica, we are concerned about respirable silica, tiny, tiny, small particles of silica. Those are the ones that can get into a lung and can cause a significant hazard, no question about that.

One case of silicosis, one fatality, one illness, is one too many, and we have to prevent them. We are preventing them. We have submitted for the record, and I would hope you would allow our statement to be placed in the record, a graph from the Centers for Disease Control. I thought we were going to have a copy of it to show. It demonstrates the success of American industry and OSHA in controlling and reducing silica related disease.

These are data taken from the Health and Human Services' Centers for Disease Control Agency that collects mortality. You will notice that just in our lifetimes, we have reduced successfully the number of cases from silica related disease. We are approaching zero. It is a wonderful public health success story. It is a story that I am proud to have been a part of for my 35 years of occupational safety and health experience, helping companies to understand their obligations and to work to continue this trend.

This was established with the current standards in place. In fact, the current standards, as you stated in your opening, Mr. Chairman, not only do we see OSHA not enforcing them, they have a

compliance problem, 30 percent or so or out of compliance, more exposure than the current problem, but a significant portion, perhaps two-thirds of that, is two to three times over exposure.

We have a compliance problem that is not going to be solved by a new set of regulations that took this many pages of the Federal Register to explain, not to mention the thousands of attachments to it. That is going to be an impossibility for any small to medium sized business to comprehend.

We have this regulation, and it is based on a series of fantasies. The very concept of respirable dust is written out of this regulation by a new definition that says it is whatever dust is collected by the sampler. So, we are not even regulating the hazard. We are regulating an inaccurate sampling and analysis method that is the best OSHA could do.

In light of that fantasy, there are additional ones in the assumptions for how you calculate risk here. According to OSHA, there are thousands, if not hundreds of thousands, of people who should be recorded with disease, and they are not there. We do not have a silica epidemic.

There are many problems here with this rule. OSHA needs to refocus on reality. We have not seen a focus on drug and alcohol abuse in the workplace, one of the leading causes of fatalities, and it is impacting our entire workforce and our families. Why not a focus where we need it?

Thank you, Mr. Chairman. I would be glad to answer questions.

[The statement and additional submission of Mr. Chajet follows:]

Statement of the U.S. Chamber of Commerce

ON: **Reviewing Recent Changes to OSHA's Silica Standards**

TO: **U.S. House of Representatives**
Committee on Education and Workforce
Subcommittee on Workforce Protections

DATE: **April 19, 2016**

BY: **Henry Chajet, Esq. Jackson Lewis P.C.**

1615 H Street NW | Washington, DC | 20062

The Chamber's mission is to advance human progress through an economic, political and social system based on individual freedom, incentive, initiative, opportunity and responsibility.

The U.S. Chamber of Commerce is the world's largest business federation representing the interests of more than 3 million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations. The Chamber is dedicated to promoting, protecting, and defending America's free enterprise system.

More than 96% of Chamber member companies have fewer than 100 employees, and many of the nation's largest companies are also active members. We are therefore cognizant not only of the challenges facing smaller businesses, but also those facing the business community at large.

Besides representing a cross-section of the American business community with respect to the number of employees, major classifications of American business—e.g., manufacturing, retailing, services, construction, wholesalers, and finance—are represented. The Chamber has membership in all 50 states.

The Chamber's international reach is substantial as well. We believe that global interdependence provides opportunities, not threats. In addition to the American Chambers of Commerce abroad, an increasing number of our members engage in the export and import of both goods and services and have ongoing investment activities. The Chamber favors strengthened international competitiveness and opposes artificial U.S. and foreign barriers to international business.

United States House of Representatives
Education and Workforce Committee
Subcommittee on Workforce Protections
Reviewing Recent Changes to OSHA's Silica Standards
Testimony of Henry Chajet, Esq. Jackson Lewis P.C.
On Behalf of the United States Chamber of Commerce
April 19, 2016

Good Morning and thank you for the opportunity to address the new OSHA silica rules. Everyone wants OSHA to succeed in its mission of working with industry and employees in protecting the safety and health of the nation's workforce. The Chamber shares this goal and supports logical, rational and feasible efforts to reduce employee injuries, illnesses and deaths.

Unfortunately, the new OSHA silica regulations are not consistent with OSHA's statutory requirements for regulations to be data driven, feasible, and performance oriented. The regulations address one of the most common materials on earth, sand, and millions of employees in a wide range of industries, most of them small businesses that make or use building materials (e.g. concrete, brick[1], and coatings), consumer products (glass, counter tops, and foundry products for automobiles, factories and homes), oil and gas (drilling), and an endless array of other agriculture, construction, consumer, industrial, communication, transportation, high tech, and national defense products.

While many industries use or encounter sand by the truck load, OSHA limited employee exposure to an infinitesimal and invisible amount of 50 micrograms of "respirable silica dust" (RSD) per cubic meter of air as a time weighted average over eight hours (PEL = 50 $\mu g/m^3$), roughly equal to an eye drop in the center of a teaspoon, dispersed in the air of a 12x10 room. In addition OSHA's new rule mandates massive new employer duties for silica, similar to the OSHA asbestos rule (air sampling, engineering controls, medical exams, respirators, restricted work areas, training, control plans, and extensive recordkeeping) many of which trigger on at one half the PEL limit, called an "action level" set at 25 micrograms per cubic meter of air (25$\mu g/m^3$).

OSHA estimates that the new silica rule will cost only about $1billion. However, the estimate is wildly speculative and inaccurate, using low implementation cost forecasts, that in reality will add up to multiple billions of dollars.

For OSHA to issue a new health standard, it must first demonstrate there is a significant risk present in the workplace. In the famous Supreme Court decision striking down OSHA's benzene standard, Justice Stevens noted that "before he can promulgate any permanent health or safety standard, the Secretary is required to make a threshold finding that a place of employment is unsafe -- in the sense that significant risks are present and can be eliminated or lessened by a change in practices." [2] While we do not challenge whether exposure to respirable crystalline

[1] Attached to this testimony is a report from the U.S. Chamber of Commerce on impacts the OSHA silica regulations will have on the brick manufacturing industry.
[2] 448 U.S. 642

silica (RCS) presents a hazard, current data undermine OSHA's conclusion that a significant risk is present in contemporary workplaces.[3]

Thus, the first question Congress should examine is why OSHA believes such a sweeping revision to the PEL for RSP is warranted in light of the success of existing limits, and what accounts for this success

According to the Center for Disease Control, silica related disease mortality in the United States is on a steep, downward trend towards vanishing, under the current rules, even with OSHA documenting about a 30% non-compliance rate, e.g. 30 % of employees exposed to RCS are exposed above the current limits, most to two to three times the current limits, as table below from OSHA shows.[4]

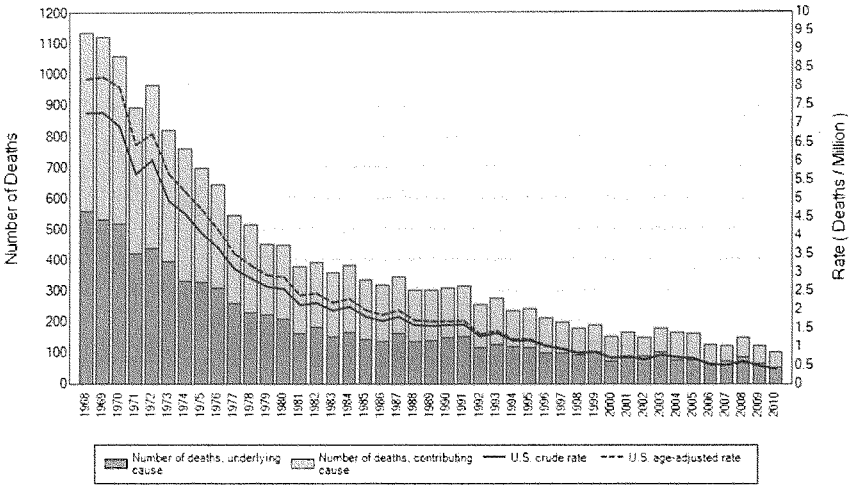
Table III-2 Time-Weighted Average (TWA) Exposures to Respirable Crystalline Silica Samples for Construction and General Industry (January 1, 2003 –December 31, 2009)

Exposure (severity relative to the PEL)	Construction		Other than construction	
	No. of samples	Percent	No. of samples	Percent
<1 PEL	548	75%	948	70%
1 x PEL to < 2 x PEL	49	7%	107	8%
2 x PEL to < 3 x PEL	32	4%	46	3%
≥ 3 x PEL and higher(3+)	103	14%	254	19%
Total # of samples	732		1355	

Source: OSHA Integrated Management Information System

[3] Attached to this testimony is an article from the Society for Risk Analysis, "Will the Occupational Safety and Health Administration's Proposed Standards for Occupational Exposure to Respirable Crystalline Silica Reduce Workplace Risk?" by Susan E. Dudley and Andrew P. Morriss, Vol. 00, No. 00, 2015.
[4] 81 Fed. Reg. at 16296.

Silicosis: Number of Deaths, crude and age-adjusted death rates, U.S. residents age 15 and over, 1968-2010



Source:
Mortality multiple cause-of-death data from National Center for Health Statistics, National Vital Statistics System. Population estimates from U.S. Census Bureau. **Reference Number:** 2014-768 **Date Posted:** September 2014

OSHA itself describes this data as a documented success: "Unlike most occupational diseases, surveillance statistics are available on silicosis mortality and morbidity in the U.S. *Silicosis-related mortality has declined in the U.S. over the time period for which these data have been collected. From 1968 to 2005, the annual number of silicosis deaths decreased from 1,157 to 161.*[5] The more current CDC data above, not used by OSHA, describes even greater success in conquering respirable silica related hazards.[6]

While one silica related death or illness is one too many and must be prevented, the CDC data calls into question what level of risk is present in contemporary workplaces where exposure to silica remains. OSHA dismissed this data, and accordingly did not attempt to determine why such a dramatic decline in silica related fatalities has occurred under the current limits.[7] The developer and author of the original silica PEL (100 $\mu g/m^3$) described it as "a standard that has stood the test of time."[8]

---

[5] NIOSH, 2008c, Document ID 1308; accessed at: *http://www.cdc.gov/eworld*, emphasis added.
[6] 81 Fed. Reg. 16296.
[7] 81 Fed. Reg. 16591.
[8] Ayer, H. Appl. Occup. Environment. Hyg. 10(12), Dec. 1995.

Unfortunately, the new rule is an example of an agency that lost its focus. Faced with multiple workplace safety challenges, OSHA spent twenty years and millions of taxpayer dollars in this rulemaking on silica, but did not keep up with scientific and technological developments, and failed to grasp that silica was one of the nation's great public health victories, and crucial to both our historical economy and new millennium technologies, like fracking. In fact, OSHA failed to even analyze fracking in its now more than a decade old small business review, causing OMB to hold the rule for more than two and a half years, while OSHA tried but failed to understand the impact and feasibility of its rule on that industry.

Not only does OSHA ignore the clear CDC data showing a vanishing risk, it also hides from its own failure in attaining compliance with the current rules. OSHA consistently demonstrates through its own sampling that 30% of sampled exposures are higher, mostly two to three times higher than the current PE. In other words, current limits are far more protective than OSHA predicted as shown by the steep CDC documented decline in silica mortality even with massive over-exposure to current PELs.

To justify the new rule OSHA relies on speculation for its own analysis, and to show that its new rule is feasible, and will address so called "significant risks" at the current PEL, and provide modeled significant benefits, without real world evidence. Yet, under the new rule and reduced limits, OSHA will document far more than the current one third of the samples as out of compliance, without doing anything to solve its compliance problem. More troubling is that OSHA will penalize responsible companies, which produced the documented CDC success, by mandating massive and costly new duties that are not needed, nor beneficial to preventing silica related disease in the United States.

The Assistant Secretary and his team prejudged the silica rule making and pronounced the result several years ago, despite extensive scientific evidence to the contrary. That evidence was presented by world class experts on behalf of the Chamber and others. The new regulation was based on stale and dated data as evidenced by the 2003 SBREFA review used for the 2016 regulation. Moreover, OSHA did not study or analyze the CDC data in the above graph posted on the web and published in 2014.

The CDC data for actual cases of silica related mortality shows less than one sixth the cases predicted by OSHA speculation modeling that it states would be prevented by the new rule. The CDC data shows the success of the current rules and PEL, moving aggressively towards disease elimination. By contrast, OSHA's speculation on how many lives will be saved by the rule is based on their assumption that the CDC data is wrong. We disagree. There simply is no silica related disease epidemic caused by a significant risk from exposure to sand, even at levels twice the current PEL.

What is clear is that the new rules will not solve OSHA's compliance failures. Instead of leading to compliance for non-compliant employers, the new regulation will place thousands of workplaces out of compliance, even though there is no demonstrated risk of disease. OSHA has never established that eliminating overexposure to the current PEL would not be a solution to the low number of remaining cases of disease.

OSHA's new regulation will place massive new burdens on responsible employers already preventing risks and do nothing to gain full compliance.

The flaws of the OSHA rule were identified by the 2003 small business review panel conducted under the Small Business Regulatory Enforcement Fairness Act. However, OSHA

dismissed the key finding of the 2003 report: that OSHA should not proceed with this rulemaking because the agency had not proven the need for a new standard in light of existing levels of overexposure at the current PEL. Instead, OSHA cherry picked isolated comments from that report to create the impression it was following its recommendations. Even though the 2003 review did not include the fracking industry, OSHA refused to conduct a SBREFA review panel contemporaneously with this proposal. The result was that the impact on the fracking industry—one of the industries hardest hit by the rule and which has strong small business participation—was never analyzed as required by law. Instead, OSHA was forced to conduct a rushed and, ultimately inadequate analysis of the impact on fracking by OIRA when the proposed regulation was undergoing review. This was no substitute for OSHA actually soliciting input from members of that industry directly as would have happened under a SBREFA panel review process.

The rulemaking was further flawed by OSHA's administrative hearings when OSHA cut off questioning by industry counsel, while permitting all questions posed from government and labor witnesses. In addition, the hearings revealed that OSHA had data it created and relied upon, but kept secret and out of the public record. The secret data was cited by OSHA at the hearing to contradict sampling and analysis feasibility criticisms by expert witnesses.

OSHA economic and technological feasibility conclusions were not supported by industry specific evidence. Instead, they were based on conclusory speculation, including the application of third world country production techniques as applicable to U.S. industry. Most if not all of OSHA's flawed feasibility and cost analysis was produced by a contractor, without revealing the identity and background of the individuals who performed the work. The resulting cost calculations by OSHA were wildly out of synch with industry estimates. OSHA feasibility conclusions were built on an assumption that if most of industry was in compliance with current limits they could feasibly comply with reduced limits. The Chamber's substantial submission from an array of engineering, medical, and economic experts demonstrated that OSHA's feasibility conclusions were not supported by adequate data or analysis.

We have many specific concerns related to the record OSHA used to justify and write the new rules. Set forth below are some of the OSHA improprieties revealed by our initial review of the massive document released on March 25, 2016.

- OSHA defines "employee exposure" to *mean "the exposure to airborne respirable crystalline silica that would occur if the employee were not using a respirator."* In other words, OSHA will use exposures that are not actual employee exposures to determine compliance.

Given the technological advances and new, comfortable and effective personal protective gear, why would OSHA penalize an employer for investing in protection by not "counting" its impact in preventing real "exposure?

OSHA continues to insist on costly engineering controls when comfortable and effective personal protection can be used successfully as a primary control.[9] This antiquated approach must change to further health gains and permit U.S. industry to be competitive.

- OSHA creates and mandates "regulated areas" for sand, one of the most ubiquitous materials on the planet.

[9] 81 Fed. Reg. 16781.

These restricted work areas will interfere with schedules and efficient procedures, again making U.S. businesses less competitive. OSHA needs a new focus that values our jobs and industrial capacity while recognizing that industry can and has protected employees without antiquated quarantined workplaces. Indeed, one reason for the precipitous drop in silica related disease and mortality rates is the widespread use of respirators and other types of personal protective equipment.

- "Respirable crystalline silica" is redefined by OSHA as "airborne particles *that are determined to be respirable by a sampling device* designed to meet the characteristics...."[10]

Regardless of their design, the samplers also capture non-hazardous, non-respirable dust. OSHA solved its accurate measurement inadequacies and feasibility problems, identified by experts, by redefining "respirable" simply as that dust captured by the sampler. In other words, OSHA's rule no longer regulates a hazardous material — respirable dust of defined particle size— but instead regulates non-respirable dust as well.

- OSHA's massive and expensive new air monitoring and lab analysis mandates — for sand dust— are far beyond the capabilities of small and mid-sized businesses. Moreover, the Chamber submitted evidence of the inherent inaccuracies of silica analysis at the new low regulated levels. Expensive but inaccurate sampling results will mandate new regulatory duties and additional sampling and analysis, and will mean employers will not be able to tell when they are in compliance.

- "Observation of monitoring" mandates permit employees to spend entire shifts "observing" the operation of a sampling pump worn by another employee. This is both unnecessary and unjustified.

- The rule mandates vast new record keeping burdens but the new records will not reduce risk or provide benefit.

Among the millions of pages of new records required will be: respiratory protection programs, compliance plans, air monitoring records, lab records, new medical exam records, and extensive training records.

- The new rule creates a massive new medical surveillance program, *paid for by employers, including* (i) *initial medical examinations* with chest X-ray... interpreted and classified... by a NIOSH-certified B Reader; a pulmonary function test administered by a spirometry technician with a current certificate from a NIOSH-approved spirometry course; tests for latent tuberculosis infection; and any other tests deemed appropriate by the provider. Periodic examinations and referrals to specialists will be employer funded and mandated. Records mandated for this health care program are massive and too many to list.

- While OSHA attempted to mitigate some of the impacts of the final rule through extended implementation periods they do not legitimize the rule. Giving more time to comply with a flawed regulation will not cure the problems with the standard; a delayed bad rule is still a bad rule.

---

[10] 81 Fed. Reg. 16712, emphasis added.

There are many other provisions of the rule that are neither justified nor beneficial. We would be pleased to provide further information or answer any questions. We thank you again for the opportunity to share the concerns of the US Chamber of Commerce.

Chairman WALBERG. Thank you. Thank you to each of the panel for the time and attention you gave to present your perspectives, valuable for us to hear as well as to see evidence of ways we have achieved success, as well as ways that we can achieve further success.

Having said that, let me recognize for the opening five minutes of questioning for our panel, Mr. Rokita. You are up on deck right now.

Mr. ROKITA. Thank you, Chairman. I appreciate having this hearing. Mr. Chajet, you have practiced law, you have experience practicing administrative law, correct?

Mr. CHAJET. Yes.

Mr. ROKITA. This was an informal rulemaking?

Mr. CHAJET. It was an informal rulemaking, although the cross examination was cut off.

Mr. ROKITA. Why?

Mr. CHAJET. I have no idea. I personally was standing asking questions, and OSHA short-circuited my ability and stopped me from asking questions.

Mr. ROKITA. And you have no idea why? Have you ever experienced that in your practice before?

Mr. CHAJET. I have never experienced my cross to be stopped.

Mr. ROKITA. In just a couple of seconds, try to explain for the record the difference between an informal rulemaking and a more structured formal rulemaking or negotiated rulemaking, and how this is different, and why in the world given the nature of an informal rulemaking you would be cut off from your testimony.

Mr. CHAJET. Well, this is a hybrid kind of rulemaking, but there is an administrative law judge present, and the administrative law judge in the OSHA world controls the hearing process and procedure. The administrative law judge, I am sure, with OSHA's approval and consent or discussion, cut off cross examination.

It was particularly egregious because the other side, the advocates for the rule, were allowed to question until they were done. The industry side was cut off. That was only one problem.

All of these kinds of rulemakings rely on data, transparency, and truth, and that is what you want, a record that is truthful with transparency.

Mr. ROKITA. That did not occur here?

Mr. CHAJET. We did not have that here. We did not have that here.

Mr. ROKITA. We have a rule with some kind of proceeding, sounds like a kangaroo court, based on untruths, half-truths, lack of transparency, facts that were not allowed to come into evidence, and testimony that was literally cut off. Is that accurate?

Mr. CHAJET. It is accurate. We had the leading laboratory expert perhaps in the world from Bureau Veritas testifying about the inability to measure. He was responded to by an OSHA staff witness who runs their laboratory who said to him would you believe that we have this secret data that we have not published that proves we can measure at this level, and I sat back and could not believe my ears.

This was not a legitimate rulemaking.

Mr. ROKITA. They admitted to secret data? What do you mean?

Mr. CHAJET. They did. During the hearing—

Mr. ROKITA. I used the pronoun, I hate doing that. I used "they." Who is "they" again?

Mr. CHAJET. I am sorry, I did not hear you.

Mr. ROKITA. Excuse me. I used the pronoun "they." Who is "they" again? I said "they used secret."

Mr. CHAJET. OSHA staff.

Mr. ROKITA. All right. Thank you very much. Ms. Herschkowitz, I appreciate your personal story, that of you and your family. Can you go into detail on how OSHA has failed to take into account public perspectives like yours, and how this is harmful to a free Republic?

Ms. HERSCHKOWITZ. Wow, where to begin. The issue with OSHA—we did testify before OIRA. They absolutely totally ignored the 50 pages, I think, of testimony that we submitted.

Mr. ROKITA. What do you mean "ignored?"

Ms. HERSCHKOWITZ. Well, they did not take into account all the costs, but just to give you an example, here is an OSHA fact sheet. I pulled this off the Internet on April 6. This is after the rule was passed. We spoke very strongly about the costs that this will entail.

On this fact sheet, it says, "The annual cost to a firm with fewer than 20 employees would be less, averaging about $550." The average cost for our employees we viewed to be $143,000. This was the exact facts I gave to the OIRA Committee when I went and talked before them.

It also says, "The proposed rule is expected to have no discernable impact on U.S. employment."

I think this speaks volumes. The other thing is why can we not just go with respirators first because the worker is breathing clean air. OSHA insists right now upon putting and measuring air respirators outside of the air respirator, and we have to put money in for dust collection systems that we feel will not work.

They also ignore the fact that you cannot just add one more dust collector, one more dust collector, and one more dust collector. It is not additive. You have to get a dust collector, and I am not even sure if that exists in today's world, that actually can take all that sand out, and it will easily be over $1 million.

So, that is how we were disregarded by OSHA.

Mr. ROKITA. Thank you very much. Mr. Chairman, without objection, I would ask for inclusion of the document Ms. Herschkowitz was referring to into the record.

Chairman WALBERG. Hearing no objection, the document will be included.

[The information follows:]

OSHA® FactSheet

OSHA's Proposed Crystalline Silica Rule: Overview

Workers who inhale very small crystalline silica particles are at increased risk of developing serious silica-related diseases. These tiny particles (known as "respirable" particles) can penetrate deep into workers' lungs and cause silicosis, an incurable and sometimes fatal lung disease. Crystalline silica exposure also puts workers at risk for developing lung cancer, other potentially debilitating respiratory diseases such as chronic obstructive pulmonary disease (COPD), and kidney disease.

To improve worker protection, OSHA is proposing two new crystalline silica standards: one for general industry and maritime, and the other for construction. The proposals are based on extensive review of scientific evidence, current industry consensus standards, and OSHA's outreach, including stakeholder meetings, conferences, and meetings with employer and employee organizations.

OSHA encourages the public to participate in this rulemaking. Information on submitting comments on the proposed rule and participating in public hearings can be found at www.osha.gov/silica. Your input will help OSHA develop a final rule that adequately protects workers, is feasible for employers, and is based on the best available evidence.

Why is OSHA proposing a crystalline silica rule?

OSHA's current permissible exposure limits (PELs) for crystalline silica were adopted in 1971 and have not been updated since that time. They do not adequately protect workers; they are outdated, inconsistent and hard to understand.

- Strong evidence shows that current PELs do not adequately protect worker health. The current PELs are based on research from the 1960s and earlier and do not reflect more recent scientific evidence. For example, since the current PELs were adopted, the U.S. National Toxicology Program, the International Agency for Research on Cancer, and the National Institute for Occupational Safety and Health have all identified respirable crystalline silica as a human carcinogen.
- The current PELs are formulas that are difficult for many employers to understand; the PELs for construction and shipyards are based on a method for measuring worker exposures that has not been commonly used for more than 40 years.
- The current PELs for construction and shipyard workers allow them to be exposed to risks that are over twice as high as for workers in general industry. The proposed rule would provide consistent levels of protection for workers in all sectors covered by the rule.

How will the proposed rule protect workers?

The proposed rule is expected to prevent thousands of deaths from silicosis, lung cancer, other respiratory diseases, and kidney disease. OSHA estimates that the proposed rule will save nearly 700 lives and prevent 1,600 new cases of silicosis per year once the full effects of the rule are realized.

> "In the absence of effective specific treatment for silica-related diseases, the only approach remains primary prevention, i.e., control of exposure to respirable silica."
> -Official Statement of the American Thoracic Society on the Adverse Effects of Crystalline Silica Exposure

Who would be affected by the proposed rule?

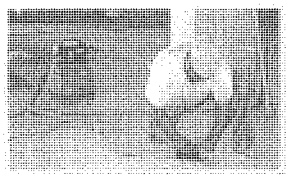
About 2.2 million workers are exposed to respirable crystalline silica in their workplaces. The majority of these workers, about 1.85 million, are in the construction industry. Exposures occur when workers cut, grind, crush, or drill silica-containing materials such as concrete, masonry, tile, and rock. About 320,000 workers are exposed in general industry operations such as brick, concrete, and pottery manufacturing, as well as operations using sand products, such as foundry work and hydraulic fracturing (fracking) of oil and gas wells. Workers are also exposed during sandblasting in general industry and maritime workplaces.

What would the proposed rule require?

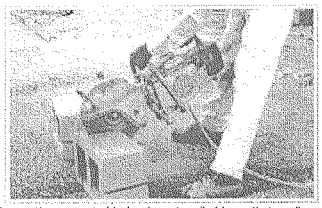
Workers' exposures would be limited to a new PEL of 50 micrograms of respirable crystalline silica per cubic meter of air ($\mu g/m^3$), averaged over an 8-hour day. The new PEL would be the same in all industries covered by the rule.

The proposed rule also includes provisions for measuring how much silica workers are exposed to, limiting workers' access to areas where silica exposures are high, using effective methods for reducing exposures, providing medical exams to workers with high silica exposures, and training for workers about silica-related hazards and how to limit exposure. These provisions are similar to industry consensus standards that many responsible employers have been using for years, and the technology to better protect workers is already widely available.

Lowering silica exposure can generally be accomplished by using common dust control methods, such as wetting down work operations to keep silica-containing dust from getting into the air, enclosing an operation ("process isolation"), or using a vacuum to collect dust at the point where it is created before workers can inhale it.



A worker using a grinder with an attached vacuum dust collection system. The vacuum pulls dust through the hose, where it is captured by filters. (Photo courtesy of the University of Washington)



A worker cutting concrete block using a handheld saw that applies water to the blade. The water reduces the amount of silica-containing dust that gets in the air.

What economic effects are expected?

The proposed rule is estimated to provide average net benefits of about $2.8 to $4.7 billion annually over the next 60 years. It is expected to result in annual costs of about $1,242 for the average workplace covered by the rule. The annual cost to a firm with fewer than twenty employees would be less, averaging about $550. The proposed rule is expected to have no discernible impact on total U.S. employment.

How can I learn more about the proposed rule?

Visit OSHA's Silica Rulemaking webpage at www.osha.gov/silica.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For assistance, contact us. We can help. It's confidential.

OSHA® Occupational Safety and Health Administration

U.S. Department of Labor
www.osha.gov (800)321-OSHA (6742)

DSG FS-3683 08/2013

Mr. ROKITA. My time has expired. I yield back.

Ms. HERSCHKOWITZ. Thank you.

Chairman WALBERG. I thank the gentleman. I recognize the ranking member, Ms. Wilson, for her five minutes of questioning.

Ms. WILSON. Thank you, Mr. Chair. Dr. Melius, your testimony says that the permissible exposure limit for construction that has been in place since 1971 was based on a recommendation from the Public Health Service in the 1920s. Was that recommendation from the 1920s based on preventing silicosis or was it simply based on the feasibility of ventilation controls available in the 1920s?

Dr. MELIUS. Well, it was to some extent to prevent silicosis but the level set was what the Public Health Service staff at the time felt was feasible to be met, that could be met in the industries where they had noted the high silica exposures. So, they recognized that it would not completely prevent all cases of silicosis in those industries.

Ms. WILSON. Some people argue that reported cases of silicosis are declining in recent years, and there is not a significant risk. Does this argument exclude other health outcomes other than silicosis that have been well established, lung cancer, renal disease, respiratory diseases, such as COPD?

Dr. MELIUS. Yes, it does exclude those. We do not have the good surveillance mechanisms for following or detecting those diseases and reporting, and certainly not ones that would relate those to silica exposure.

The Bricklayers and Allied Craftworkers actually have submitted some data to the record for the OSHA hearing showing lung disease—deaths from lung disease among their workforce, their members, actually had stayed steady throughout, up until close to the present time. So, they do not see a decline among their members. That would include both silicosis and chronic obstructive pulmonary disease.

Ms. WILSON. Is there a significant risk from silica dust exposure today? What is that risk, and what is wrong with the argument made by the U.S. Chamber that OSHA is chasing a nearly insignificant risk?

Dr. MELIUS. Well, I think it is—the risk we know is recurrence of silicosis, lung cancer, kidney disease, and chronic obstructive pulmonary disease. These are all serious health problems and can cause people to die related to their past work or current work with silica.

So, these are obviously significant to the people who suffer. You have heard the testimony, and the three people sitting behind me can testify, too.

They are also significant in the sense that among the populations exposed, one of the problems with the death certificate surveillance that Mr. Chajet showed from the Centers for Disease Control, those are death certificates, and silicosis is not included on many death certificates, even among people that have it. We do fewer autopsies now.

I think there is an estimate actually from the State of Michigan, where they have done a statistical analysis and showed over 85 percent of people with silicosis do not have silicosis put on their death certificate. It is just an artifact of how we practice medicine

now and how many autopsies and what happens when a person dies in terms of what the doctor writes on the death certificate.

Now, we also know that the amount of exposure to silica is decreasing overall in terms of the people exposed because many of the industries that use silica, particularly the foundry industry, has decreased. The number of foundries and number of foundry workers in this country have gone greatly down, and that was a major group at risk of silicosis.

So, without foundries themselves, the ones that currently exist, we could still very well have a high rate of silicosis, maybe not in all foundries but many foundries, even if they meet the previous standard.

Ms. WILSON. One witness argues that all that is needed is more OSHA enforcement to address the problem. If there was 100 percent enforcement wall to wall for each facility each year, would that eliminate the need for more protective standards?

Dr. MELIUS. No. It certainly would be a change, but it would not, because the current standard is not protective. There will continue to be a number of cases of silicosis that occur. I mean, OSHA has done an estimate of that.

I think we know from all the health risk assessments that have been done for this standard, again, peer reviewed by outside scientists, that this is not protective, and even with comprehensive and complete enforcement, we would continue to have not only silicosis cases, but cases of lung cancer, kidney disease, and the other illnesses related to silica exposure.

Ms. WILSON. Thank you, Mr. Chair.

Chairman WALBERG. I thank the gentlelady. I recognize now the gentleman from Michigan, Mr. Bishop, for your five minutes of questioning.

Mr. BISHOP. Thank you, Mr. Chairman, and thank you for your attention to this matter, bringing this before the Committee, and thank you to the panel for being here today and providing your testimony.

Mr. Brady, I was interested in hearing all of this testimony. It is amazing to me what is going on here and how pervasive it is across the government and the economy. We hear the same concern in just about every section of the economy that is regulated by the Federal government.

Your testimony highlights some of the safety concerns that engineering controls create, such as water sprays on a tile roof. It seems to me that we might be solving a problem and creating another. Can you explain how the final rule fails to adequately address the safety concerns?

Mr. BRADY. I think there are a number of different areas during construction that OSHA has not paid attention to, and that is the practical side of—I am in Illinois, Michigan, Indiana, Midwestern States, we are building throughout the year.

There are freezing temperatures. If they are required to add water to the exterior, whether it is brick cutting, block cutting, tile roof installation, it potentially creates, certainly on a 6–12 pitch roof, a hazard probably more or equal to the possibility of adding water to cutting those tiles, again depending on the pitch of the roof and the installation procedure.

So, there are many elements of the rule that actually could create hazards in trying to protect from the silica.

Mr. BISHOP. Maybe it is just me, but that seems like a pretty obvious problem. Was that ever taken into consideration?

Mr. BRADY. In our remarks about the rule, and we commented on a number of these issues, we feel that OSHA just did not look at and pay attention to the number of comments that we made, did not incorporate them into the rule on a practical and technologically feasible and economically feasible position.

Again, we are willing to work with OSHA on these, and we were willing, and we have put hours and hours and hours in working with OSHA, but they ignored most of what—I will say I will give them a bit. They took adding water to dust or the dirt on a floor before you sweep it, they took that out, and if any of you try to sweep a mud floor, it is not so easily done. So, those are the types of practical things that they ignored in great part.

Mr. BISHOP. Okay. Thank you very much. So many questions. Ms. Herschkowitz, I noted your discussion about the respirator and some of the protective equipment that is out there. Has the quality of that equipment changed over the years? I know this rule has been kind of lingering since, what, 1990. Has it changed over the past couple of decades?

Ms. HERSCHKOWITZ. Oh, absolutely. The old respirators used to be very bulky, very uncomfortable, and there has been a lot of research on respirators which has turned into much better products, much more comfortable for the person to use.

What we would like under this regulation is to use the respirators first versus going with the expensive dust collectors.

Mr. BISHOP. I would assume that the current respirators are far better at doing what they are supposed to do than the previous iterations.

Ms. HERSCHKOWITZ. By far. OSHA does measure the air quality outside of the respirator, which is not indicative of what a worker is breathing. A worker is actually breathing clean air, and we do use respirators in our facilities for certain jobs right now.

Mr. BISHOP. Okay, great. Mr. Chajet, did I pronounce that right?

Mr. CHAJET. Chajet.

Mr. BISHOP. Thank you. We were just talking about personal protective equipment. OSHA seems to dismiss the use of personal protective equipment as an effective way to protect employees from silica exposure. Is that true? Can you share with me your thoughts on that?

Mr. CHAJET. Congressman, the agency has really lost its focus on protecting people. I am not sure what they are protecting. The state of respirator science—I do not even call them respirators, they are mini-environments. Some of these devices are very comfortable hard hats that put fresh air over a person's face. It is filtered or it is clean. They are comfortable, and they do not provide any pressure. Others are paper, incredibly high-quality, simple, like painter mask-type respirators.

Again, I am not so sure what you call "respirators" other than mini-environments. When we have such effective technology for protecting people, why should we discount it? Why should we not

credit an employer who is protecting their employees with this technology?

It is the way of the future, and OSHA is living in the past.

Mr. BISHOP. Thank you, sir. Mr. Chairman, I yield back.

Chairman WALBERG. I thank the gentleman. I recognize the gentleman from Wisconsin, a northern State as well, Mr. Pocan.

Mr. POCAN. Thank you, Mr. Chairman, and thank you to the witnesses for being here. I think this is my third hearing on silica.

I have to admit sometimes I start to lose my patience a little as we go through these hearings when I hear some of the comments. I am not a lawyer. I am not the CEO of a big business. I have a small specialty printing business, a union shop. I have done every job that any employee in my business has done over the years. I only make money when I have customers and when I have employees to do the work because I cannot do everything. I value my employees far more than I value my equipment.

We just bought a brand new UV printer that was about $75,000. I can buy a cheaper solvent printer for $25,000, but that puts organic compounds into the air, causes health risks. There are other good things about the printer, but clearly, part of the decision I made was I want to make sure my employees are not exposed to problems.

I have heard a lot of bad math and slippery language during this debate. So, if I can maybe just try to address some of this and ask a few questions.

Mr. Chajet, I am going to pass on you right now and ask the people who are employers questions. I know you raised a lot of concerns about sand. Honestly, my guess is as a lawyer for the U.S. Chamber, the closest you are going to get to exposure to sand is if you go on vacation to the Caribbean.

Let me ask Mr. Brady a question, if I could, specifically. There is another construction company, a medium-sized company in Illinois, Englewood Construction, and the director of operations there, if I could just read his quote real quickly in the time I have. Let me just get to the relevant part maybe.

He said, "Many of the new silica guidelines formulize existing best practices. Elements of the silica rule will require real change and will take time, effort, and yes, money, to implement consistently. It is easy to see the cost of protection for our workers, but how do you put a price on workers' health and long-term well-being?" He goes on a little longer.

I really sympathize with that because I understand. I think you have employees and I am sure you go to their family events, you watch their kids graduate, and everything, and I know that is an important part of it. One of the things you said is you talked about up to 3.2 million construction workers and these physicals they are going to have.

The reality is it is only if they have 30 days on a respirator, and that is only a fraction, a very small fraction of the jobs that require it, and it is every three years. I put that in the "slippery language" category. It is not quite where it is at.

I would ask the question, how do you value what a life is worth? What is a life worth? It is a tough question.

Mr. BRADY. Yes, it is a pretty tough question. It is not a question of whether or not our industry wants to protect lives. It is a question of whether or not technologically or economically this rule is feasible. I would not get into an argument whether or not any protection is worth a life. It is whether you can provide it. Somebody mentioned earlier, 93 percent, silica related illnesses have been reduced by 93 percent in the last—

Mr. POCAN. I am going to steal my time back. Again, there are fewer people in the industry, so that same graph that the person who is afraid of the beach sand has—also shows the employee numbers in those fields have gone down. Again, it is a little bit of slippery language.

Mr. BRADY. There is—

Mr. POCAN. Let me reclaim back my time, Mr. Brady. I only have a minute and a half left and I want to ask another question of Ms. Herschkowitz. Of the pictures that you have here, you do a lot of work for submarines, I see. I have a company in my district that does a lot of work for submarines.

How much is too much that we would have to spend if we knew we could fix something on a submarine to make it healthier for the people, the service members, what amount would be a fair amount, that you would say is a fair amount to put in to protect the people who are on that submarine? Is there a dollar figure you would say, $50,000, $100,000, $500,000?

Ms. HERSCHKOWITZ. I think workplaces should be very, very safe. We do a lot to make it safe.

Mr. POCAN. Per foundry, what it is going to cost, and OSHA said $32,000. You are saying $1 million. I am asking specifically what would be the dollar figure you would assign that you would be willing to spend to make a submarine safe for the people who work on a submarine? A dollar question.

Ms. HERSCHKOWITZ. First of all, all the components we put on the submarine are very, very—

Mr. POCAN. Do you have an amount you would recommend? How about how many sugar packs worth of silica in that football field that is 13 high would you say is acceptable? How many sugar packets are a problem? You want to talk about the safety, but you do not actually want to answer the question. I have asked you very direct questions.

Let's go back to the submarine question. I want you to answer. How much would you spend to make a submarine safe? It is a dollar question.

Ms. HERSCHKOWITZ. It is a question in terms of putting—

Mr. POCAN. You do not want to answer the questions.

Chairman WALBERG. The gentleman's time has expired.

Ms. HERSCHKOWITZ. I am trying to answer the question.

Mr. POCAN. No, you are not.

Chairman WALBERG. I will now recognize the Ranking Member of the full Committee, Mr. Scott, for his questioning.

Mr. SCOTT. Thank you, Mr. Chairman. Dr. Melius, can you give us a little history about how long we have known about the dangers of silica?

Dr. MELIUS. Well, the history of our knowledge of silicosis resulting from quarry and other kinds of work like that go back to

Roman times. Socrates recognized it. It goes back up into the Italian Renaissance, 1600s. A doctor named Ramazzini described it also throughout, up through the centuries; and then in the United States, we recognized it back in the early part of the 1900s, last century, because we had epidemics of silicosis among quarry workers, particularly up in Vermont. We had tunneling workers, West Virginia, other areas, New York, and among foundry workers.

So, it was recognized in the early part of the century in the United States as a public health problem, in fact. Again, we talked earlier about that is where the standard came from, originally came from, that is being used.

The knowledge goes way back, and certainly we are well aware of it in the United States for many years.

Mr. SCOTT. Did I understand you to say that the chance of coming down with silicosis if you are exposed at the present level is about 100 percent?

Dr. MELIUS. Yes, sir. If you go look at the construction standard and you look at how that might project out in the number of recurrence of silicosis, people exposed to that standard, 100 percent of them could develop silicosis because of that exposure.

Mr. SCOTT. Can you describe the health problems that result?

Dr. MELIUS. Yes. The obvious health problem we mostly talk about is a stiffening fibrosis of the lungs. The lungs just became so stiff that a person can no longer breathe, so a very horrible disease to experience. We also have other illnesses, lung cancer, which has been relatively recently, in the last 30 or 40 years, recognized as a risk from silica exposure, as well as kidney disease and other pulmonary disease from that exposure.

So, it is not just silicosis but these other diseases that are a very significant risk for anybody working with silica.

Mr. SCOTT. What kind of health cost savings can be generated if you reduce exposure?

Dr. MELIUS. They would be very significant given that—I cannot give you an exact number, but the cost to treat a case of lung cancer is in the hundreds of thousands of dollars a year, if they survive for any period of time. Silicosis, a person with severe silicosis, medical costs can be extremely high with repeated hospitalizations and the kind of medication and other care they may need, same with the chronic obstructive pulmonary disease and kidney disease.

These are very high and they are very devastating for families to experience.

Mr. SCOTT. I have been advised that OSHA estimates an annual net benefit over the next 60 years of $3.8- to $7.7 billion, after an annual cost of the rule of about $1 billion, a net benefit of 3.8 to 7.7. What kind of underlying numbers would they be looking at?

Dr. MELIUS. What they would be looking at would be the medical costs, the cost of loss of employment for the people that are affected by those diseases who no longer work, so they are going to be getting Workers' Compensation, Social Security Disability, other forms of income assistance, hopefully.

So, the main costs would be a loss of productivity, people would lose their trained workforce, skilled workforce.

Mr. SCOTT. Some businesses have to pay this in terms of higher health care costs, health care premiums, and Workers' Compensation, is that right?

Dr. MELIUS. Absolutely.

Mr. SCOTT. Now, someone talked about the costs. Could you tell me if you are aware if the National Asphalt Paving Association has taken a position on the rule?

Dr. MELIUS. Yes, I am. That is the group I work with closely on both looking at controlling exposures to asphalt as well as controlling silica exposures, the two pictures we have up there. They are supportive of the rule. They submitted comments. OSHA was responsive to those comments regarding the requirement for respirators. When the rule came out, they came out in support of that rule.

Mr. SCOTT. Thank you, Mr. Chairman.

Chairman WALBERG. I thank the gentleman. Now, I recognize the gentlelady from the beautiful State of North Carolina, Ms. Adams.

Ms. ADAMS. Thank you, Chairman Walberg and Ranking Member Wilson, and I would also like to thank our witnesses for testifying today.

Before I get started, I want to just make a very simple point about the Department of Labor. One of their primary reasons for existence is to improve working conditions for working people. It is clear that the purpose of this rule is to improve the working conditions of some of our most vulnerable employees.

As we know, exposure to silica is a serious health hazard, and while many have pointed to reductions in silicosis as a reason to oppose this rule, I believe these generalizations are very misguided, especially for low-wage workers who are often workers of color.

Silica dust-related illnesses have a greater impact on low-income and ethnic minority groups than on the job populations, and it is especially true for the Latino community.

Dr. Melius, with that in mind, can you speak to the positive impact this rule will have on low-wage earners and communities of color who are disproportionately affected by silica-related illnesses?

Dr. MELIUS. Yes, actually there is data that show—actually, from the State of Michigan—that African-American workers are at a much higher risk of developing silicosis. So, what you are saying is what we can actually see in some of the data that we do collect about the risk of silicosis.

This rule should benefit everybody that is exposed to silica. We also know African-American, Hispanic, and Latino workers tend to work in so-called "dirty jobs," where there is more exposure.

If this rule is put in place and completely enforced, properly enforced, we should see great benefits to them because they may often work in so-called "the dirtiest jobs," the jobs with the higher exposures. Hopefully, if this rule goes in place, they will be protected as well as everybody else that is exposed to silica.

Ms. ADAMS. Thank you, sir. It is your opinion that this is a step in the right direction in addressing racial health disparities?

Dr. MELIUS. Absolutely.

Ms. ADAMS. In addition to saving many lives and reducing illnesses among workers who are exposed to silica dust, this rule will

also create billions in benefits. Dr. Melius, can you explain on what some of those benefits will be and how they will play into the industry's ability to capture savings associated with safer and healthier employees?

Dr. MELIUS. Yes, certainly. There will be reduced medical costs for caring for employees, reduced either through health insurance or Workers' Compensation for those employees.

There will be a better ability to retain highly trained and skilled workers in the workplace but not having to replace people because they are becoming ill, your most experienced and trusted workers, they will be able to work for a longer period of time, which will help maintain and improve productivity for the industries involved, whether it is general industry or in the construction industry.

Ms. ADAMS. Thank you very much, sir, I appreciate. Mr. Chairman, I am going to yield my time back.

Chairman WALBERG. I thank the gentlelady. I recognize the gentleman from California, Mr. DeSaulnier.

Mr. DESAULNIER. Thank you, Mr. Chairman. First, a question for Ms. Herschkowitz. I was just handed this document that I am told is part of a trade association that you are a part of, "Control Silica Exposure in Foundries," are you familiar with this?

Ms. HERSCHKOWITZ. I have seen it, but I have not read it. I just saw it this morning.

Mr. DESAULNIER. Mr. Chairman, I would like to enter it into the record.

[The information follows:]

Extensive material was submitted by Mr. Desaulnier. The submission for the record is in the committee archive for this hearing.]

Mr. DESAULNIER. It seems at a very quick look that the organization has done a lot of work in this regard. Again, just preliminarily looking at it, it seems there are some contradictions. Just having sat here and listened to the contradiction between Dr. Melius and the rest of you about we are all on the same page we want to use cost-effective implementation and feasibility.

Dr. Melius, in terms of the feasibility, and you are a public health expert, I appreciate Mr. Brady's comments about everybody wanting to invest effectively on reducing the public health issue and the graph that has been presented by the Chamber. Do you have comments on how feasible, you think, recognizing you are a public health person?

Dr. MELIUS. I believe that the control recommendations that are directly contained in the standard or that will be developed in response to the standard are very feasible to control and achieve the levels that are involved. OSHA and everyone involved spent a lot of time looking at it.

I mentioned the silica milling machines. That work started almost 10 years ago in terms of getting ready for the possibility of a new standard. The foundry document that you mentioned goes back, I believe, to 2010, 2008, I cannot remember directly, but again, people recognizing that there may be a standard coming and getting prepared for it, the kind of ventilation that is on this kind of saw (in front of the witness at the table) is also something that people have been working with to demonstrate that there are practical ways of meeting the standard, and they are cost-effective.

Mr. DESAULNIER. Mr. Brady, I appreciate meeting with you, and you know about my concern, coming from Northern California, about the need for affordable housing. In California, since 2008, the standards went to the higher standards in terms of prevention.

Do you have any comments about that or any of your California colleagues? Knowing many people in the home building industry, as when I met with you in my office in Richmond, California, they are able to work in a fairly—I am choosing my words here—aggressive regulatory atmosphere and still make a handsome profit and provide the product that we need.

Mr. BRADY. Well, I think even in our conversation, again, this is not about providing—the issue is not only health. It is about providing a product for a price. In your district alone, starter homes are $450,000. You know that better than I do.

Mr. DESAULNIER. I do not think I could find a $450,000 home right now.

Mr. BRADY. You have to have balance in regulatory reform. You have to have balance whether or not you can provide it economically but even technologically, whether or not—as somebody said, silica is in soil. As we are grading alot, silica is kicked up in soil. How do you economically and feasibly or technologically provide that at an affordable cost and be able to provide a product that consumers can buy?

Mr. DESAULNIER. I appreciate that having heard that argument in the air quality field for 20 years when it came to sulfur, lead, MTBE, but we were able to pass regulatory investments that the affected community came up to the standards, and we provided off ramps if they were not making it.

So, my question was we have had the more aggressive prevention at Cal/OSHA in place since 2008, and the industry has coped with it. Granted, they will have to come up to these higher standards in terms of the micrograms, but have you had any input from your members as to what a disadvantage that is? Honestly, I have not heard it, and it has been in place for 8 years.

Mr. BRADY. Again, no, dollar for dollar, no. I understand from our members this is a very cumbersome compliance issue. Our industry seems to be targeted specifically to this rule because they will have a huge impact on the cost to provide product.

Now, again, over the last 40 years, our industry—drywall mud is a good example where our industry took silica out of drywall mud. It is no longer a hazard. Our industry continued to do that. Yes, maybe there are fewer workers, but they are also building better product, and that is the type of environment, cooperative environment, that we would like to work with OSHA to make practically, economically, and technologically feasible.

Mr. DESAULNIER. Appreciate that. I would love to have further discussion with you and OSHA in doing that. I just want to note that there are Canadian provinces that are actually at 25 micrograms, so we might look at that and see how cost-effective that has been as well. Thank you, Mr. Chairman.

Chairman WALBERG. I thank the gentleman. I now recognize myself for my five minutes of questioning.

Ms. Herschkowitz, it is not up to you really how much it will cost for a safe submarine component, is it? Who is it up to decide how

much it will cost? Would you not say it is the Federal Government and the contracting process and Electric Boat, and ultimately, you have to find a way to produce that product if they say so, and if you cannot, someone else will have to produce it, correct?

Ms. HERSCHKOWITZ. Absolutely.

Chairman WALBERG. I think that is a crucial point we need to make here.

Ms. HERSCHKOWITZ. I also want to make the point that in our foundry, it is safety first. Anybody can stop a heat if they feel it is unsafe. We have safety leaders at every levels of the organization. We have spent an awful lot of money on safety and are very, very proud of our safety record, and I value our employees very much.

Chairman WALBERG. And I would expect that. Those people who work for you provide the opportunity to get a contract with Electric Boat.

Ms. HERSCHKOWITZ. It is not easy.

Chairman WALBERG. It is not easy to get.

Ms. HERSCHKOWITZ. It is not easy.

Chairman WALBERG. They ultimately decide what a cost will be for safe. They expect that component to work.

Ms. HERSCHKOWITZ. Certainly, and I never ever want to sacrifice cost for safety.

Chairman WALBERG. OSHA suggests that the company, talking about the brick industry as was pointed out, can pay the necessary engineering alterations out of the first year's profits. Could your company pay for the necessary compliance activity out of the first year's profits as OSHA has suggested in its preamble?

Ms. HERSCHKOWITZ. No, we have four separate companies. We opened a foundry last just because we could no longer buy castings in this country, and we are probably the most vertically integrated sand foundry in the country. We view our foundry as a cost center, not a profit center. According to the AFS, the cost of putting these regulations in place is 273 percent of the profits of a company, but it is even higher for a foundry, it is even much, much higher for us.

Chairman WALBERG. In that case, the castings that cannot be purchased now for your components, your products, your production, if this goes through, the castings cannot be produced in this country, again, since you will be there, correct?

Ms. HERSCHKOWITZ. Right, conceivably.

Chairman WALBERG. Conceivably. It goes back to that creative tension between jobs, the necessity of jobs, having the successful ability to create, sustain, and carry on versus putting in safety, and we want to go as close as possible meeting that need in both ways, but there definitely are cost issues that will influence whether you can do them.

Ms. HERSCHKOWITZ. That is correct. The foundry industry standard PEL of 100, 70 percent of the foundries are able to meet, 30 percent are not. I personally, and I am not speaking for the AFS right now, I have personally as a 25-year foundry woman have never heard of a case of silicosis, much less within our own companies.

Chairman WALBERG. Mr. Brady, construction is fundamentally different than other professions. Your testimony discusses how Table 1 of the regulation does not adjust appropriately for the modern construction workforce. Can you expand on the concerns of the industry as a whole with Table 1?

Mr. BRADY. Well, Table 1, I think, has 18 points to it. Our industry is so complex. I will have 100 people on a construction site during the three months that I am building, on a home building. Remodeling is entirely different. A remodeling project is a good example of where Table 1 does not really answer some of these questions, so they default to the very stringent—there are no remediation issues potentially on the remodeling side, so they default to the very restrictive compliance issues, because they cannot comply with throwing water into a home when they demolish a wall, they cannot throw water into that wall, so they have to use other means.

This rule really sets up our members, from builder, remodeler, to the associates, to the thousands of members throughout the country, for failure, because technologically, we will not be able to comply with this rule.

Chairman WALBERG. How does the specialty contractors that often work concurrently with you add to this mix, specifically the multiemployer citation policy that OSHA has? How does that add to additional problems in compliance?

Mr. BRADY. Well, again, we are a fairly transient business. I am a general contractor so I use small business subcontractors. Their employees move seasonally, they move from employer to employer, they move around. It is going to be very cumbersome, number one, if I have to test—say I am a brick mason and I have to test my employee today, I have to do a baseline medical exam, three months later, they are working in Indiana with another contractor.

I think the rule suggests they have to be baselined, so to say they are only going to be tested every three years is a miscalculation because our business is transient and people move, so just kind of with the logistics of these specialty contractors and their employees, it is going to be very difficult to comply with.

Chairman WALBERG. I thank you. My time has expired. Now, I will recognize the Ranking Member, Ms. Wilson, for her closing comments.

Ms. WILSON. Thank you, Chairman Walberg, for calling today's hearing, and giving us the opportunity to discuss this very important rule. I want to thank the witnesses for your testimony, and thank you for coming.

At every committee hearing, every markup, every press conference, I endeavor to remind my colleagues of our purpose as a subcommittee member. This is the Workforce Protections Subcommittee, and that means our job is to protect our workers.

I stand with my colleagues in strong support of DOL's updated silica dust standard. We know that the science is clear. Workers exposed to silica dust at levels allowable under the previous OSHA silica standard are at risk from developing deadly and debilitating diseases, such as silicosis, lung cancer, and renal disease.

The Department of Labor took a long-awaited strong step towards helping the 2.3 million workers exposed to silica dust by fi-

nalizing its updated rule on March 23, 2016. We know that controlling silica dust is feasible, controlling silica dust is a well understood and time-tested proposition.

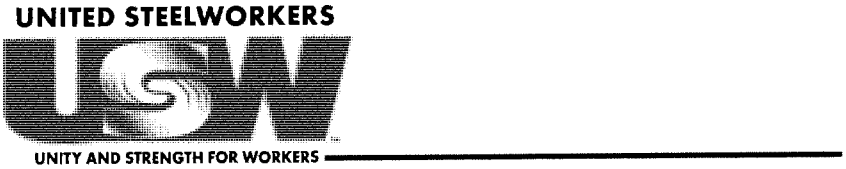
Wet the dust down or vacuum it up. Water or air. States like California and New Jersey already have in place standards and regulations requiring companies to use water systems or vacuums to control dust. Nationwide, many companies put their workers' health first by controlling silica dust with existing technology. New equipment now comes equipped with dust controls of water spray hookups.

We know that this rule will protect worker health. Above all, we must judge this rule by its ability to protect our workers.

As we have heard, once fully implemented, this updated rule will save more than 600 lives and prevent more than 900 cases of silicosis each year. OSHA's new standard includes engineering controls, training, prohibitions on dry sweeping, and medical surveillance that will do much to protect workers, especially in the building trades.

There is strong support for DOL's updated silica rule to protect workers. I ask unanimous consent to enter into the record letters of support from the following organizations: United Steelworkers, the BlueGreen Alliance, Public Citizen's Congress Watch, American Association for Justice, American Public Health Association, Englewood Construction, Motley Rice LLC, America's Agenda, International Union of Bricklayers and Allied Craftworkers.

[The information follows:]



April 18, 2016

The Honorable Tim Walberg, Chairman
Subcommittee on Workforce Protections
House Committee on Education and the Workforce
2176 Rayburn House Office Building
Washington, DC 20515

The Honorable Frederica Wilson, Ranking Minority Member
Subcommittee on Workforce Protections
House Committee on Education and the Workforce
2101 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Walberg and Ranking Minority Member Wilson:

On the occasion of tomorrow's hearing, I write to you today on behalf of the 1.2 million active and retired members of the United Steelworkers (USW) in strong support of the Occupational Safety & Health Administration (OSHA) and the recently finalized standard on crystalline silica.

The USW is the largest industrial union in North America and represents workers in a range of industries including metals, mining, rubber, paper and forestry, oil, health care, security, hotels, municipal governments and agencies.

More than 80 years ago, the Department of Labor recognized silica as a deadly hazard. Today, about 1.7 million men and women face exposure to crystalline silica in their workplaces. Our members have experienced the dangers for many years and know that it can be controlled, creating safer workplaces.

The OSHA silica standard finalized in March 2016 is long overdue. Too many workers, including USW members have become sick or died from silica exposure. The standard was promulgated through rulemaking procedures that allowed all stakeholders to engage in the process over the course of years. OSHA estimates that the new standard could save as many as 700 lives and prevent 1,600 new cases of silicosis among workers.

United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union
Legislative Department, 1155 Connecticut Ave., Suite 500, N.W., Washington, D.C. 20036 • 202-778-4384 • 202-419-1486 (Fax)
www.usw.org

Unfortunately, the rule will not prevent USW member and foundry worker Alan White from developing silicosis caused by workplace exposure to crystalline silica. Alan worked at the foundry for sixteen years before his diagnosis. He is now constantly out of breath and has very little endurance to even walk up a flight of stairs. Mr. White testified at OSHA's March 2014 hearings on the proposed rule. I have enclosed Alan's moving and impactful testimony for your reference.

We urge this subcommittee to support the finalized standard and exert its efforts on protecting workers from the many unregulated and uncontrolled hazards that injure, sicken, or kill workers every day.

Sincerely,

Holly R. Hart

Holly R. Hart
Assistant to the International President
Legislative Director

United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union
Legislative Department, 1155 Connecticut Ave., Suite 500, N.W., Washington, D.C. 20036 • 202-778-4384 • 202-419-1486 (Fax)
www.usw.org

BLUEGREEN
ALLIANCE
www.bluegreenalliance.org

1300 Godward St NE, Suite 2625
Minneapolis, MN 55413

1020 19th Street NW, Suite 600
Washington, DC 20036

155 Montgomery Street, Suite 1001
San Francisco, CA 94104

April 19, 2016

House Committee on Education and the Workforce
Subcommittee on Workforce Protections
Rayburn House Office Building
Washington, DC 20515

Dear Subcommittee Members,

The BlueGreen Alliance (BGA), a national coalition of labor unions and environmental organizations, offers our comments to the House Education and Workforce Committee's Subcommittee on Workforce Protections hearing titled *Reviewing Recent Changes to OSHA's Silica Standard* today to express our support for the recently finalized, and long-overdue standards of the Occupational Safety and Health Administration (OSHA) to safeguard general industry, maritime and construction workers who may be exposed to respirable crystalline silica. BGA urges the Subcommittee to support the work OSHA has done to complete their rulemaking and issue a final silica rule for general industry, maritime, and construction trades.

BGA thanks OSHA for its thorough and sound review and evaluation of the peer-reviewed literature on the health effects associated with exposure to respirable crystalline silica. We agree with the American Public Health Association (APHA) and other health organizations that OSHA used the best available evidence and acted appropriately in giving greater weight to those studies with the most robust designs and statistical analyses. The new rule also incorporates well-demonstrated methods of worker protection. We recognize that the new standards represent significant progress over previous limits.

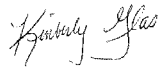
OSHA's announcement of a final rule to improve workplace protections for workers exposed to silica dust represented a positive step forward for worker health and safety protections. After 40 years of regulatory delay, this rule could save nearly 600 lives, prevent 900 cases of silicosis, and countless other silica-related diseases each year. For this, the BlueGreen Alliance applauded the administration's announcement of the final version of the long overdue silica rule.

Silica dust has been a known carcinogen since the 1990's; exposure to the mineral can cause a multitude of illnesses including silicosis, lung cancer, kidney disease, and respiratory diseases. The estimated 2.3 million workers who are exposed to this carcinogen everyday all deserve the protection these new standards will offer.

No job can be considered a good job if it is not, first and foremost, a safe job. We thank OSHA for finalizing this rule amid staunch industry resistance and look forward to continuing to work with the agency on implementing this policy to limit workplace hazards to the maximum extent.

As advocates for safe, middle-class jobs, the BlueGreen Alliance supports OSHA in its work to set permissible occupational exposure levels of respirable crystalline silica. Revised and strengthened standards will benefit American workers and, by example, workers around the world. Accordingly, we commend OSHA for its leadership on this critical health and safety issue, ask for this Subcommittee's validation of the good work OSHA has done on this worker protection issue, and look forward to continuing to work on this policy in the months and years ahead.

Sincerely,



Kim Glas
Executive Director
BlueGreen Alliance

#5.00 GC
UNION USW LABEL
2002-22

215 Pennsylvania Avenue, SE • Washington, D.C. 20003 • 202/546-4996 • www.citizen.org

April 19, 2016

The Honorable Tim Walberg
Chairman, Subcommittee on Workforce Protections
House Committee on Education and the Workforce
2176 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Frederica S. Wilson
Ranking Member, Subcommittee on Workforce Protections
House Committee on Education and the Workforce
2101 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Walberg and Ranking Member Wilson,

My name is Emily Gardner and I am the worker health and safety advocate in Public Citizen's Congress Watch division. Public Citizen is a national, nonprofit public interest organization with 400,000 members and supporters nationwide that advocates for public health and safety interests before legislative bodies, executive branch agencies, and the courts. We welcome the opportunity to comment on the subject of today's hearing, the U.S. Occupational Safety and Health Administration's (OSHA's) lifesaving silica rule.

Among other provisions, the new silica rule adopts the National Institute of Occupational Safety and Health's (NIOSH's) recommended exposure limit of 50 micrograms per cubic meter of air for respirable crystalline silica. According to OSHA, the rule will save over 600 lives and prevent more than 900 new cases of silicosis annually. In addition, OSHA expects the final rule to generate net benefits of $7.7 billion each year from preventing silica-related deaths and illnesses.

It is important to remember the workers who have contracted preventable, deadly illnesses while waiting for the federal government to put politics aside and issue this rule. Take the case of Chris Johnson, a bricklayer who contracted acute silicosis after a five-month job exposed him to toxic silica dust. Although NIOSH issued a warning about silica in 1974 – six weeks before Johnson was born – the final silica rule was not issued until March 24, 2016, more than 40 years later. Johnson now has a life expectancy of only 45 years.[1]

[1] Jamie Smith Hopkins, Maryam Jameel & Jim Morris, *Working to Death*, Slate (June 30, 2015, 5:00 AM), http://slate.me/1NuRwrv.

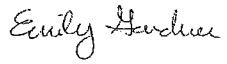
Opponents of the silica rule argue that the rule will be costly for employers to implement. However, OSHA has already performed extensive economic analysis demonstrating the rule's feasibility.[2] Moreover, recent economic analysis estimates the annual cost of compliance for the average workplace to be about $1,524, and for small businesses with 20 or fewer employees, the cost will average as little as $560 per year.[3] OSHA does not expect the rule to have any distinct impact on total U.S. employment.[4]

Some opponents also claim that the silica rule will be technically burdensome for businesses to implement. In reality, the rule gives employers the flexibility to determine which method of compliance is right for their worksites. Employers can even purchase some of the necessary equipment to shield workers from this deadly dust at hardware stores.

The facts show that the silica rule will save workers' lives and protect their health. While the alleged dangers of this rule are a myth, the lives it can save are real. Public Citizen expresses full support for the silica rule and respectfully asks the subcommittee to use its authority to improve worker health and safety protections instead of hindering them.

Thank you for your consideration.

Sincerely,



Emily A. Gardner, J.D.
Worker Health and Safety Advocate
Public Citizen's Congress Watch

---

[2] *See, e.g.*, OCCUPATIONAL SAFETY AND HEALTH ADMIN., PRELIMINARY ECONOMIC ANALYSIS AND INITIAL REGULATORY FLEXIBILITY ANALYSIS (2013), http://1.usa.gov/22uYDqC.
[3] OCCUPATIONAL SAFETY AND HEALTH ADMIN., FREQUENTLY ASKED QUESTIONS: RESPIRABLE CRYSTALLINE SILICA RULE (2016), http://1.usa.gov/1MEtmtU.
[4] *Id.*

April 18, 2016

Committee on Education and the Workforce Subcommittee on Workforce Protections
U.S. House of Representatives
2176 Rayburn House Office Building
Washington, DC 20515

Ranking Member Wilson,

The American Association for Justice (AAJ), formerly the Association of Trial Lawyers of America (ATLA), hereby submits the organization's position for purposes of the hearing on "Reviewing Recent Changes to OSHA's Silica Standards" on April 19, 2016.

AAJ, with members in the United States, Canada and abroad, is the world's largest trial bar. It was established in 1946 to safeguard victims' and workers' rights, and strengthen the civil justice system. In this capacity, we comment in support of OSHA moving forward on the standard regulating occupational exposure to silica because it is overdue, desperately needed to protect workers, and based on sound science.

Silica causes a debilitating respiratory illness called silicosis, lung cancer, and other illnesses. Scientists have recognized since the Roman era that silica causes respiratory damage to the lungs of exposed workers. OSHA's current silica exposure limit was set in 1971 and it is now obsolete. The National Institute for Occupational Safety & Health (NIOSH) recommended as far back as 1974 that OSHA's exposure limit was not adequate to prevent silicosis in exposed workers. The International Agency for Research on Cancer first recognized that silica also caused lung cancer in 2000 and reaffirmed this finding in 2009. Since then the National Toxicology Program has listed silica as a carcinogen.

OSHA has been debating silica regulation for more than 40 years. The current regulatory proceeding began more than a decade ago when OSHA convened a small business review panel. Its draft silica rule was the subject of more than two years of review by OMB. During the silica rulemaking, affected parties had the opportunity to file comments, appear at a public hearing to present testimony and cross-examine witnesses, file post-hearing comments and post-hearing arguments. OMB review of OSHA's final standard took more than six months.

During this rulemaking process, OSHA amassed a detailed and voluminous record showing that silica causes silicosis, lung cancer and other diseases at exposure levels currently permitted in the workplace. A consensus of well-respected scientists testified in favor of OSHA's proposal. OSHA's new silica standard is estimated, based on extensive quantitative risk assessment, to prevent 600 deaths and 900 new cases of silicosis a year.

Industry opponents of the standard have claimed it was too expensive to protect workers from these fatal illnesses. To the contrary, OSHA has found that the standard is both economically and technologically feasible. And while OSHA is not permitted to rely on cost-benefit analysis when setting health standards, its analysis shows that the benefits of silica regulation greatly exceed the cost.

More than two million workers will benefit from OSHA's new silica standard. Congress should not take action to deny these workers the long-overdue protections they need to protect them from silica-related illness.

Sincerely,

Linda A. Lipsen
Chief Executive Officer
American Association for Justice

https://www.apha.org/news-and-media/news-releases/apha-news-releases/apha-celebrates-osha-silica-rule

APHA celebrates OSHA silica rule

- News & Media
- News Releases
- APHA News Releases

FOR IMMEDIATE RELEASE

APHA celebrates OSHA silica rule

Date: Mar 24 2016

APHA celebrates OSHA silica rule to protect workers from longtime health hazard

FOR IMMEDIATE RELEASE
For more information, contact Daniel Greenberg at 202-777-3913 or daniel.greenberg@apha.org

Washington, D.C., March 24, 2016 — The American Public Health Association applauds the U.S. Department of Labor Occupational Safety and Health Administration for finalizing a rule today to reduce occupational exposure to respirable crystalline silica. This rule protects an estimated 2.2 million U.S. workers whose jobs expose them to silica, a carcinogen that leads to harmful and often deadly lung diseases, chronic renal diseases and autoimmune disorders.

"APHA has long championed measures to reduce the significant toll silica takes on our workforce every day," said APHA Executive Director Georges C. Benjamin, MD. "We know that silicosis alone kills 200 workers and harms 7,300 more each year. This is a life-saving public health victory, and we thank the Occupational Safety and Health Administration for making it happen."

The new OSHA limit of 50 micrograms of respirable crystalline silica per cubic meter of air — along with other measures to control and protect against silica — improves safety in a broad range of workplaces, including construction, foundries, glass manufacturing, brick-making facilities and at hydraulic fracking sites.

Members of APHA have been engaged in efforts to reduce illness and deaths from silica exposure for nearly 50 years. APHA's Occupational Health and Safety Section developed a policy statement to support silica standards and helped draft the Association's 2013 comments and verbal testimony to support the new rule.

"This is enormously good news for public health," said APHA Occupational Health and Safety Section member Rosemary Sokas, MD, MOH, chair of the department of Human Science at Georgetown University School of Nursing & Health Studies, who testified at public hearings before the rule's passage. "Although deaths from acute silicosis have declined since the 1930s, they unfortunately occur to this day, as do illness and death from chronic silicosis, silicotuberculosis, lung cancer, and other diseases we have only recently confirmed to be caused by exposure. The OSHA silica standard, if adequately enforced, should also be a force for reducing health disparities, since occupational silica exposure disproportionately impacts low income, African American and Latino workers."

# # #

The American Public Health Association champions the health of all people and all communities. We strengthen the profession of public health, share the latest research and information, promote best practices and advocate for public health issues and policies grounded in research. We are the only organization that combines a 140-plus year perspective, a broad-based member community and the ability to influence federal policy to improve the public's health. Visit us at www.apha.org.

Englewood
Construction • Management

April 18, 2016

via email: Richard.Miller@mail.house.gov

The Honorable John Kline, Chairman
Robert C. "Bobby" Scott, Ranking Member
Committee on Education and the Workforce
Washington, DC 20515

Dear Mr. Chairman,

Recently, our firm was pleased to be invited to contribute a post to OSHA's blog sharing our views on OSHA's final rule on silica dust exposure and what it means for worker safety. In light of your committee's upcoming hearing to review the changes to OSHA's silica standards, and realizing these standards affect different industries in different ways, we wanted to take this opportunity to provide the committee our perspective on the new silica rule as a national commercial construction firm.

Commercial construction is an industry where workers regularly encounter on-the-job hazards. Because of this environment, safety must be a top priority for responsible employers. While efforts to ensure a safe workplace are often focused on immediately evident concerns, such as implementing fall protections and regularly inspecting tools and equipment, it is equally important that construction firms think about how exposure to hazards, such as silica dust, affect the long-term health and well-being of workers. Like many of the unions we partner with in our field, we see the updated silica standards as an important change in our understanding of worker health and safety.

As a national general contractor, our firm manages a variety of construction projects across the country – from ground-up development of new shopping centers to interior build-outs of commercial spaces for well-known retail and restaurant brands. In managing these projects, we are responsible for protecting the entire job site and ensuring all subcontractors and trade partners are following appropriate safety standards. Additionally, it is our responsibility to alert all subcontractors on our job sites of any safety hazards, such as the presence of silica dust, and advise them on appropriate preventative measures.

In many instances, we are already seeing adequate silica protections in place. Measures such as wet-cutting of masonry materials, implementation of dust control measures and use of respirators are, in some cases, becoming standard practices, and many subcontractors and trade partners we work with already go above and beyond OSHA's minimum standards. But we also see opportunities where those same precautions could and should be applied.

We realize it will take time and effort to implement the updated silica dust exposure guidelines, and in some cases there will be an added cost. But we also believe we owe it to the workers who are so vital to the construction industry to do what we can to protect their health and safety.

Best Regards,

Chuck Taylor
Director of Operations
Englewood Construction

80 Main Street - Lemont, IL 60439
Tel: (847) 233-9200 – Fax: (847) 233-9227

"I will stand for my client's rights.
I am a trial lawyer."
~Ron Motley (1944–2013)

28 Bridgeside Blvd.
Mt. Pleasant, SC 29464
o. 843.216.9000 f. 843.216.9450

Anne McGinness Kearse
Licensed in DC, SC, WV
direct: 843.216.9140
akearse@motleyrice.com

April 19, 2016

House Committee on Education and the Workforce
Subcommittee on Workforce Protections
Rayburn House Office Building
Washington, DC 20515

Dear Subcommittee Members,

I write regarding the Occupational Safety and Health Administration's (OSHA) final rule on Occupational Exposure to Respirable Crystalline Silica (the "Standard"). On behalf of Motley Rice, I respectfully submit this letter of support for the new OSHA Standard and urge Congress to allow OSHA to enforce the standard immediately.

I am proud to have represented trade workers and servicemen throughout the country for decades, as have my Motley Rice colleagues. I also was honored to serve as legal counsel for the leadership of the International Union of Bricklayers and Allied Craftworkers ("BAC") and it's more than 75,000 members during the public OSHA hearings on the Standard.

Too many hard-working Americans have been injured or perished due to workplace illnesses, including from respirable crystalline silica, that could have been prevented if the standards and the safety regulations and processes were stringent enough. At the current permissible level, nearly 100% of workers exposed will become ill. In just the two years since the OSHA hearings, many more workers have fallen ill or died because of their silica exposure that is, in most cases, preventable by actions as simple as adding water or vacuum systems.

We applaud OSHA for now having issued a final, comprehensive Standard last month. This Standard, while long overdue, will make possible easy, feasible, affordable and long-understood measures to control the hazard. As OSHA estimates, the new Standard could save close to 600 lives, and prevent more than 900 cases of silicosis and countless other silica-related diseases each year. While no standard is perfect, we cannot delay any further in order to prevent harm from a known hazard.

Today, and nearly every day, we continue to hear about workers not being afforded the workplace protection that they deserve. These workers in general industry, maritime and construction trades

are the backbone of our country. And yet, this preventable danger is still harming workers while delays and unnecessary roadblocks are being thrown in the way.

I highly encourage Congress and this Subcommittee to support the Standard and allow OSHA to fully implement it as soon as possible. Lives and the livelihoods of our neighbors, family and friends are at stake.

Sincerely,

Anne McGinness Kearse

Anne McGinness Kearse
Member Attorney
Motley Rice LLC

1025 Connecticut Avenue, NW
Suite 907
Washington, DC 20036
t: 202.223.1584
f: 202.223.0311
www.americasagenda.org

TO: Members, Committee on Education and the Workforce
US House of Representatives
FROM: Mark Blum, Executive Director, America's Agenda
DATE: April 16, 2016

STATEMENT ON HEALTHCARE SAVINGS RESULTING FROM IMPLEMENTATION OF THE NEW OSHA RESPIRABLE CRYSTALINE SILICA STANDARD

Chairman Kline and Members of the Committee:

From both the human health and a healthcare cost perspectives, the cost of jobsite exposure to respirable crystalline silica under the current OSHA silica standard is unacceptably high. The likelihood that a construction or shipyard worker will develop silicosis or a silica-related disease (including COPD, lung cancer and kidney disease) if exposed to silica at the limit of the current standard over the course of a 40-year career approaches 100%.[i] The economic costs of this level of exposure are needlessly high, as well. Like silicosis and related work-acquired diseases, themselves, the associated health costs are largely preventable.

The new OSHA silica exposure limit proposed for implementation in 2017 will reduce significantly the risk of silicosis and related diseases among construction and shipyard workers.[ii] Our analysis shows that the health cost savings to employers, workers, and taxpayers in private and public sector health insurance plans will amount to tens of billions of dollars over the next decade. These savings will surpass, by far, the costs of compliance with the new standard[iii] -- a net economic benefit for all Americans.

OSHA measures the benefits derived from implementing the new silica exposure limit using the standard "willingness to pay" methodology. This methodology is commonly employed by OSHA and other government agencies engaged in comparable regulatory activities.[iv] Alternatively, America's Agenda employs a cost-benefit methodology that measures health cost savings expressed as lower health care spending associated with reduced incidence of preventable disease. In the case of the new OSHA silica standard, these would be reduced costs of health care for silicosis and related diseases resulting from jobsite compliance with the new standard, particularly in the construction and shipbuilding industries. Accordingly, we believe the prospective reduction in health costs (or health cost savings) resulting from adoption of the new silica standard will fall between OSHA's undiscounted low and high

estimates of $7.3 billion and $19.3 billion, respectively, calculated as the monetary benefits in their "willingness-to-pay" analysis.[v]

Taking into account the costs of compliance, the *net* impact on a cost-benefit basis will fall between $6.3 billion to $18.3 billion.[vi] This means that, in the affected industries, workers and health insurance plan sponsors (that is, private sector employers, union co-sponsors, and the federal government, in the case of Medicare-covered retirees) will enjoy a minimum health cost savings of $7.3 billion dollars in premium-equivalent savings on an annual basis, according to our analysis. The upper limit of projected savings is considerably more than this.

Given OSHA's estimated costs of compliance,[vii] it is reasonable to expect that the new silica standard will save lives, prevent sicknesses, and save many billions of dollars for affected workers, businesses and taxpayers *on an annual basis.*

We recognize that the new silica standard must be enforced if it is to improve worker health and capture prospective health care savings. We don't believe past inadequacies in enforcement provide any justification for rejecting implementation of the new, silica standard, however – particularly in light of the significant potential it offers to save lives and reduce unnecessary healthcare spending. Both adoption and robust enforcement of the new, safer silica exposure standard are essential to achieve these objectives.

Regardless of their views on federal health reform, Members of Congress on both sides of the aisle recognize that progress toward reducing wasteful and unnecessary health care spending must be made for the American economy to remain on a path to sustained growth and job creation. Adoption of the new silica exposure standard presents an opportunity to make an important step in this direction by improving workplace safety, rather than relying on further governmental regulation of healthcare. OSHA's new silica standard should be a common sense, common ground health and safety policy. On-schedule implementation is an objective that merits the bipartisan support of Congress.

About America's Agenda

America's Agenda is an alliance of national labor unions, businesses, health care providers, and government leaders who share a common commitment to assuring that every American has access to affordable, high quality health *care (See attached list of America's Agenda Board of Directors.)*

ENDNOTES

---

[i] Occupational Safety and Health Administration (OSHA, 2013). *Occupatianal Exposure to Respirable Crystalline Silica*. Docket 2010-0034, Federal Register, Vol. 78, No. 177, p. 56335.

[ii] OSHA's modeling approach yields estimates that the new PEL would prevent between 26,216 and 31,541 premature fatalities over the lifetime of the current worker population, with a midpoint estimate of 28,879 fatalities prevented. Occupational Safety and Health Administration (OSHA, 2016). *Final Economic Analysis and Final Regulatory Flexibility Analysis*. Supporting Document for the Final Rule for Occupational Exposure to Respirable Crystalline Silica. U.S. Dept. of Labor, Occupational Safety and Health Administration, Office of Regulatory Analysis. Docket 2010-0034, p. VII-17.

[iii] Occupational Safety and Health Administration (OSHA, 2016*). Final Economic Analysis and Final Regulatory Flexibility Analysis*. Supporting Document for the Final Rule for Occupational Exposure to Respirable Crystalline Silica. U.S. Dept. of Labor, Occupational Safety and Health Administration, Office of Regulatory Analysis. Docket 2010-0034, Tables VII-7a & VII-7b.

[iv] Occupational Safety and Health Administration (OSHA, 2016). *Final Economic Analysis and Final Regulatory Flexibility Analysis*. Supporting Document for the Final Rule for Occupational Exposure to Respirable Crystalline Silica. U.S. Dept. of Labor, Occupational Safety and Health Administration, Office of Regulatory Analysis. Docket 2010-0034, pp. VII-35 – VII-37.

[v] Occupational Safety and Health Administration (OSHA, 2016). *Final Economic Analysis and Final Regulatory Flexibility Analysis*. Supporting Document for the Final Rule for Occupational Exposure to Respirable Crystalline Silica. U.S. Dept. of Labor, Occupational Safety and Health Administration, Office of Regulatory Analysis. Docket 2010-0034, Table VII-5A.

[vi] Ibid, Table VII-6.

[vii] Ibid, Tables VII 7a-7b

1025 Connecticut Avenue, NW
Suite 907
Washington, DC 20036
t: 202.223.1584
f: 202.223.0311
www.americasagenda.org

Board of Directors

Douglas H. Dority, *President & Chairman*
Former President
United Food & Commercial Workers (UFCW)

Joseph J. Hunt, *Secretary Treasurer*
Former President
Ironworkers

Morton Bahr
President Emeritus
Communications Workers of America

Robert Martinez
International President
International Assoc. of Machinists
and Aerospace Workers (IAM)

Jim Boland
President
Bricklayers and Allied Craftworkers

Clayola Brown
President
A. Philip Randolph Institute

Joseph R. Bock
Attorney
Florio, Perrucci, Steinhardt & Fader, LLC

Cecil Roberts
President
United Mine Workers of America

Jeffrey A. Bond
SVP, State Advocacy
PhRMA

Richard Lanigan
President, Office and Professional
Employees International Union (OPEIU)

Jacques Loveall
President
UFCW 8 - Golden State

Dr. Cliff Robertson
President and CEO
UniNet / CHI

Eric Dean
General President
Ironworkers

James P. Hoffa
General President
International Brotherhood of Teamsters

Bernard J. Tyson
Chairman & CEO
Kaiser Permanente

Matt Loeb
International President
International Alliance of Theatrical
Stage Employees (IA)

Edward M. Smith
President
Union Labor Life Insurance Company

Terence M. O'Sullivan
General President
Laborers' International Union of North America

The Honorable Richard A. Gephardt
Former Majority Leader
US House of Representatives

Edward J. McElroy
President Emeritus
American Federation of Teachers

George Donald W. Bohn
Vice President, US Government Affairs
Johnson & Johnson

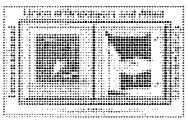
Jonathan Dinesman
SVP for Government Relations
Centene

Dr. Samuel R. Nussbaum, MD
Executive Vice President, Clinical Health Policy
Chief Medical Officer, WellPoint, Inc.

Dr. Janis DiMonaco
President
HMC Companies

Wendell Steinhauer
President
New Jersey Education Association

Marc Perrone
International President
United Food & Commercial Workers (UFCW)



International Union of Bricklayers and Allied Craftworkers

James Boland
President

April 19, 2016

House Committee on Education and the Workforce
Subcommittee on Workforce Protections
Rayburn House Office Building
Washington, DC 20515

Dear Subcommittee Members,

On behalf of trowel trades craftworkers throughout the United States and Canada, including the more than 75,000 members of the International Union of Bricklayers and Allied Craftworkers ("BAC"), I am writing with respect to the Occupational Safety and Health Administration's (OSHA) final rule on Occupational Exposure to Respirable Crystalline Silica (the "Standard").

Silica is found in most, if not all, of the materials with which trowel trades craftworkers – union and non-union alike – ply their trade every day. It is released during the performance of tasks associated with each masonry trade, regularly exposing craftworkers to respirable silica dust at high levels. For the past fifteen years, silica exposure has been cited by BAC members as the most significant safety and health hazard they face on the job. It is for that reason that I and five of my fellow BAC members testified on a panel during the public OSHA hearings on the Standard, and that we continue to urge that the Standard, now final, be enforced. The testimony of the BAC members who participated in the OSHA hearings has been provided electronically. In the two years since those hearings, many more masonry craftworkers have fallen ill or died because of their silica exposure. And three members, BAC Local 2 Michigan members Tom Ward and Dale McNabb, and BAC Local 8 Wisconsin member Tim Brown, attend the hearing today to represent these workers.

As OSHA heard in written comments and briefs, and during the three weeks of public hearings -- and indeed over the past decades as we and our fellow building trades unions have pressed for increased protection against deadly silica dust -- controlling silica dust in the masonry trade is in most cases as simple as adding water or vacuum systems to our tools. Finally, after more than two decades of work, OSHA issued a final, comprehensive Standard last month. This Standard is long overdue, having been delayed for decades by individuals and organizations who have nothing to fear from a final rule; who are trying even now to throw up roadblocks; who have delayed making available the easy, feasible, affordable and long-understood measures OSHA sets forth in its comprehensive Standard to control the hazard.

There is no reason masonry craftworkers must or should get sick and die just for going to work; just for building the buildings we live and work in each day.

620 F Street, NW • Washington, DC 20004 • Phone: 202-383-3195 • Fax: 202-661-8984 • www.bacweb.org

We can no longer sacrifice worker health in exchange for corporate profits. Every day that implementation and enforcement of the Standard is delayed, more workers are exposed at unacceptable levels to silica dust; more workers will get sick; and more workers will die. It is essential that OSHA be able to enforce this Standard without any further political interference or delay. It is essential that Congress support this Standard.

Sincerely,

James Boland

James Boland
President

Ms. WILSON. I want to thank the witnesses again for being here today, and I want to thank those in the audience who have traveled to join us and your support for DOL's updated silica rule.

I want to read a letter, part of a letter from Chuck Taylor of Englewood Construction, a mid-sized construction contractor based in Lemont, Illinois, with projects underway in eight States. He writes this: "We realize it will take time and effort to implement the updated silica dust exposure guidelines and, in some cases, there will be an added cost, but we also believe we owe it to the workers who are so vital to the construction industry to do what we can to protect their health and their safety."

This is a very powerful statement from a company with skin in the game. How can you put a price on a human life or on their suffering, and on the suffering of their families? You just morally cannot put a price on that.

I want to close with the words of Tim Brown, a worker with silicosis, who has joined us here today. You met him earlier. Raise your hand, Tim. Tim writes, "We must prevent this from happening to any other bricklayers. To my fellow union members and to my unorganized colleagues, no worker should suffer what I have. The previous standard did not protect me, but if we enforce the new comprehensive rule, what happened to me will not happen to other bricklayers. We cannot let others suffer and become ill just for doing an honest day's work."

Thank you, Tim, for your words. Thank you, Tom and Dale, for bravely representing the millions of workers and families affected by silica.

I hope our subcommittee can honor the lives of those who have become ill or have died from silica related illnesses and support this updated rule. I yield the remainder of my time, and thank you, Mr. Chair.

Chairman WALBERG. I thank the gentlelady. We would certainly identify with a number of your sentiments very clearly. There is no price for a life. It is important.

Our responsibility is to make sure those lives are able to work in a beneficial way on the jobsite, and carry on and pass that on as well to family members for an opportunity that this country affords, unlike any other country in the world.

I like that chart that was displayed earlier, put up on the board, and just for context again, at the very least, we can agree that is the direction we want to go, reducing silicosis.

There might be variables in the numbers there, a little bit up, a little bit down, but that is the direction we want to go, and with the present standard, even with weaknesses in the actual enforcement of that standard, that is where we are at.

Through all of the hearings that we have had, and it is correct, we have had multiple hearings on this silicosis rule, trying to press upon OSHA, the Department of Labor, that this is a serious consideration and that it impacts all of us in the room, all outside this room, on industry continuing to provide the products and the services that are necessary in this great country.

It has been stated by a colleague of mine on the other side of the aisle that China is not doing these things. We do not want to go backwards to what China is doing. We do not want to give our

products away to China either, or any other country. We want to continue to compete.

This is not only the construction industry. This crosses the board, as we have heard about multiple industries with the impact of silica.

There have been literally thousands of comments submitted to OSHA in the rulemaking process. Sadly, it is clear that some of those comments were rejected, not simply rejected because they did not make sense, but just out of hand, apparently for philosophical differences. That does not bode well for a standard that works.

My father worked at U.S. Steel. I do not know whether he eventually got lung cancer as a result of that job, but he did. Ultimately, thankfully, due to experimental therapy, he not only lived but he went on to work until he was 73 years old as a machinist/tool and dye maker, because he loved it, and he would have worked longer if he did not wear out.

I worked at that same plant, U.S. Steel South Works, on the south side of Chicago, out of high school. My second job after being a laborer there at the plant was as a furnace and ladle repairman's helper. It was an interesting job. I mixed a lot of mortar, I cut a lot of tile and bricks for those ladles that took the molten steel from the furnace, as well as got inside those furnaces when they were shut down to help repair those as well.

I do not know, well, I guess I could say, I am sure that the policies that are in place right now probably were not in place back in 1969, at least fully. I am still breathing okay, and I hope that continues. I do not know about the ladle repairman, whether he is or not.

We wanted to see things work well. That same plant, those same set of furnaces, ten minutes after I left work one night, left the locker room heading back to my car, half a mile from the Number 2 electric furnace where I worked, exploded. The entire locker room was gone. Everything around it was gone because a burn through from the heat went down into the sewer and blew up.

I agree with you, Ms. Herschkowitz, we do not want to mess around with water around molten steel.

These are considerations that OSHA ought to take into consideration. We are talking here about flexibility. We are talking about using controls, we are talking about using technology, we are talking about using tools, we ought to be at least to protect the worker, make a clean breathing space for them to carry on the necessary work they do, and not have a simple one-size-fits-all because we think it ought to be that way.

That is why we had this hearing again today. It is after a fact. I am still hopeful that somehow, some way, we can make sure we preserve jobs, we preserve trades, we preserve futures for people in this country that they can pass on doing good work that needs to be done here and not someplace else.

We can make sure there are foundry jobs available. Every one of you are safer as a result of that, maybe. We will not have those foundry jobs, we will not have those products built. That is what we wrestle with. It is not an issue of whether we discount life, it is an issue of whether we sustain life, and move industry forward to make America what it is. That is what this is about.

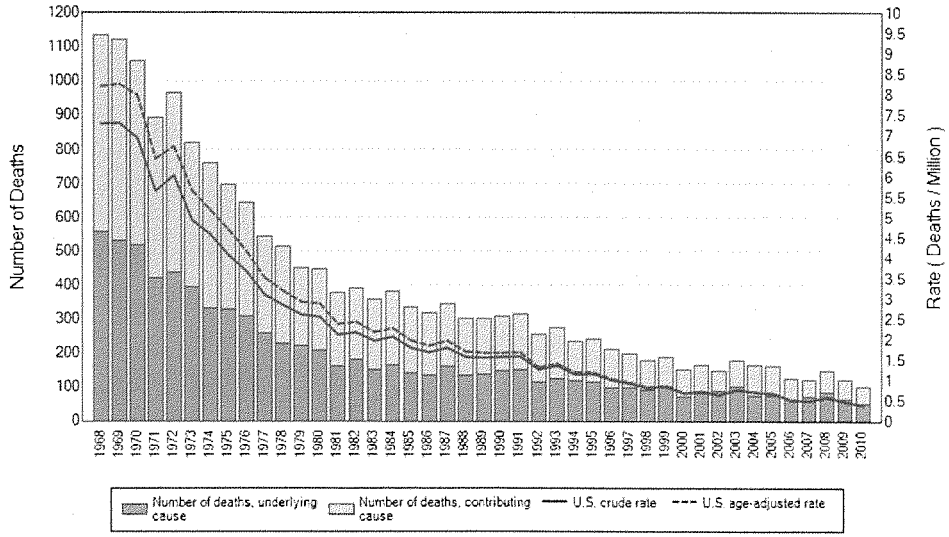
I want to express my deep appreciation to my colleagues on both sides of the aisle. I want to express my appreciation to the witnesses, all four at the table, and everyone in this room today, for taking this seriously.

I hope as a result, we will see OSHA maybe even step back and say we might want to listen to some of the information more carefully. We might have a better way that ultimately protects the individuals involved with this as well as the workplace.

Having got on and off my hobby horse right now, and seeing there is no further business for the subcommittee today, the Committee stands adjourned.

[Additional submission by Mr. Chajet follows:]

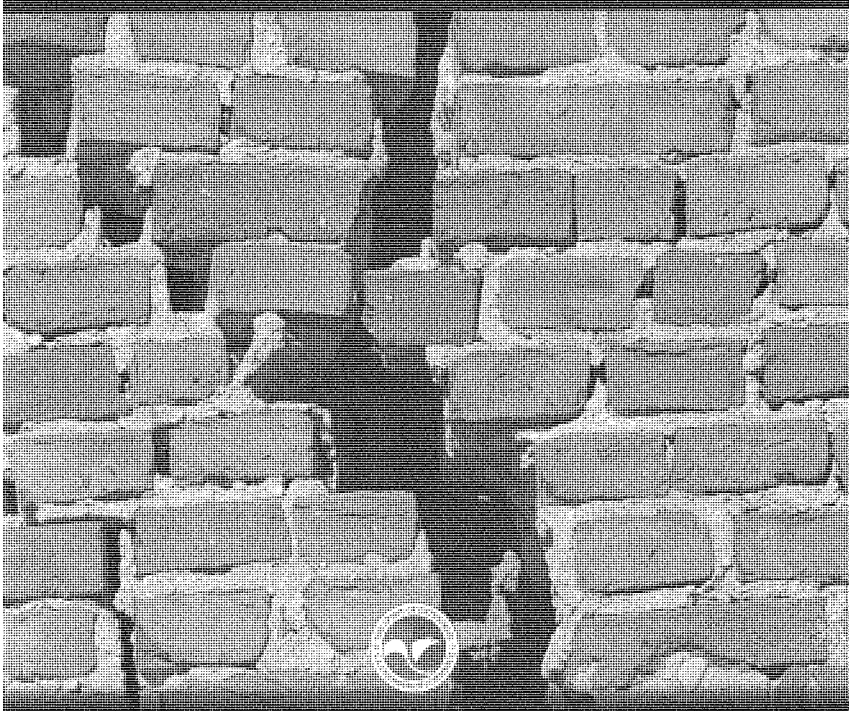
Silicosis: Number of deaths, crude and age-adjusted death rates, U.S. residents age 15 and over, 1968–2010, source: NIOSH (CDC), September 11, 2014



[Additional submissions by Mr. Walberg follow:]

Regulatory Indifference Hurts Vulnerable Communities

No. 7 in a Series of Regulatory Reports



U.S. CHAMBER OF COMMERCE

Environment, Technology & Regulatory Affairs Division

ACKNOWLEDGMENTS

AUTHORS
William L. Kovacs, *Senior Vice President, Environment, Technology & Regulatory Affairs*
Joseph M. Johnson, *Executive Director, Federal Regulatory Process Review & Analysis*
Keith W. Holman, *Senior Policy Counsel and Managing Director*

The authors work in the U.S. Chamber's Environment, Technology & Regulatory Affairs Division.
Released February 2016

U.S. CHAMBER OF COMMERCE

The U.S. Chamber of Commerce is the world's largest business federation representing the interests of more than 3 million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations.

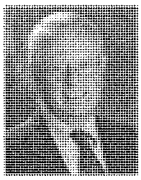
Copyright © 2016 by the United States Chamber of Commerce. All rights reserved. No part of this publication may be reproduced or transmitted in any form—print, electronic, or otherwise—without the express written permission of the publisher.

Regulatory Indifference Hurts Vulnerable Communities

No. 7 in a Series of Regulatory Reports

February 2016

Executive Summary



William L. Kovacs
U.S. Chamber Senior Vice-President for
Environment, Technology, and Regulatory Affairs
U.S. Chamber of Commerce

Over the past five years, the U.S. Chamber has studied the sources of dysfunction in our federal regulatory system. In a series of reports, we highlighted serious problems with the way agencies do the job of regulating that Congress assigned to them, including:

- Agencies downplay the costs of their biggest new regulations with estimates of far larger benefits that the public has no way to verify;
- Agencies are receptive to lawsuits from outside advocacy groups, then enter into binding settlement agreements that give advocacy groups control over the agency's policy agenda and budget;
- Agencies delay or kill proposed infrastructure projects by failing to take action on environmental permit applications; and
- Agencies fail to consider the impacts their regulations have on local employment and job displacement. Instead, they often refuse to acknowledge that these impacts even exist.

While the Chamber's previous reports have focused on large, complex regulatory actions that have widespread economic impacts, evidence shows that much smaller rules can also have significant negative impacts on specific industries and the towns where they are located. For example, when the U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) proposed rules[1] that threaten the survival of many brick manufacturing plants in the United States, we realized that the relatively small size of the brick industry, the absence of foreign competition, and the stability of labor and material costs would allow us to zoom in on the specific impacts the EPA and OSHA rules will have on brick companies and their employees.

[1]EPA, "National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing," 79 Fed. Reg. 75,622 (December 18, 2014); OSHA, "Occupational Exposure to Respirable Crystalline Silica," 78 Fed. Reg. 56,274 (September 12, 2013).

What Our Research Revealed

The Chamber compared estimates of compliance costs prepared by EPA and OSHA with cost and burden estimates developed by five brick plants that are representative of the overall brick industry. EPA estimated that its final rule will have an annualized cost to the brick industry of about **$25 million**, while delivering benefits between **$75** and **170 million**.[2] OSHA projects that its rule would cost each workplace about **$1,250** per year, while delivering between **$2.8** and **4.7 billion** in benefits for all industries across the country.[3] Both agencies made key assumptions to support their estimates of modest costs and substantial benefits, but little factual evidence was given as support.

According to the Brick Industry Association, the EPA rule actually carries a price tag of **$100 million** or more per year, while the OSHA rule imposes an up-front capital cost of **$900,000** or more per brick plant. These costs, broken down on a per-plant basis, are greater than many brick companies can ever afford—even if they were able to borrow the capital. Consequently, several plants will be forced by the EPA and OSHA rules to cut back their operations or close. This in turn will hurt small communities, whose residents depend on brick jobs for their middle-class wages and benefits.

Brick companies say they are willing to make economic sacrifices in exchange for major improvements in air quality and worker health. EPA and OSHA have not demonstrated that their rules will actually deliver these benefits, however. On the contrary, virtually all of EPA's calculated benefits come from fine particulate matter reductions the rule might achieve—a total of about 309 tons spread across the nation—which is less than ***1/500th*** of the amount of PM2.5 EPA believes goes into the air from fast food restaurants alone.[4] Similarly, the 147 pounds of mercury the rule is expected to reduce is about ***1/400th*** the amount of mercury now reported by EPA to be in dental amalgam (fillings) in the mouths of millions of Americans.[5] Likewise, OSHA's rule imposes heavy costs on the brick industry while evidence cited by the Brick Industry Association indicates that the clay used in brick manufacturing is not a significant cause of silicosis for plant workers.[6] Thus, the calculated benefits of the rules are far too small to notice or to improve the lives of the people in these communities.

[2] 80 Fed. Reg. 65,470, 65,513 (October 26, 2015). EPA acknowledges that all of these benefits are actually "co-benefits" that come from estimated reductions in fine particulate matter, a pollutant that is already very well controlled by other regulations. Agency claims of expansive health benefit calculations stemming from such "co-benefits" were recently questioned by the U.S. Supreme Court in *Michigan v. EPA*, __ U.S. __ (2015), slip op. at 4.

[3] U.S. Department of Labor, OSHA Fact Sheet, "OSHA's Proposed Crystalline Silica Rule Overview" (August 2013) at 2.

[4] *See* E.H. Pechan & Associates, "National Emissions Inventory for Commercial Cooking" (April 2004), available at www.epa.gov/ttnchie1/conference/ei13/pointarea/roe.pdf.

[5] *See* EPA, "Mercury in Dental Amalgam," available at www.epa.gov/mercury/dentalamalgam/html. Moreover, while OSHA asserts that its rule will prevent 1,600 new silicosis cases each year, the Brick Industry Association counters that brick workers have historically experienced no silicosis cases, so the OSHA rule actually does nothing to improve worker safety in brick plants.

[6] *See, e.g.*, Love, R.G., Waclawski, E.R., Maclaren W.M., Porteous, R.H., Groat, S.K., Wetherill, G.Z., Hutchinson, P.A., Kidd, M.W., Soutar, C.A. "Cross-Sectional Study of Risks of Respiratory Disease in Relation to Exposures of Airborne Quartz in the Heavy Clay Industry" *Edinburgh: Institute of Occupational Medicine* (1994). (IOM Report TM/94/07); Love, R.G., Waclawski, E.R., Maclaren, W.M., Wetherill, G.Z., Groat, S.K., Porteous, R.H., and Soutar, C.A., "Risks of Respiratory Disease in the Heavy Clay Industry," *Occupational Environmental Medicine*, Vol. 56, pages 124-133 (1999); Buchanan, D., Miller, B.G., Soutar, C.A.. "Quantitative Relationships Between Exposure to Respirable Quartz and Risk of Silicosis at One Scottish Colliery," *Edinburgh: Institute of Occupational Medicine*, 2001. (IOM Report TM/01/03).

The Policy Implications of Our Findings

The brick industry experience clearly illusttates the increasingly common situation where regulations—shaped in significant part by outside advocacy groups—impose heavy burdens on specific businesses and their host communities that far outweigh their assumed local and national benefits. Rules such as these—that do more harm than good to communities—should never be allowed to become legally binding requirements. Under our regulatory system, however, agencies like EPA and OSHA can make sweeping assumptions about the costs and benefits of a rulemaking, with confidence that their assumptions usually survive challenges until ***after*** the rule takes legal effect. Courts typically defer to agency decisions, and the agencies themselves are indifferent to the adverse impacts their rules have on vulnerable communiries.

Recommendations

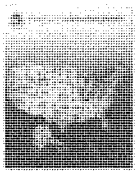
EPA needs to conduct the type of **in-depth employment analyses** required by Section 321(a) of the Clean Air Act, in order to provide Congress and the public with information about the impacts its regulations have had on businesses, workers, and communities. Other federal agencies should also be required to conduct analogous evaluations. Only by fully understanding how past regulatory approaches have affected American industries and the communities where they are located can the public see how additional requirements may affect their lives. It is time for Congress to demand that EPA and other agencies look at the long-term impacts of their regulations on real people, in real communities.

In addition, Congress should enact the **Regulatory Accountability Act of 2015 (RAA)**,[7] of 2015, which would improve the transparency of regulations by requiring agencies to invest more effort earlier in the rulemaking process to gather data, evaluate alternatives, and receive public input about the costs and benefits of its rules. The RAA would provide stakeholders with a way to confront unfounded assumptions that agencies rely on to make their proposed rules seem less costly and/or more beneficial than they really are. Factual challenges and agency responses to those challenges would be part of the rulemaking record that a court would have before it when it reviews the rule. The RAA would be a powerful tool to keep agencies honest about the claims they make to support new regulations and help to prevent new rules that will do more harm than good.

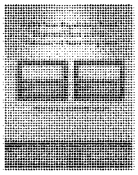
[7] H.R. 185, passed by the House of Representatives on January 23, 2015; S. 2006 was introduced in the U.S. Senate on August 30, 2015.

Report

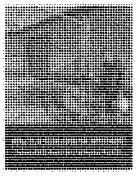
The U.S. Chamber has spent several years analyzing the federal regulatory system in order to understand how new rules can affect the lives of ordinary Americans. The resulting reports identified specific problems associated with the federal regulatory process, i.e. procedural barriers to permitting new projects, federal agencies refusing to cooperate with the states, the impact of new regulations on employment, and the legal tactic used by advocacy groups known as "sue and settle."



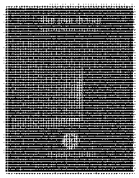
Understanding the roadblocks in permitting energy projects and their impacts (March 2011)



Understanding how federal agencies override states' regulatory discretion (July 2012)



Understanding the impacts of regulations on employment loss and displacement (Feb. 2013)



Understanding how private parties control agencies through the "sue and settle" process (May 2013)

The Chamber's August 2014 report, ***Charting Federal Costs and Benefits***, found that only a tiny number of new regulations (just one or two each year, on average) carry the vast majority of the costs and benefits from the 3,500 to 4,000 rules issued annually by all of the federal agencies combined.

The follow-up report, ***Truth in Regulating: Restoring Transparency to EPA Rulemaking*** (April 2015), concluded that the U.S. Environmental Protection Agency (EPA) has not been transparent in explaining to the public the details of its rulemakings, including the cost-per-ton of pollutant reduced, and the cost of the rule EPA chose versus other potential alternatives.

Each of these reports highlights a different problem with our current federal regulatory process:

- Federal agencies ignore the tremendous resource drain their rules impose on state and local governments, despite being obligated by statute and executive orders to do so;
- Agencies downplay the costs of their biggest new regulations with estimates of far larger benefits that the public has no way to verify or see what they are actually getting for their money;
- Agencies are receptive to lawsuits from outside advocacy groups, resulting in the agency binding itself through settlement agreements that give advocacy groups effective control of the agency's policy agenda and budget; and
- Agencies fail to carefully consider the impacts their regulations have on employment and job displacement. While Congress often considers the impact that a new law will have on jobs and communities—and may provide assistance for affected workers—federal agencies for decades have refused to acknowledge that these impacts even exist.

The Chamber's prior reports have focused on the largest federal rulemakings and regulatory issues that have the greatest potential impact on the U.S. economy (e.g., unfunded federal mandates on the states and the difficulty in getting key infrastructure projects permitted). While rules that impose billions of dollars in annual costs have the most obvious economic impact, evidence suggests that much smaller rules can also have significant negative impacts on specific industries and the communities where they are located.

It is often difficult to trace these impacts on specific industries to dysfunctional regulations, however, because of other important factors, such as foreign competition, rising costs of materials and labor, and changes in consumer demand.

When EPA and the Occupational Safety and Health Administration (OSHA) proposed rules[8] that threaten the survival of many brick manufacturing plants in the United States, the Chamber decided to take a more detailed look at the brick industry and the impacts of the two rules on specific plants.

The U.S. brick industry is particularly useful to study, because:

- Foreign competition has not been a significant factor in the past;
- Regulation has not previously threatened the industry with large numbers of plant closures;
- Materials and labor costs have been stable;
- The industry is viable because long-term demand for brick as a building material is strong, though it varies significantly with business cycles;
- The modern brick industry is a relatively minor source of air emissions;
- The brick industry is dominated by small businesses;
- Workers at brick plants are often less-educated; and
- Brick plants are often located in smaller communities that depend on the plant jobs for middle-class wages.

[8] EPA, "National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing," 79 Fed. Reg. 75,622 (December 18, 2014); OSHA, "Occupational Exposure to Respirable Crystalline Silica," 78 Fed. Reg. 56,274 (September 12, 2013).

Background: The U.S. Brick Industry

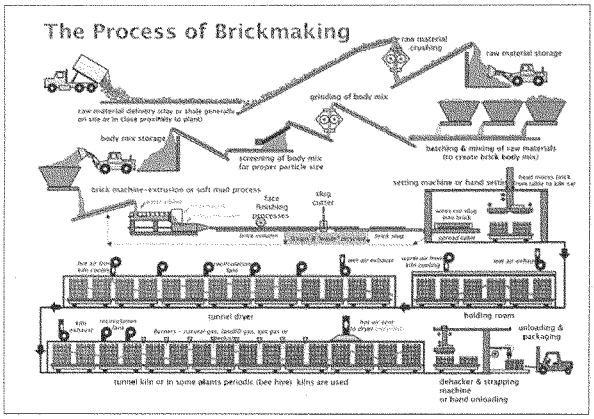
Historically, the U.S. brick industry has experienced periods of growth and decline that are closely tied to the overall economy and the construction industry. Over 80% of bricks sold are used in residential construction, with the remainder used for non-residential construction, paving, and other purposes.

According to the Brick Industry Associaiion, brick plants make approximately 9 billion "standard brick equivalents" each year and add nearly $8 billion to our economy.[9] About **200,000** American workers are employed directly in raw materials sourcing, manufacturing, distributing, and transporting bricks, and indirectly as skilled masons and contracrors using bricks in construcrion.

[9] Brick Industry Association, *An Overview of the American Brick Industry*, available at www.gobrick.com/Resources/American-Brick-Industry.

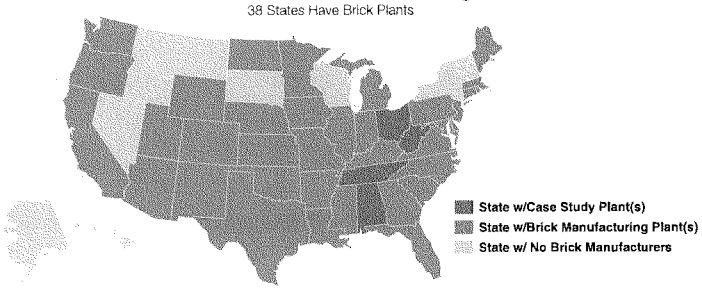
In 2014, there were **70** brick plants with **217** kilns in the United States, employing about **7,000** people. More than 60 of the 70 U.S. brick plants are owned and operated by small, often family-owned companies. Brick manufacturing firms are located in 38 states, with the heaviest concentration in the Southeast, Mid-Atlantic, and Midwest, in areas with major clay deposits. Because brick plants typically use natural gas to fire their kilns and dryers, they are far cleaner than facilities operating a generation ago.

In 2015, the brick industry operated at a capacity utilization rate of only about 40%, largely because of the post-2008 residential construction slowdown. Many plants now have productive capaciry that hasn't been used since 2005. Based on the most recent Census data, the brick industry has losr 54% of its jobs since the housing peak in 2004.



States with Brick Manufacturing Plants

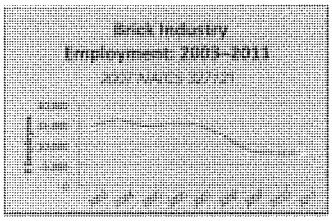
38 States Have Brick Plants



Two New Regulations Will Hit the Brick Industry Hard

EPA's Clean Air Act regulation, called the **Brick Maximum Achievable Control Technology (Brick MACT) rule**,[10] requires state-of-the-art air quality emissions controls for brick manufacturing plants (including smaller plants). The rule is intended to reduce emissions of hazardous air pollutants such as hydrogen fluoride (HF), hydrogen chloride (HCl), chlorine (Cl_2), and mercury (Hg).

Previously, in 2003, EPA finalized the first version of the Brick MACT rule.[11] The 2003 Brick MACT rule required brick plants to install equipment on their kilns to control HF and HCl, and to develop work practices to reduce other emissions. Brick companies spent millions of dollars to comply with the 2003 rule. An environmental advocacy group sued EPA, however, claiming that the agency did not fully comply with the Clean Air Act in writing the 2003 rule. A federal court subsequently threw out the rule and ordered EPA to rewrite the Brick MACT rule.[12] The revised rule is far more difficult and costly for brick plants to comply with because EPA determined that the substantive emission reductions achieved by the control devices installed under the 2003 rule should be the starting point for the level of emissions reduction under the current rule. The 2015 Brick MACT seeks to achieve major emissions reductions over and above the near **95%** reductions achieved under the 2003 rule. While the agency could have written the rule to give the brick industry credit for emissions reductions already achieved, EPA in effect changed the rules for brick plants in the middle of the game.



[10] EPA, "National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing," 80 Fed. Reg. 75,622 (October 26, 2015).

[11] EPA, "National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing," 68 Fed. Reg. 26,690 (May 16, 2003).

[12] *Sierra Club v. EPA*, 479 F.3d 875 (D.C. Cir. 2007).

OSHA's **Silica Dust Permissible Exposure Limit (PEL) rule**[13] requires the installation of new large-scale, plant-wide ventilation systems and personal protective equipment (PPE) such as face masks and respirators for jobs where the PELs are exceeded. The PEL rule is intended to reduce worket exposutes to silica dust in order to reduce incidents of silicosis, a lung disease that is caused by inhaling silica dust.

EPA and OSHA Contend That Their Proposed Rules Are Reasonable and Cost-Effective

EPA estimates that the Brick MACT rule will have an annualized cost to the brick industry of about **$25 million,** while delivering benefits between **$75 and $170 million,**[14] and that nearly all brick manufacturers can easily comply. EPA says that it has taken steps to make the rule affordable and achievable, including offering an unusual risk-based compliance alternative in the rule. OSHA projects that its rule would cost each workplace about **$1,250** per year, while delivering between **$2.8 and 4.7 billion** in benefits for all industries across the country.[15] OSHA's benefits calculation is based on the agency's belief that the new standard will prevent 1,600 new silicosis cases each year.

[13] 78 Fed. Reg. 56,274 (September 12, 2013).
[14] 80 Fed. Reg. 65,470, 65,513 (October 26, 2015). EPA acknowledges that most of these benefits are actually "co-benefits" that come from reductions in fine particulate matter, a pollutant that is already well controlled by other regulations. Agency claims of expansive health benefit calculations stemming from such "co-benefits" were recently criticized by the U.S. Supreme Court in *Michigan v. EPA*, __ U.S. __ (2015), slip op. at 4.
[15] U.S. Department of Labor, OSHA Fact Sheet, "OSHA's Proposed Crystalline Silica Rule Overview" (August 2013) at 2.

EPA and OSHA Had to Make Key Assumptions to Support These Low Burden Estimates

Claims by EPA and OSHA that their rules will impose only modest regulatory burdens and will deliver substantial health and safety benefits rest heavily on key assumptions that are unsupported by facts and contradicted by the brick companies.

- *Both agencies assume that brick companies* ***already have or can readily borrow the capital needed to install required equipment.*** Brick plant owners counter that at present it is almost impossible to get loans for critical projects like plant modernization. Securing financing for costly control equipment that does nothing to improve their productivity or their bottom line is even more problematic.

- Both agencies assume that the costs of complying with the rules can be ***passed on to consumers simply by increasing brick prices.*** This assumption ignores the reality that price is a critical factor in customer choice between brick and other construction materials. Thus, raising brick prices is not a feasible operating strategy.

- Both agencies assume that businesses will be able to comply with the regulatory standards if they use the prescribed technology—even in situations where ***the agencies themselves*** don't know whether a required technology will be sufficient.

EPA bases its claim that the Brick MACT rule will cost the industry "only" $25 million per year on further key assumptions:

- EPA is confident that most small brick plants can meet the emission standards in the Brick MACT without having to install the most costly new control equipment. Most important, EPA thinks all small brick plants can meet the stringent mercury standard without installing costly mercury controls.
- Because EPA allows a less-costly risk-based standard for one type of emissions, the agency believes that most brick plants can use this alternative to avoid installing the most costly new controls.
- EPA also believes that many brick plants will be able to avoid the cost of the Brick MACT by electing to become "synthetic" minor sources—staying below the threshold of the rule by agreeing to limit output/operating hours, or to install relatively less costly controls, or both.

Brick Industry Information Tells a Very Different Story

The Brick Industry Association estimates that the annual cost of the Brick MACT will be **$100 million or more**[16] and that compliance will be nearly impossible for many smaller plants.

EPA assumes that if a plant captures ***X tons*** of particulate matter (PM), it will also capture ***X ounces*** of mercury and other hazardous air pollutants.

While the agency assumes that all but three small plants can meet the required PM standard, this assumption is not supported by any facts.

- Only a small handful of brick kilns currently have control equipment installed that can meet the MACT rule's proposed emission limits for **all** of the air pollutants.
- Therefore, most kilns will require the installation of a dry injection fabric filter (DIFF) to control PM and acid gases, as well as an activated carbon injection (ACI) system to control mercury. The combined up-front capital cost of these controls is about **$2.2 million per kiln**, or $4.4 million per plant with two tunnel kilns (the industry average).
- The 2003 Brick MACT rule led to many plants installing dry lime absorber (DLA) control devices on their larger kilns. Brick companies that installed DLAs will likely have to tear out their DLAs and replace them with new DIFFs at a cost of **$4.27 million per kiln—including removal costs and costs to install new equipment**.

Likewise, the OSHA silica PEL rule will require many brick plants to install ventilation systems across numerous sections of their plants, to provide new types of PPE for many employees, to provide training for exposed employees, and to institute new reporting and recordkeeping procedures.

- For brick plants, the up-front capital cost to the average small plant is estimated to be **$906,000** and the

[16] Letter from Brick Industry Association to U.S. Chamber (January 4, 2016). Available upon request.

annual cost is **$224,000.**[17] These are the up-front costs for the typical small brick plant, which has two tunnel kilns. Larger plants often have as many as four to six kilns, and the cost for silica compliance scales upward significantly with the size of the plant.

- While OSHA imposes the silica PEL rule for the stated purpose of reducing exposure to silica dust, the Brick Industry Association cites studies showing that raw materials used in brick manufacturing do not represent a significant cause of silicosis for brick workers.[18] OSHA has essentially acknowledged this fact yet has done nothing to adjust the compliance burden for brick plants.[19] Thus, brick plants are asked to shoulder a heavy burden to solve a problem that they play little or no part in causing.

Case Studies: Five Communities with Brick Plants

The Chamber considered brick plants in five different communities. These plants were chosen because they represent a range of different types of brick plants (e.g., large tunnel kilns, periodic or "batch" kilns, and plants that use specialty source clays). We included companies with a variety of plant sizes, production methods, producrs, input materials, and leadership structures.

[17] "Testimony of Janet Whitacre Kaboth, Whitacre-Greer Brick, before the House Committee on Oversight and Government Reform, Subcommittee on Government Operations, Plymouth, Michigan (May 6, 2014) at 3.

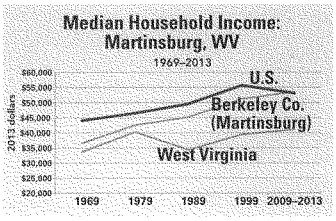
[18] "Love, R.G., Waclawski, E.R., Maclaren WM, Porteous, R.H., Groat, S.K., Wetherill, G.Z., Hutchinson, P.A., Kidd, M.W., Soutar, C.A. "Cross-Sectional Study of Risks of Respiratory Disease in Relation to Exposures of Airborne Quartz in the Heavy Clay Industry", *Edinburgh: Institute of Occupational Medicine* (1994). (IOM Report TM/94/07); Love, R.G., Waclawski, E.R., Maclaren, W.M., Wetherill, G.Z., Groat, S.K., Porteous, R.H., and Soutar, C.A., "Risks of Respiratory Disease in the Heavy Clay Industry," *Occupational Environmental Medicine*, Vol. 56, pages 124-133 (1999); Buchanan, D., Miller, B.G., Soutar, C.A.. "Quantitative Relationships Between Exposure to Respirable Quartz and Risk of Silicosis at one Scottish Colliery," *Edinburgh: Institute of Occupational Medicine*, 2001. (IOM Report TM/01/03).

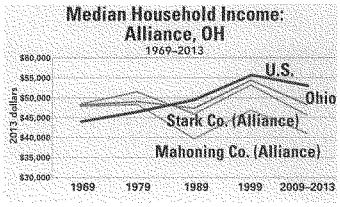
[19] *See* 78 Fed. Reg. 56,333. OSHA notes that "The finding of reduced silicosis risk among pottery workers is consistent with other studies of clay and brick industries that have reported *finding a lower prevalence of silicosis compared to that experienced in other industry sectors* (Love et al., 1999; Hessel, 2006; Miller and Soutar, 2007) as well as a *lower silicosis risk per unit of cumulative exposure* (Love et al., 1999; Hessel, 2006; Miller and Soutar, 2007.") (emphasis added).

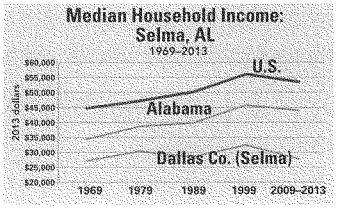
City Name	Brick Firm	City Pop.	Unemp. %	Poverty %	Mfg. %
Alliance, OH	Whitacre-Greer Brick	22,183	5.6%	26%	35%
Gleason, TN	Boral Brick	1,425	11.8%	21.7%	26%
Martinsburg, WV	Continental Brick	17,513	6.0%	23.8%	17%
Selma, AL	Henry Brick	20,251	13.8%	43.5%	21%
Sugarcreek, OH	Belden Brick	2,217	6.5%	2.7%	30%

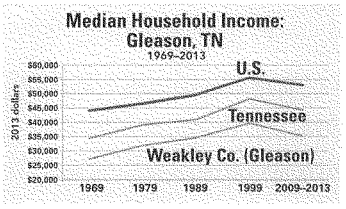
Median Household Income in the Five Study Communities

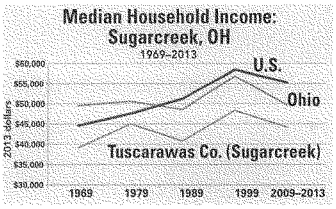
U.S. Census data give a comparative historical perspective on the economic health of the five communities included in our study between 1969 and 2013. The following charts compare median household income in the counties where the plants are located against state and national median household income.
All data are U.S. Census Bureau data.











Case Studies: Estimated Impacts of EPA and OSHA Rules on the Five Brick Plants Studied

Based on interviews with the five companies listed below and/or information supplied by tbe companies and by tbe Brick Industry Association, we compiled the following information about the impacts of the two rules on specific brick plants.[20]

Whitacre-Greer Brick, Alliance, Ohio

Revenue	$8.7 million (EPA est.)
Capital Cost-MACT	$3.0 million
Annual Cost-MACT	$1.27 million
Capital Cost-Silica	$906,000 for 2 kilns
Annual Cost-Silica	$224,130
Total Annual Cost	$1.49 million
Total Annual Cost % Rev.	17.2%

- Whitacre-Greer has one facility with two kilns. The plant employs 75 people, offers health insurance, education and training benefits, and profit sharing for all employees (skilled and unskilled). The company produces a specialty brick that has allowed it to remain competitive during a prolonged consrruction downturn.
- To comply with the MACT srandard, the firm must install a fabric filter on one kiln and a DIFF on the other.
- The company estimates that it will cost **$906,000** to meet the silica PEL.
- Recently, after a **two-year** search, Whitacre-Greer was finally able to secure funding for a kiln renovation project. Small firms like Whitaker-Greer say they cannot borrow the required $3.9 million capital cost to pay for control equipment that provides ***zero*** return on investment, and would greatly increase operating expenses.
- In order to eliminare at most ***four pounds*** of mercury per year, EPA would force the company to spend nearly $4 million it can't borrow or go out of business and leave 75 workers and their families without paychecks or benefits.[21]

Boral Brick, Gleason, Tennessee

Revenue	NA
Capital Cost-MACT	$4.4 million
Annual Cost-MACT	$1.6 million
Capital Cost-Silica	$906,000 for 2 kilns
Annual Cost-Silica	$224,000
Total Annual Cost	$1.9 million
Total Annual Cost % Rev.	NA

- Boral is one of the largest brick manufacturing firms, with multiple plants spread across nine states. The

[20] Estimated brick company revenues are from EPA, *Regulatory Impact Analysis: Proposed Brick and Structural Clay Products* (July 2014), Docket ID No. EPA-HQ-OAR-2013-0291 Table 2-4, pages 2-10, 2-11.

[21] Whitacre-Greer Brick was forced to close another brick plant located in Waynesburg, Ohio, in 1989. The 87-year-old plant was unable to meet new environmental requirements, and the company was not willing to completely rebuild the old plant. Without the brick plant—which was the only industrial employer in the immediate area—Waynesburg's population decreased by **20%**, from 1,160 in 1980 to 923 in 2010, according to the U.S. Census Bureau.

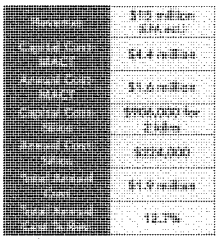
Gleason, Tennessee, plant has two small tunnel kilns and, like most brick manufacturing facilities, is located near source clay that allows it to make a specific type and color of brick.

- The kilns at Gleason are currently uncontrolled, but they would be able to meet the rule's emissions standard for each of the pollutants except mercury. Thus, the plant will have to install a DIFF with ACI on each kiln ***just to meet the mercury standard.***

- The Brick MACT rule's controls will yield perhaps ***three pounds*** of mercury reductions annually at the plant at a cost of over $4 million.

- While Boral is a large company, the Gleason planr is a small branch operation analogous to most of the small, single-facility companies. The capital investment needed to install emissions controls at this facility risks the jobs of everyone at the plant and potentially the economic health of the tiny town.

Continental Brick, Martinsburg, West Virginia



- Continental Brick in Martinsburg, West Virginia, has two small kilns. The plant employs 75 people.

- Continenral's small kilns were not required to install controls under the 2003 Brick MACT. Under the revised rule, the plant will have to install new DIFFs with ACI on both kilns.

- Like Whitacre-Greer Brick, the most insurmountable problem for Continental Brick is finding a way to finance the high capital costs of compliance with the two regulations.

- Although ir is uncertain because of a lack of emissions testing data, controlling the two small kilns at Continental will reduce at best a pound of mercury and very small amounts of fine particulate matter each year.

Henry Brick, Selma, Alabama

Revenue	$5.3 million (EPA est.)
Capital Cost-MACT	$8.5 million
Annual Cost-MACT	$2.4 million
Capital Cost-Silica	$906,000 or more
Annual Cost-Silica	$224,000
Total Annual Cost	$2.6 million
Total Annual Cost % Rev.	49%

- Henry Brick in Selma, Alabama, has two large kilns and the plant employs 60 people in a largely African-American community with high unemployment and high rates of poverty. Jobs such as those at Henry are extremely valuable as relatively high-paying employment for low-skilled laborers.

- Henry Brick spent about $1.5 million to install DLAs on both kilns, as required by the 2003 Brick MACT, but now will have to tear that equipment out and retrofit DIFFs with ACI to meet the new MACT.

- According to the Brick Industry Association, Henry Brick could face one of the highest capital costs for retrofit of new emissions control equipment. Consequently, the annual cost to operating revenue ratio forecast for Henry is an insurmountably high 49%, making it hard to envision how this firm could remain in business under these costly regulations.

- The emissions reductions achieved by controlling Henry's two kilns are minimal and certainly do not warrant putting the firm out of business and costing 60 jobs at the plant alone.

Belden Brick, Sugarcreek, Ohio

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

- Belden Brick in Sugarcreek, Ohio, has 10 kilns and employs about 200 workers. Belden is the largest family-owned brick company in the U.S., and is managed by the fourth generation of the Belden family.

- In addition to extremely high capital costs to comply with the EPA rule, Belden Brick faces unusually high costs to meet the OSHA silica rule.

- Because Belden is a large brickmaking operation (the sixth largest in the United States), the total environmental benefit of mercury controls on its kilns is expected to be slightly larger, perhaps as much as ***12 pounds*** of mercury annually, but the unusually high capital cost of controls makes the cost-effectiveness of these reductions extremely poor.

The Negligible Benefits of the Two Regulations Do Not Justify Their High Costs and Impacts on Vulnerable Communities

Pollutant	Reduction
Mercury (Hg)	147 pounds
Acid Gases	368 tons
PM 2.5	309 tons
Non-Hg metals	7.08 tons

Many brick plants face high capital costs to meet the EPA and OSHA rules, as well as large annual operating costs that represent a substantial percentage of revenues. Brick companies say they would be more willing to make economic sacrifices if the rules would result in major improvements in air quality and worker health. For example, Allen Puckett III, the owner of Columbus Brick Company in Columbus, Mississippi, testified in a House Judiciary Subcommittee hearing in 2013 that "[i]f this burden resulted in some great benefit to the environment, it might be worth it."[22] Unfortunately, there is no evidence that these rules will deliver any "great benefit."

Advocacy groups and EPA point to the significant environmental value of the Brick MACT rule by suggesting that the rule would reduce ***thousands of tons*** of hazardous air pollutants such as mercury, arsenic, lead, chromium, and dioxin.[23] EPA refers in the preamble to its proposed rule to the (unquantified) benefits of "reducing the exposure to close to 450 tons of [hazardous air pollutants] each year."[24] OSHA claims that the silica PEL rule will prevent thousands of cases of silicosis and save some 700 lives of workers each year.[25] EPA's own emissions reduction estimates, however, indicate that the costs imposed by the Brick MACT rule will produce only very small emissions reductions, which in turn will have negligible health benefits.

The total mercury reduction of ***147 pounds*** per year from the entire industry is a tiny mercury reduction that, when spread across the nation, will have little measurable health benefit. By way of comparison, in EPA's 2012 Mercury Air Toxics Standards (MATS) rule,[26] where mercury reductions were estimated by EPA to be about ***seven tons*** per year, the agency was able to claim only **$4 to $6 million** in direct benefits.[27] The Brick MACT rule's mercury reductions equate to only about **$26,000** in direct benefits.

With respect to the 368 tons of acid gases across the country the rule is anticipated to reduce each year, EPA itself has acknowledged that the brick industry's emissions are orders of magnitude below the threshold the agency considers safe. Based on its evaluation of the low risk of health effects from the small amounts of acid gases emitted by brick plants, EPA concluded that "we do not expect that the combined emissions of HF, HCl, and Cl_2 from [brick plants] and nearby other sources would result in substantial cumulative health and environmental impacts."[28]

[22] Allen Puckett III, Written Testimony before the House Committee on the Judiciary, Subcommittee on Regulatory Reform, Commercial and Antitrust Law (June 5, 2013) at 6.
[23] *See, e.g.*, Earthjustice, Fact Sheet "Cutting Toxic Air Pollution from Brick Kilns."
[24] 79 Fed. Reg. 75,668.
[25] U.S. Department of Labor, OSHA Fact Sheet, "OSHA's Proposed Crystalline Silica Rule Overview" (August 2013) at 1.
[26] *See* 77 Fed. Reg. 9,304 (February 10, 2012).
[27] 77 Fed. Reg. 9,306, 9,424.
[28] 79 Fed. Reg. 75,642. Accordingly, EPA allows brick plants to utilize a risk-based flexibility tool known as a Health-Based Compliance Alternative standard.

In fact, in its economic analysis, virtually **all** of EPA's estimated benefits come from fine particulate matter reductions, but the modest reductions the rule may achieve—about 309 tons spread across the nation—is less than ***1/500th*** of the amount of PM2.5 EPA estimates now comes from fast food restaurants. Similarly, the ***147 pounds*** of mercury the rule is expected to reduce is less than ***1/400th*** the amount of mercury now reported by EPA to be in dental amalgam in the mouths of millions of Americans. Even if EPA is correct that the rule would impose just $25 million in costs, the rule's purported benefits are swamped by its costs and its damaging impact on local communities.

Keeping in mind that the brick industry already committed millions of dollars to install and operate controls to reduce air emissions from brick kilns by about **95%**, the current Brick MACT imposes costs that—for the brick industry—are cripplingly high while delivering scant benefits over and above those from the 2003 rule.[29] And, as noted above, because most of those benefits are actually estimated "co-benefits" from PM2.5 reductions (precisely the same co-benefits questioned recently by the Supreme Court in the *Michigan v. EPA* case), the Brick MACT rule actually imposes more than **$100 million** in annual costs to deliver significantly less in quantifiable benefits.[30] OSHA's silica rule also imposes substantial capital costs (estimated by the brick industry to be $906,000 per small plant and more for larger plants) and high annual costs ($224,000 per year) that are a significant percentage of annual revenues. The OSHA silica rule will also provide scant benefits in exchange for the required expenditures. The brick industry notes that incidents of silicosis are practically nonexistent for the industry,

> **"If these regulations would save lives—of our workers or our neighbors—it would be worth it. However, in both cases, the regulatory authority has data that shows that the benefit of these regulations is minimal or non-existent for the brick industry."**
>
> ***—Janet Whitacre-Kaboth***
> *Testimony before the House Committee on Government Reform, Subcommittee on Government Operations (May 6, 2014)*

owing to the nature and character of the raw materials used in brick manufacturing. Brick plants will also have a difficult time demonstrating compliance because of unique technical difficulties in air monitoring. Thus, the OSHA rule compels brick plants to make large capital expenditures to address a health issue that they have not been shown to cause. In sum, EPA and OSHA have not shown that their rules regulating the brick industry will actually deliver these benefits to brick workers, local residents, or anyone else. On the contrary, the calculated benefits of the rules are far too small for the people in communities with brick plants to even notice.[31]

[29] The Brick MACT rule is unique in that the brick industry actually came into full compliance with the 2003 MACT rule at least a year before it was vacated by the court. Brick plants installed the required controls and fully met the rule's standards. The 2015 Brick MACT sets new standards based on the level of control achieved under the vacated 2003 MACT, rather than on pre-2003 emissions. This so called "MACT-On-MACT" situation results in a rule that is much more stringent than it otherwise would be.

[30] *Michigan V. EPA*_ U.S. __ (2015), slip op. at 4.

[31] As noted above, while OSHA asserts that its rule will prevent 1,600 new silicosis cases each year, the Brick Industry Association counters that brick workers have historically experienced no silicosis cases, so the OSHA rule actually does nothing to improve worker safety in brick plants.

In Summary

The net result of the EPA and OSHA rules is that communities with brick plants will be worse off than they were before the two rules were issued. The nation's air quality and workplace health will not be improved in any discernible way, yet local communities will feel the loss of jobs and the shuttering or downsizing of brick plants. Potentially thousands of workers will be deprived of middle-class jobs and benefits, for no good reason. This type of rule—one that does vastly more harm than good—is the type of rule that should never be written and acquire the force of law.

The Policy Implications of Our Findings

The brick industry experience with the EPA and OSHA rules illustrates how several factors have come together over time to make our regulatory system produce nonsensical regulatory outcomes.

1. In the 1970s, Congress wrote sweeping new laws that were designed to broadly benefit all Americans, such as the Clean Air Act and the Occupational Safety and Health (OSH) Act. These laws reflected the view of Congress and the American people that environmental protection and worker health and safety were important factors that needed to be balanced against traditional economic priotities. Congress knew the new laws would have significant adverse economic impacts on newly regulated industries and communities, but expected they would yield massive national health and safety benefits to ***all*** Americans.

2. Congress gave federal agencies broad authority to implement these new laws, while also allowing agencies some discretion and flexibility in implementing them.

3. The federal agencies that write the rules implementing laws—in this case EPA and OSHA—interpret their mission ro take priority over all competing considerations.

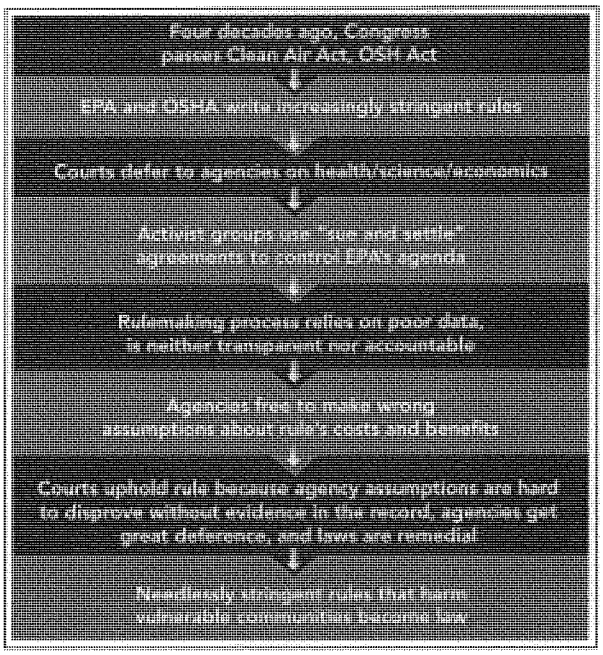
4. Over time, the courts have been more and more willing to defer to agency decision-making. Advocacy groups increasingly rely on lawsuits to get agencies to pursue ever more stringent rules without any regard for other policies or interests. In the case of the brick industry, an advocacy group sued EPA, had the 2003 Brick MACT overturned, and forced EPA to develop an excessively strict rule that does far more harm than good.

5. EPA and OSHA both imposed stringent requirements that not only were based on groundless, unproven assumptions, but that arrogantly refused to acknowledge local harms that far outweigh any nationwide benefits.

6. Thus, instead of developing rules that trade off some localized sacrifice in order to achieve substantial national benefits—the type of regulation intended by Congress when it wrote the Clean Air Act and the OSH Act in the 1970s—federal agencies now write needlessly stringent rules that indiscriminately shutter industries and devastate communities while delivering little or no real benefit to the country as a whole.

7. Regulated entities like brick companies have few opportunities to effectively challenge the many assumptions agencies make about the low cost and high benefits of a rulemaking. Agencies ignore adverse comments, and courts defer to agency decisions. Agencies' groundless assumptions typically become obvious **after** the adverse effects of a poorly written rule manifest themselves. If the rule does more harm than good, there is little recourse for affected parties, since agencies rarely take existing rules off the books.

How We Got Here



Significantly, neither the agencies nor the courts have any major institutional incentive to prevent or stop rulemakings that will do more harm than good to local communities. In the current regulatory system, **the agencies** are essentially indifferent to economic considerations or the real-world impacts their rules have on employees. An agency's objective is to further what it perceives to be its statutory mandate and to impose the most stringent requirements it can successfully defend before a court. Other considerations are irrelevant. This is particularly true now that advocacy groups are asserting far greater control over agency priorities and objectives.

In the rare situations where an agency uses its discretion to write flexible rules that consider the technical and economic feasibility concerns of industry—as EPA did in the 2003 Brick MACT—the agency is likely to be challenged by advocacy groups and have the rule overturned by the courts.

For their part, **the courts** are typically only inrerested in whether an agency has reasonably interpreted statutory requirements, regardless of their actual impact on communities. Because statutes like the Clean Air Act are remedial and their provisions can be interpreted to authorize very stringent regulations, courts often simply defer to agencies' actions. **The Executive Branch** rarely takes much interest in meaningfully addressing regulatory dysfunction, and sometimes adds to the problem by using administrative agencies to aggressively pursue its policy objectives. Ultimately, only **Congress** is in a position to correct this problem.

What Can Be Done to Prevent Agencies from Issuing Rules That Do More Harm Than Good?

The first critical step in preventing agencies from issuing rules that do more harm than good is for agencies to admit that some rules impose devastating effects on individual industries and communities, rather than denying that these effects exist. As Justice Antonin Scalia observed in a 2001 Supreme Court decision interpreting the Clean Air Act:

> [T]he economic cost of implementing a very stringent standard might produce health losses sufficient to offset the health gains achieved in cleaning the air—for example, by closing down whole industries and thereby impoverishing the workers and consumers dependent upon those industries. That is unquestionably true, and Congress was unquestionably aware of it.[32]

Congress was indeed aware of the danger that agencies might reflexively impose needlessly stringent regulations with no thought for their consequences. Accordingly, Congress in 1977 inserted into every major environmental statute a requirement that EPA must continuously evaluate potenrial loss or shifts in employment from its regulations in order to gauge the real impact of its rule on people and communities.

Section 321(a) of the Clean Air Act provides:

> **(a) Continuous evaluation of potential loss of shifts of employment**
> The Administrator shall conduct continuing evaluations of potential loss or shifts of employment which may result from the administration or enforcement of the provision of this chapter and applicable implementation plans, including where appropriate, investigating threatened plant closures, or reductions in employment allegedly resulting from such administration or enforcement.[33]

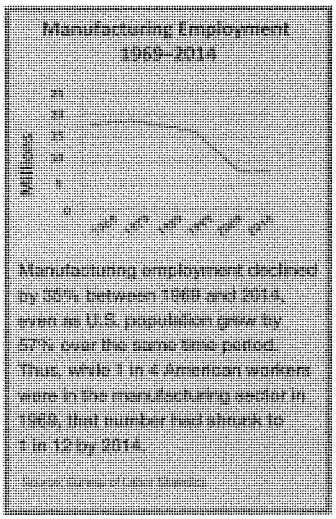
[32] *Whitman v. American Trucking Ass'ns*, 531 U.S. 457, 466 (2001).
[33] 42 U.S.C. § 7621(a). Section 321(a) became law as part of the 1977 Amendments to the Clean Air Act. Similar provisions are contained within the Clean Water Act and other major statutes.

In the legislative history of the analogous provision of the Clean Water Act, Section 507 (e), Representative Bella Abzug stated that "'[t]his amendment will allow the Congress to get a close look at the effects on employment of legislation such as this, ***and will place us in a position to consider such remedial legislation as may be necessary to ameliorate those effects***.'"[34]

Although the information that an evaluation of job loss/displacement would produce could be essential in directing future congressional and agency policies, EPA has refused for nearly 40 years to conduct such an evaluation.

EPA asserts that traditional cost/benefit analyses produced for major rules under Executive Order 12,866[35] are sufficient to evaluate the economic impacts of new regulations. These analyses largely ignore employment impacts from new regulations, however, and fail to identify vulnerable communities that will be hardest hit by new rules.

The job loss/displacement impacts that the continuous evaluation would identify are real. The chart at right shows the long decline in U.S. manufacturing employment since 1969. While it is clear that this decline had many causes, federal environmental regulations were a major contributing factor. Although it is currently difficult to know exactly how many jobs have been lost or displaced due to federal environmental regulations, the continuous evaluation required by Congress would provide this critical information.



The effect of job displacement is known to be particularly hard on older workers, reflecting the difficulty of transferring established skills to new jobs. Among long-tenured displaced workers ages 55 to 64, nearly half (44%) of workers who lost jobs over the three years 2009–2011 were still without a job in January 2012.[36] These impacts would be expected to be worse for lower-skilled, less-educated workers in smaller, more rural communities. Yet EPA avoids its duty under the law to evaluate these real-world impacts. This situation needs to change, so that Congress and the public can see for themselves the true costs and benefits of regulatory programs at the community level.

[34]See *EPA v. National Crushed Stone Ass'n*, 449 U.S. 64(1980) at n. 24 (*emphasis added*) (citing Clean Water Act Leg.Hist. 654-659).
[35]Executive Order 12,866, "Regulatory Planning and Review," 58 Fed. Reg. 51,735 (September 30, 1993).

[36]U.S. Bureau of Labor Statistics, Displaced Worker Survey, January 2012.

Recommendations

EPA needs to conduct the type of **in-depth employment analyses** required by Section 321(a) of the Clean Air Act, in order to provide Congress and the public with information about the impacts its regulations have had on businesses, workers, and communities. Other federal agencies should also be required to conduct analogous evaluations. Only by fully understanding how past regulatory approaches have affected American industries and the communities where they are located can the public see how additional requirements may affect their lives. It is time for Congress to demand that EPA and other agencies look at the long-term impacts of their regulations on real people, in real communities.

In addition, Congress should enact the **Regulatory Accountability Act of 2015 (RAA)**[37] of 2015, which would improve the transparency of regulations by requiring agencies to invest more effort earlier in the rulemaking process to gather data, evaluate alternatives, and receive public input about the costs and benefits of its rules. The RAA would provide stakeholders with a way to confront unfounded assumptions that agencies rely on to make their proposed rules seem less costly and/or more beneficial than they really are. Factual challenges and agency responses to those challenges would be part of the rulemaking record that a court would have before it when it reviews the rule. The RAA would be a powerful tool to keep agencies honest about the claims they make to support new regulations and help to weed out new rules that will do more harm than good.

[37] H.R. 185, passed by the House of Representatives on January 23, 2015; S. 2006, introduced in the U.S. Senate on August 30, 2015.

Notes on Methodology

- This report was developed using a combination of publicly available data taken from federal government sources, including the U.S. Census Bureau, Bureau of Labor Staristics, Environmental Protection Agency, and Occuparional Safety and Health Adminisrration, together with data provided by the Brick Industry Association and individual brick companies affected by the regulations discussed herein.

- The report focuses on five specific brick manufacturing plants that provide a sample of the 70 plants that comprise the U.S. brick industry. The sample was obtained with the assistance of the Brick Industry Association, which polled its membership for volunteers willing to share individual, plant-specific information about their business and how these regulations would impact them. These plants were also chosen because they represent a range of different types of brick plants (e.g., large tunnel kilns, periodic or "batch" kilns, and plants that use specialty source clays. We included companies with a variety of plant sizes, production methods, products, inpur materials, and leadership structures.

- All data on individual brick manufacturing plants, including estimates of their site-specific compliance costs for both the EPA Brick MACT and OSHA Silica PEL rules, come from the brick companies and the Brick Industry Association. However, the costs of the various control technologies and their operation and maintenance are estimated by EPA in the agency's Regulatory Impacts Analysis.

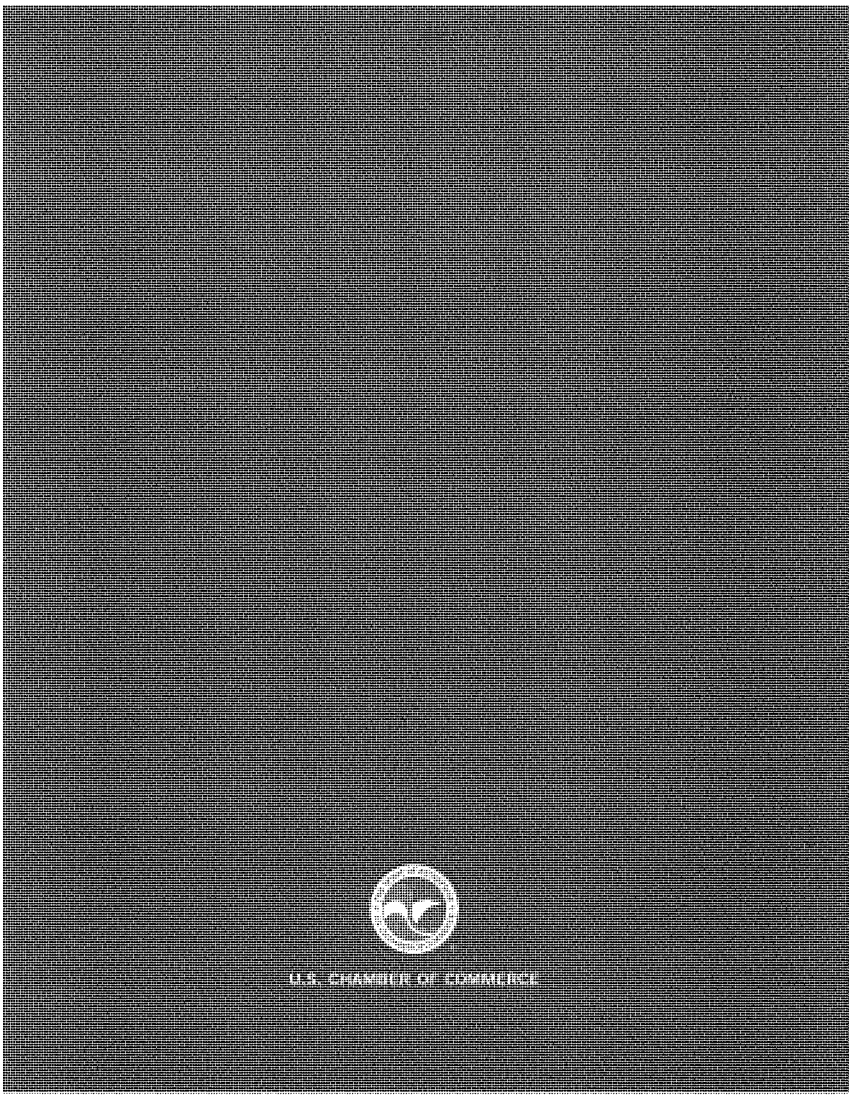
Recommendations

It is time for Congress to demand that EPA and other agencies look at the long-term impacts of their regulations on real people, in real communities. Only by fully understanding how past regulatory approaches have affected American industries and the communities where they are located can the public see how additional requirements may affect their lives. EPA needs to conduct the type of **in-depth employment analyses** required by Section 321 (a) of the Clean Air Act, in order to provide Congress and the public with information about the impacts its regulations have had on businesses, workers, and communities. Other federal agencies should also be required to conduct analogous evaluations.

In addition, Congress should enact the **Regulatory Accountability Act of 2015 (RAA)**[1] of 2015, which would improve the transparency of regulations by requiring agencies to invest more effort earlier in the rulemaking process to gather data, evaluate alternatives, and receive public input about the costs and benefits of its rules. The RAA would provide stakeholders with a way to confront unfounded assumptions that agencies rely on to make their proposed rules seem less costly and/or more beneficial than they really are. Factual challenges and agency responses to those challenges would be part of the rulemaking record that a court would have before it when it reviews the rule. The RAA would be a powerful tool to keep agencies honest about the claims they make to support new regulations and help to weed out new rules that will do more harm than good.

---

[1] H.R. 185, passed by the House of Representatives on January 22, 2015; S. 2490, introduced in the U.S. Senate on August 20, 2015.


U.S. CHAMBER OF COMMERCE

THE HILL

PRICE $3.00 TUESDAY, MARCH 19, 2013 LARGEST CIRCULATION OF ANY CAPITOL HILL PUBLICATION

Regular dust monitoring can help prevent silicosis – not more regulation

By Mark Ellis, president, National Industrial Sand Association

In his State of the Union speech President Obama talked about "smart savings" instead of "reckless cuts" and "smarter government" rather than "bigger government." For the last two years, a proposal has been under review by the White House Office of Management and Budget (OMB) that, if modified, could become an example for the administration of "smart regulation" as opposed to overregulation or ineffective regulation.

The Occupational Safety and Health Administration (OSHA) proposal under White House review would reportedly set a new significantly lower permissible limit for workers' exposure to silica, one of the most abundant naturally occurring minerals on earth. As sand on the beach, silica is harmless, but in the form of tiny crystalline silica particles in the air breathed in by workers, it can cause silicosis, a potentially disabling and sometimes fatal lung disease.

There is no question that silicosis is a completely preventable occupational disease, and there is also no question that responsible companies should do everything necessary to protect their workers. The real question -- what is the best way to do that?

Most of industry has taken a position that no new regulation is necessary, but the country's leading industrial sand producers, which have the longest history of working with silica, believe doing nothing is not an option.

The companies of the National Industrial Sand Association (NISA), which I represent, agree with our friends in labor that we must do more to protect workers. However, we also strongly believe there is a better or "smarter" way to do that than lowering an exposure limit that has a history of noncompliance and little government enforcement.

A smarter approach to preventing silicosis is for OSHA to require employers to conduct regular dust monitoring of their workplaces, implement dust controls needed to comply with the current exposure limit, and adopt medical surveillance programs to identify silica-related disease and halt its progression. In our experience, doing so will prevent new disease.

THERE IS NO QUESTION THAT SILICOSIS IS A COMPLETELY PREVENTABLE DISEASE...AND THAT RESPONSIBLE COMPANIES SHOULD DO EVERYTHING NECESSARY TO TRY TO PROTECT THEIR WORKERS.

We know this approach works because this is what the companies in our association did voluntarily more than 30 years ago and our Occupational Health Program has resulted in the virtual eradication of silicosis from the generation of workers hired by our companies since the program began.

According to the Centers for Disease Control and Prevention (CDC), deaths from silicosis have fallen 93 percent in the United States since 1968, but thousands of the approximately 1.7 million Americans working in manufacturing, construction, and anything that involves breaking up rock, brick or concrete, continue to be over-exposed to silica in the workplace.

The predominant industry position is that the best way to protect workers is stronger enforcement of the existing limit, but everyone knows OSHA doesn't have the resources to do that. Government data shows that approximately 30 percent of the air samples OSHA collects from workplaces exceed the current silica exposure limit.

This means that irresponsible companies know they can flout the law, whatever it is, and likely get away with it. Right now, companies with high levels of silica dust in the air their workers breathe are not even explicitly required by regulation to test that air for silica dust. That needs to change.

Increased enforcement is only part of the answer. A new rule that mandates regular monitoring of the silica dust workers are exposed to and medical surveillance of the health of their lungs will make it more difficult for irresponsible employers to skirt the current law and put their workers at risk.

Labor and some public health advocates claim the best way to protect workers is to cut the limit of permissible exposure to crystalline silica in half. Yet, if 30 percent of the samples OSHA now collects are not in compliance with the current permissible exposure limit, how many would NOT comply with a limit that is half of that? Sixty percent?

The cost of lowering the current exposure limit is an estimated $5 and-a-half billion a year and would do little or nothing to provide safer workplaces. The costs to implement the NISA solution would be only a fraction of that cost.

The industrial sand producers' approach to smart regulation is not based on assumptions or prognostications, but on real life experience of more than 30 years backed up with real data. It has resulted in the virtual eradication of new cases of silicosis in our workplaces and is a model of "smart regulation" that achieves the ultimate goal of protecting American workers.

Ellis is president of the National Industrial Sand Association.

NSSGA NATIONAL STONE, SAND & GRAVEL ASSOCIATION

STATEMENT FOR THE RECORD
OF THE HEARING OF THE

HOUSE EDUCATION AND THE WORKFORCE
SUBCOMMITTEE ON WORKFORCE PROTECTIONS

REVIEWING RECENT CHANGES TO OSHA'S SILICA STANDARDS

April 19, 2016

Submitted By

The National Stone, Sand & Gravel Association

Mr. Chairman, Ranking Member Wilson and Members of the Subcommittee, thank you for the opportunity to submit a statement on behalf of the National Stone, Sand & Gravel Association (NSSGA) to the hearing *Reviewing Recent Changes to OSHA's Silica Standard*.

Silica is the second most common mineral in the world and found abundantly in nature, such as beach sand. Studies have shown that aggregates industry compliance with current regulations has been effective in reducing and appropriately monitoring silica exposure to workers.

In the rulemaking phase for OSHA's revised silica standard on respirable crystalline silica (silica), NSSGA presented voluminous comments and testified at OSHA's public hearings. Additionally, NSSGA and its members held several formal meetings with the OMB Office of Information and Regulatory Affairs (OIRA) to express and reiterate our concerns. Our most recent meeting at OIRA was in February 2016, when an independent expert presented data showing the inability of many commercial labs to provide employers with consistently accurate air-sample test results, particularly at the new permissible exposure level (PEL) and action level for silica.[1]

Based near the nation's capital, NSSGA is the world's largest mining association by product volume. Its member companies represent more than 90 percent of the crushed stone and 70 percent of the sand and gravel consumed annually in the U.S. and employ 100,000 working men and women annually.

The sale of natural aggregates (crushed stone, sand, and gravel) generates over $40 billion annually for the U.S. economy. During 2015, over two billion metric tons of aggregates – valued at roughly $21 billion – were produced and sold in the U.S.

Aggregates are used in nearly all residential, commercial, and industrial building construction and in most public works projects, such as roads, highways, bridges, railroad beds, dams, airports, water and sewage treatment plants and tunnels. While the American public pays little attention to these raw materials, they go into the manufacture of asphalt, concrete, glass, paper, paint, pharmaceuticals, cosmetics, chewing gum, household cleaners and many other consumer goods.

---

[1] The new OSHA silica PEL is 50 micrograms of respirable crystalline silica per cubic meter of workplace air (50 $\mu g/m^3$), expressed as an eight-hour time-weighted average. The former OSHA PEL to which we refer here was equivalent to 100 $\mu g/m^3$, which is also the current silica PEL used by the Mine Safety and Health Administration (MSHA). The new OSHA action level is 25 $\mu g/m^3$,

NSSGA members are committed to providing a safe and healthful work environment for aggregates industry workers. This has been manifest in part by the industry's declining injury rates for 15 consecutive years; NSSGA's establishment of the first ever Alliance with the U.S. Mine Safety and Health Administration (MSHA) for education and training; and, NSSGA's formation of a Safety and Health Pledge signed by CEOs of more than 70 percent of all NSSGA producer companies.

NSSGA has long supported universal compliance with, and enforcement of, the former OSHA PEL for silica, which is protective of worker health. We believe that periodic air monitoring of potentially exposed workers to assure compliance with the former PEL, coupled with medical surveillance where appropriate, and the use of engineering controls, administrative controls and personal protective equipment, as necessary, will continue to reduce the already small number of silica-related disease among workers.

However, an objective review demonstrates that OSHA's new silica rule is not supported by sound science, but imposes unnecessary costs on employers and dilutes critical investments and efforts for science-based worker safety and health.

Background

OSHA and MSHA currently regulate employee exposures to airborne silica particles that are respirable—that is, particles that can be inhaled deep into the lungs. However, long-term exposure to silica at levels below 100 $\mu g/m^3$ have not been shown by sound science to cause silicosis, a debilitating and sometimes fatal disease.

The former OSHA PEL dates to the early 1970s; since then, annual silicosis deaths in the U.S. have decreased considerably. Silicosis still exists; however, the disease likely occurs among workers whose silica exposures began before the 1970s, or whose long-term silica exposures since then exceeded the former PEL. Thirty percent of the employees OSHA samples for silica are exposed above the former PEL.

By contrast, MSHA-measured silica overexposures in the aggregates industry currently average about three percent. Recognizing long ago that opportunities for improvement still existed, NSSGA in 1996 committed publicly to help U.S. Labor Secretary Robert Reich eliminate occupational silicosis in America. One result of that commitment is NSSGA's recognized Occupational Health Program that provides detailed information on reducing workplace silica exposures. Other accomplishments were mentioned earlier.

Discussion

It's important to highlight a few of NSSGA's concerns with the new OSHA standard. First, the majority of NSSGA's member companies are small businesses that are the most adversely

affected by the ever-increasing federal regulatory burden. In this case, OSHA failed to conduct a new small business panel review as called for by the Small Business Regulatory Enforcement Fairness Act (SBREFA). In fact, the agency's only SBREFA review occurred in 2003, over a decade before this regulation was actually proposed. The business environment has changed radically since then and OSHA still needs to hear from small business.

Another key concern is that many commercial laboratories do not provide consistently accurate air-sample test results on which operators must rely. That appears particularly the case at exposure levels that trigger the various requirements of the rule. As a result, employers that depend on accurate test results may be unable to determine reliably whether their operations are in compliance or not.

Among other problems with OSHA's analysis, the agency failed to investigate silicosis data reported by the Centers for Disease Control and Prevention (CDC). OSHA did not examine disease mortality cases to assess their past exposures. Without a thorough understanding of the remaining silicosis cases, it is difficult to understand how OSHA claims that a rule of this magnitude is warranted.

Finally, OSHA has significantly underestimated, by billions of dollars, the costs this rule will impose on employers, significantly impacting economic growth and taking needed investment from the development of programs to more effectively protect human health.

Conclusion

NSSGA supports legislative efforts to prevent funding for implementation of the OSHA Crystalline Silica rule until a SBREFA panel is held and until OSHA commissions an independent study to be conducted by an organization such as the National Academy of Sciences. That study should examine the epidemiological justification for OSHA's reduced PEL and action level, including the steady decline in silicosis rates documented by the CDC; the performance of commercial laboratories to provide consistently accurate test results for workplace air samples (in a manner that meets the NIOSH Accuracy Criterion); the ability of regulated industries to comply with the new PEL and action level; the ability of various types of personal protective equipment to protect employees from exposure to silica; and, the costs of the different types of such personal protective equipment as compared to the costs of engineering and work practice controls related to such equipment.

While NSSGA has long demonstrated its commitment to safety and health, OSHA's new rule will actually make that work more difficult.

Again, thank you for the opportunity to submit this statement.

CHARLES L. GRECO, President
MARK KNIGHT, Senior Vice President
ART DANIEL, Vice President
JOSEPH M. STELLA, Treasurer
STEPHEN E. SANDHERR, Chief Executive Officer
DAVID LUKENS, Chief Operating Officer

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

April 19, 2016

The Honorable Tim Walberg
Chairman
Committee on Education and the Workforce,
Subcommittee on Workforce Protections
U.S. House of Representatives
Washington, DC 20515

Re: AGC Concerns with OSHA's Crystalline Silica Rule

Dear Chairman Walberg:

The Associated General Contractors of America (AGC) thanks you for holding the hearing entitled "Reviewing Recent Changes to OSHA's Silica Standards." The Occupational Safety & Health Administration's (OSHA) final rule reduces the Permissible Exposure Limit (PEL) of crystalline silica exposure to a level that is not technologically or economically feasible. AGC urges Congress to consider legislation that would block implementation and enforcement of the rule so OSHA can better study the impact on small employers and the National Academy of Sciences can determine whether air samples can be accurately tested and analyzed and identify the level and cost of personal protective equipment (PPE) required by the rule.

Crystalline silica is found in numerous building materials and a number of construction activities result in the release of crystalline silica. Silica can be found in concrete, brick, gravel, stone, tile, as well as many other construction materials. Because of the ubiquitous nature of silica, nearly every employee who performs work on a construction worksite will work with or near a product that contains it. While safety is the number one priority for the construction industry, the approach OSHA has taken to regulate crystalline silica exposure in the construction industry could actually compromise safety rather than improve it.

OSHA has not demonstrated that the proposed rule is technologically and economically feasible. AGC further believes that OSHA has not taken the time to adequately answer numerous questions related to this proposed rule and its impact on the construction industry. OSHA's proposal prescribes control methods that contradict existing safety practices and compliance with it will ultimately cost the construction industry nearly $5 billion dollars annually. The proposed rule will also drastically impact small businesses, which have not been given the opportunity to voice their concerns with this proposed rule.

OSHA last convened a small business advocacy review (SBAR) panel to consider an earlier proposed rule regulating crystalline silica in 2003. The 2003 panel recommendations resulted in OSHA withdrawing their original proposed silica rule. Since that time, the economy and the construction industry have changed drastically. In proposing this new rule regulating silica,

2300 Wilson Blvd., Suite 300 • Arlington, VA 22201-3308
Phone: 703.548.3118 • Fax: 703.837.5400 • www.agc.org

OSHA has not only failed to convene a new small business advocacy review panel, but has also ignored the original 2003 panel recommendations.

OSHA's proposed rule drastically cuts the Permissible Exposure Limit (PEL) for occupational silica exposure in construction from 250 micrograms per cubic meter of air to 50 micrograms. The rule also establishes an "action level" (with constant monitoring) of 25 micrograms. OSHA has failed to explain how the drastically lower PEL and action level will effectively reduce the number of silica-related illnesses and deaths with the agency itself admitting to a failure to properly enforce existing standards. Additionally, the Centers for Disease Control (CDC) has reported a 93 percent drop in silica-related deaths between 1968 and 2007. Further reductions through 2010 under the current regulation are expected.

Additionally, laboratories that are responsible for analyzing air samples do not have the ability to measure exposures accurately below the current OSHA exposure limits. Independent studies, and even OSHA's own testing, have shown that the laboratories that would be conducting the exposure testing are only able to determine within a margin of error of ± 50% what level of silica is present in the samples at the significantly lower exposure levels. This means that employers will not be able to reliably determine whether they have met the requirements of the standard.

The rule as written needs to be blocked. OSHA should undertake a new small business review panel to consider the rule and the National Academy of Sciences should be required to study several key concerns that OSHA has not addressed. These questions are paramount in showing the technological feasibility, or lack thereof, of the current proposed rule.

Sincerely,

Jeffrey D. Shoaf
Senior Executive Director, Government Affairs

NATIONAL INDUSTRIAL SAND ASSOCIATION

1200 18th Street, NW • Suite 1150 • Washington, DC 20036
Telephone: (202) 457-0200
Fax: (202) 457-0287
www.sand.org

April 28, 2016

Hon. Tim Walberg
Chairman
House Subcommittee on Workforce Protections
House Committee on Education & the Workforce
Washington, DC 20515

Hon. Frederica S. Wilson
Ranking Member
House Subcommittee on Workforce Protections
House Committee on Education & the Workforce
Washington, DC 20515

Re: OSHA Final Rule on Occupational Exposure to Respirable Crystalline Silica

Dear Chairman Walberg and Ranking Member Wilson:

Thank you for holding your hearing on April 19, 2016, to consider the Occupational Safety and Health Administration's (OSHA) final rule on occupational exposure to respirable crystalline silica. The National Industrial Sand Association (NISA) would like to submit this letter to the hearing record. We commend it to your attention because we believe the position that NISA advanced during the rulemaking represents a pathway toward a workable silica rule that is protective of employee health, feasible for employers, and capable of enforcement by OSHA.

NISA is a nonprofit 501(c)(6) trade association representing the major North American producers and processors of industrial sand (sometimes called silica sand). Founded in 1936, NISA is committed to advancing research and maintaining a dialogue with industry, legislators, regulatory agencies and the scientific community with respect to issues of concern to the industrial sand industry, including the potential health effects associated with the inhalation of respirable crystalline silica. NISA is the oldest and largest trade association representing the industrial sand industry in the United States and Canada.

NISA members strongly believe the exposure monitoring and medical surveillance they implement under the NISA Silicosis Prevention Program (SPP) are the right thing to do. NISA's SPP protects the health of employees and is good for businesses' bottom line. Our members also believe personal dust sampling of employees is the key to ensuring compliance with any permissible exposure limit (PEL) for crystalline silica, and that the absence of an exposure assessment requirement from the former crystalline silica PEL was the principal reason for the persistently high rates of noncompliance OSHA continually witnessed with the former PEL

despite years of focused enforcement. NISA therefore supports inclusion of exposure monitoring and medical surveillance as part of any comprehensive crystalline silica standard.

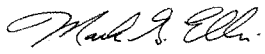
NISA expects all its member companies to implement and manage a comprehensive Silicosis Prevention Program (SPP) – including exposure monitoring and medical surveillance – at all worksites sufficient to eliminate silicosis among its employees. NISA's data covering the past 20+ years demonstrates that implementation of the SPP by companies has eliminated the creation of new silicosis cases among those companies' employees. This experience demonstrates that the former 100 $\mu g/m^3$ PEL is adequate to substantially reduce significant risk of material health impairment from silicosis sufficient to meet the requirements of Section 6(b) of OSH Act if supported by the proposed ancillary provisions, triggered by an action level of 50 $\mu g/m^3$, and if the former 100 $\mu g/m^3$ PEL is strictly complied with.

As NISA's detailed comments in the rulemaking demonstrate, OSHA has not established that a significant risk of material health impairment from crystalline silica exists at the former 100 $\mu g/m^3$ PEL, or that any such risk would be substantially reduced by a PEL of 50 $\mu g/m^3$. To substantially reduce any risks of material health impairment from workplace exposure to crystalline silica arising from the persistently high level of noncompliance with the former PEL, NISA strongly supports the "NISA Solution": a comprehensive standard, in the form of a variant of OSHA's Alternative #1: the former 100 $\mu g/m^3$ PEL and an action level of 50 $\mu g/m^3$, with exposure monitoring and medical surveillance triggered by exposures above the action level. The NISA Solution is economically and technologically feasible – particularly if, as NISA predicts, many establishments internalize the costs of exposure assessment.

NISA supports the intended purpose of April 19 hearing to ensure public policy establishes a workablesilica rule that is protective of employee health, feasible for employers, and capable of enforcement by OSHA. We believe the NISA Solution marks a path to such an outcome.

Before, during and after the OSHA rulemaking, NISA made its case in various fora. Our comments to OSHA are the best source for ascertaining our evidence on the matter. However, a letter to the editor of *The Hill* newspaper we authored prior to OSHA's issuance of its proposal speaks to the issue of "smart regulation," which we believe is at the heart of what you seek to accomplish. A copy is attached for your consideration. We believe it captures, in readily digestible form, salient issues the Subcommittee should continue to consider in light of your hearing. We request the inclusion of this letter and its attachment in the hearing record.

Respectfully submitted,



Mark G. Ellis
President

Attachment

cc: Members of the House Subcommittee on Workforce Protections

[Additional submissions by Ms. Wilson follow:]

March 27, 2014

Alan White

USW Local Union 593

Good morning. My name is Alan White. It is an honor to be here. Thank you for your time.

Do I look sick? I have silicosis.

I worked in a foundry for sixteen years. I am not a supervisor, I am from the floor. I saw the foundry from a vantage point not seen by visitors or those who listen to management describe what goes on. We clean for up to a week before visitors come by and only start operations when visitors are in position to see us start; then they leave after a few minutes and we go back to normal...dirty, filthy and dusty. The dust settles everywhere only to get stirred up again by brooms, forklift exhaust and other things. Nothing cleans the crane rails 50 feet above the floor or the ceilings like the concussion from an explosion. The operation at our foundry in Buffalo, NY is more complex than it looks. A lot of training, smarts, guts and experience are the only things that can help you understand the finer points of how to pour 60K# of quality brass, bronze or copper each time. In 16 years as a general helper, I performed every job in every step of our process, having trained on them immediately after I was hired. In addition to learning all the jobs, I learned about product quality, efficient work practices and how to not blow myself up. From materials testing and handling to furnace operation and furnace lining cleanup, repair, mixing and maintenance, I was known as a good worker on every job in the department and I worked with or around silica containing products without knowing the dangers or any precautions to make a safer environment for myself. I learned that a dust mask was hardly, if ever needed to do most jobs there. Part of my training, encouraged by the culture of the foundry, was that respiratory protection was not necessary unless while skimming slag out of the brass furnaces in order to avoid zinc flu and that protection was only a dust mask. I was test fitted by the safety department for a dust mask, an N95 dust mask style respirator and a dual cartridge respirator in my first year, 1995, and was told that I would never use anything other than the dust mask in the foundry because only it was needed. We were taught that while cleaning or doing other jobs that if we were overcome by dust or other smoke, we should go outside and get some air then come back when we felt better. An employee who wore a respirator when working in the foundry was repeatedly called crazy. Never were there any warnings and no information was freely available about the products we worked with. In our safety training there was always hearing and vision checks, forklift safety and slip, trip & fall and accident prevention classes. Only recently, 3 years after I left the foundry was there a brief class on respirators. Not ever a mention of silica, or its dangers.

It's easy to think that if there were a stricter OSHA standard for silica in place when I worked in the foundry, I might not be sick. You're right. There are other things you should know in order to have an understanding of some things a stricter standard can help workers and also their employers avoid,

based on what happened in my firsthand experience. First of all, for me, there was the growing problem of being out of breath sooner than I used to. That's a difficult situation for a competitor, especially since I didn't know why. Then, I received a big surprise during the conversation with the first doctor when I found out that I have silicosis and that I will lose my job. He and the other doctors all agreed that the diagnosis is silicosis. Watching your wife and other loved ones cry as they figure out what silicosis is was a big hit and then, shortly afterward, there was the radical pay cut from a transfer out of the foundry to a department where I knew nothing because I chose my health over money. Thank God because of my seniority, I was able to get a decent job later to make some of that up. Meanwhile, there was a recollection of past events that foretold of the silicosis; the getting out of breath sooner, the fading endurance of what used to be easy tasks for someone in shape; but since I didn't know, I didn't know. There are the compensation hearings where the lawyers say that the company doesn't use any silica containing products and when that doesn't work, they try everything else under the sun. Company officials that praised me in the past lied about what I did while in the foundry. There was and still is the struggle on my new job to deal with irritants that will affect my breathing and performance far sooner than anyone else because of the damage to my lungs and the resistance of the company to assist me in this matter even though they know my condition. The safety department manager and a company official who was at the comp hearings wrote me up, or disciplined me, recently for wearing breathing protection because in their words, "it's not necessary", and in so many words, "you don't need it because we say so". Later it was, "if you keep wearing that, eventually everyone will want to wear one." Thank God that I belong to the Steelworkers or I definitely would've been fired for trying to protect my already damaged lungs. My union has ever heard of anything so callous and careless, especially since the company allowed several others to wear the type of respiratory protection they didn't want me to wear. There are also difficulties outside of work and issues for me to look forward to in the future. Walking while talking on a cell phone is very exhaustive, as well as walking up the stairs from my basement to my second floor apartment. I have increasing difficulty on my current job. Certain irritants like air fresheners, potpourri and cleaners make home life increasingly difficult and I was told that it's downhill from here for both work and home life.

What happened to me is preventable with this proposed standard in effect and it can help companies too. The company I work for can avoid losing a person who could fill any opening in the foundry, which costs time and money to replace, as the amount of jobs known by general helpers is voluntary; they can learn one job or all or in between. The first two years, the company needed three people on the shift to cover the jobs I used to cover when I was there in the foundry. In addition, the mistakes made by trainees cost money.

As much as they plaster 'your safety is our number one priority' throughout the facility, they could easily mention the dangers of working with silica and the corresponding protective measures in safety training, all for less money than replacing good people. My employer is just like every employer in the world; they don't want someone to miss a lot of time from work, or be unable to perform their duties for whatever reason, especially after investing in training them. That's why they interview, check references and require physicals and more to make sure they hire the right person for the job. They want someone there for the long haul. If the employee has to stop working because of silicosis, the

company loses. Companies also preach continuous improvement to their employees so they themselves need to accept this proposed standard as part of continuous improvement. With the new OSHA standard in place, there can be more warnings about silica and protective measures put in place to keep people like me from saying a stricter standard could have helped me stay on the job. Thank you and have a nice day.

Union of Concerned Scientists
ucsusa.org Two Brattle Square, Cambridge, MA 02138-3780 t 617.547.5552 f 617.864.9405
1825 K Street NW, Suite 800, Washington, DC 20006-1232 t 202.223.6133 f 202.223.6162
2397 Shattuck Avenue, Suite 203, Berkeley, CA 94704-1567 t 510.843.1872 f 510.843.3785
One North LaSalle Street, Suite 1904, Chicago, IL 60602-4064 t 312.578.1750 f 312.578.1751

21 April 2016

Statement on the OSHA Rule
Occupational Exposure to Respirable Crystalline Silica

On 25 March 2016, the Department of Labor issued the long-awaited silica rule to protect workers from health effects of crystalline silica dust exposure.[1] The rule is overdue ever since the department's original 1971 silica standard, which has long been inadequate and outdated. The new rule should be celebrated; it has now caught up to science and will save more than 600 lives per year and have a net benefit of $7.7 billion annually.[2] But we also need to take a longer look at why something that made so much sense has taken so long to be implemented and why it's still under attack.

Scientists have known for decades about the health effects of silica dust exposure, including silicosis, an irreversible and debilitating lung disease that can cause respiratory failure among other problems.[3] Silica is widely used in the construction, food, pharmaceutical, and many other industries and silicosis occurs when workers' inhale the respirable crystalline silica dust that can get into the air.[4]

Remarkably, none of this is new science. Back in the 1930s, the construction industry was conducting studies on exposure of workers to silica dust and the incidence of silicosis. In an infamous Gauley Bridge tunnel incident, hundreds of workers died of silicosis and it all could have been avoided if a "wet drilling" technique was used to keep the dust down.[5,6] But doing so slowed the process so the construction company only used it when inspectors were present.

Despite this overwhelming evidence of harm and knowledge of how to prevent it, such common sense protections were not put in place sooner.

Industry Interference and Regulatory Delay at the OMB

In 2013, my colleague Michael Halpern wrote that it could be years before the silica rule would be in place.[7] He was right. He knew that delay by the Whitehouse Office of Management and Budget (OMB) would slow progress on the rule, while workers continued to be needlessly exposed to silica dust and risk developing silicosis and other lung ailments.

---

[1] https://www.osha.gov/silica/
[2] Ibid.
[3] https://www.osha.gov/dsg/topics/silicacrystalline/health_effects_silica.html
[4] Ibid.
[5] Cherniack, Martin (1986). *The Hawk's Nest Incident*. Yale University Press. ISBN 978-0-300-04485-0.
[6] Michaels, David. (2008). *Doubt is their product*. Oxford University Press: London
[7] http://blog.ucsusa.org/michael-halpern/white-house-finally-releases-silica-rule-217

Printed on 100% post-consumer recycled paper

In addition to this regulatory delay by OMB, we cannot overlook the role that industry has played in obstructing scientific understanding of the harms of silica and development of protections.

The chemical industry has long fought the Occupational Safety and Health Administration (OSHA) on regulation of silica. In his comprehensive book *Doubt is Their Product*, scientist and OSHA head David Michaels observed, "In virtually every instance in which a federal regulatory agency proposes protecting the public's health by reducing the allowable exposure to a toxic product, the regulated industry hires scientists to dispute the science on which the proposal is based."[8]

Indeed, this was the case with silica. The chemical industry engaged on a decades-long fight to cast doubt on the health effects linked to silica exposure. While thousands of exposed workers developed silicosis and died, the industry hired firms to run counter analyses to suggest no link between silica exposure and silicosis.[9]

Industry works to undermine OSHA efforts to protect workers' health

In 2013, OSHA proposed to tighten the silica standard to better protect workers exposed to potentially harmful silica dust. Several industry players, including the American Chemistry Council (ACC) and the U.S. Chamber of Commerce strongly opposed the proposal, citing possible effects on capital investment and technology requirements and questioning the science on which it was based.[10]

In response to OSHA's proposed silica rule, the American Chemistry Council testified in a hearing in 2014, challenging the scientific basis for the rule.[11] Despite longstanding and numerous studies demonstrating the public health dangers of silica, the trade group inexplicably asserted that the strong scientific evidence was "not trustworthy" and "not ready for prime time".[12] The Crystalline Panel division of the ACC released a statement calling itself "committed to the prevention of adverse health effects" resulting from respirable silica dust, despite also noting that the panel does "not believe there is a need for a new crystalline silica standard".[13]

The influence of industry in the process made such an impact that OSHA took an unprecedented step: In a move the first of its kind, the agency asked anyone submitting public comments on the silica rule to disclose financial ties and any conflicts of interest, a great step toward greater transparency around who is influencing a rulemaking process.[14]

---

[8] Michaels, David. (2008). *Doubt is their product*. Oxford University Press: London

[9] Ibid.

[10] Goldman, Gretchen; Christina Carlson, and Yixuan Zhang. 2015. *Bad Chemistry: How the Chemical Industry's Trade Association Undermines the Policies that Protect Us*. Union of Concerned Scientists. Cambridge, MA.

[11] https://www.americanchemistry.com/Media/PressReleasesTranscripts/ACC-news-releases/Crystalline-Silica-Panel-Statement-on-New-OSHA-Silica-Regulation.html

[12] http://www.bna.com/chamber-commerce-chemistry-n17179888697/

[13] https://www.americanchemistry.com/Media/PressReleasesTranscripts/ACC-news-releases/Crystalline-Silica-Panel-Statement-on-New-OSHA-Silica-Regulation.html

[14] http://www.bna.com/request-silica-commenters-n17179878313/

New protections from silicosis for workers

With a new rule finally in place, OSHA and others who fought the good fight to get this rule passed, should take a bow and celebrate. This was a hard battle but they've won. Now countless workers will be protected from risking sickness and death from needless exposure to silica dust.

Unfortunately, proponents may not have time to relax. Members of Congress at a hearing on April 19 were questioning the science that the rule is based on.[15] Despite decades' worth of science, politics continues. But as Representative Frederica Wilson asserted in the hearing on silica, "The science is clear."[16]

Sincerely,

Gretchen Goldman, Ph.D.

Lead Analyst
Center for Science and Democracy
Union of Concerned Scientists
1825 K Street NW, Suite 800
Washington, DC 20006

[15] https://www.youtube.com/watch?v=gVmrLsy0VEU
[16] http://edworkforce.house.gov/calendar/eventsingle.aspx?EventID=400579

Building and Construction Trades

www.BuildingTrades.org

SEAN MCGARVEY
President

BRENT BOOKER
Secretary-Treasurer

NEWTON B. JONES
1st Vice President

WILLIAM P. HITE
2nd Vice President

KINSEY M. ROBINSON
3rd Vice President

PATRICK D. FINLEY
4th Vice President

JAMES P. HOFFA
5th Vice President

TERRY O'SULLIVAN
6th Vice President

JAMES BOLAND
7th Vice President

FRANK J. CHRISTENSEN
8th Vice President

KENNETH E. RIGMAIDEN
9th Vice President

JAMES T. CALLAHAN
10th Vice President

JOSEPH SELLERS, JR.
11th Vice President

LONNIE R. STEPHENSON
12th Vice President

ERIC M. DEAN
13th Vice President

JAMES P. McCOURT
14th Vice President

NORTH AMERICA'S
BUILDING TRADES UNIONS
Value on Display. Every Day.

April 19, 2016

TO: All Members of United States Congress

Silica dust is a killer that causes silicosis, lung cancer and other disabling diseases. We have known the dangers of breathing this deadly dust for hundreds of years. The health risk and control methods were documented in government reports and shared with industry almost 80 years ago. We have known for more than 40 years that OSHA's existing construction standard limiting silica exposure was insufficient to prevent worker deaths and illnesses. And since the 1990's, silica has been known to cause cancer and has been listed as a regulatory priority by both Democratic and Republican Administrations.

The new comprehensive silica standard OSHA issued a few weeks ago is long overdue. It was delayed for decades by groups that raised industry fears but failed to share the facts. In developing the standard, OSHA solicited input from the public, gathered data, and conducted a year-long notice and comment rulemaking proceeding, in which hundreds of organizations and individuals participated. The resulting standard, which takes into account the concerns of construction workers and large and small contractors, is reasonable, feasible and affordable. It gives employers the flexibility to tailor solutions for the specific conditions on their jobsites, while ensuring that workers are protected.

The standard also reflects clear scientific evidence that exposure to respirable crystalline silica can lead to debilitating and fatal illnesses, beyond silicosis and lung cancer -- including COPD and kidney disease. Construction workers are becoming ill and dying needlessly from silica exposure. Without this comprehensive standard, silica will continue to be a deadly hazard for working men and women in the construction industry.

Together, we urge members of Congress to support OSHA's silica standard and reject any proposals that would undermine or further delay the implementation of this critical standard. It's time to stop stalling – and to start protecting workers from silica.

815 SIXTEENTH ST., N.W., SUITE 600 • WASHINGTON, D.C. 20006-4104 • (202) 347-1461 • Fax (202) 628-0724

General President
International Association of
Heat & Frost Insulators & Allied
Workers

General President
Laborers' International Union of
North America

International President
International Brotherhood of
Boilermakers, Iron Ship Builders,
Blacksmiths, Forgers, & Helpers

General President
International Union of Operating
Engineers

President
International Union of Bricklayers
And Allied Craftworkers

General President
International Union of Painters
and Allied Trades

General President
International Union of Elevator Constructors

International President
United Union of Roofers,
Waterproofers and Allied Workers

General President
Operative Plasterers' & Cement Masons'
International Association of the US &
Canada

General President
Sheet Metal Air Rail & Transportation

International President
International Brotherhood of Electrical
Workers

General President
International Brotherhood of
Teamsters

General President
International Association of Bridge,
Structural, Ornamental and Reinforcing
Iron Workers

General President
United Association of Journeymen &
Apprentices of the Plumbing & Pipe
Fitting Industry of the US and Canada

President
North America's Building Trades Unions

Signature	Printed Name	City/Town, State
	Brian H. McLaughlin	South Amboy N.J.
	Butch Kenan	Bronx NY
	John P. Tarr	Mahopac NY
	NANCY M. BREHENY	BURBANK, IL
	Jean Marie Lowery	Palos Park, IL
	LIN ALLEN	INVERNESS, IL
	LINDSAY AMUNDSEN	CANADA
	K MAHONEY	ORLANDO, FLA
	Michael Cunningham	Austin, TX
	[illegible]	[illegible]
	JASON BUSTEK	WASHINGTON, DC
	Nick S. Gigas	Levittown NY
	FRENKI VERBANAC	WHITESTONE, N.Y.
	James Frontani	MARYLAND
	April Nagel	Aslip, IL

Signature	Printed Name	City/Town, State
	James Sype	Okemos, MI
	Jonathan DeRoo	Chesterfield Twp., MI
	Tim Still	Pasco WA
	Alexander Sanchez	Baltimore, MD
	Robert S. Garrison	Westfield, NJ
	Tim Quis	Danbury, CT
	Kevin Dunne	Chappaqua, NY
	Kristin Mighty	Frederick, MD
	Rick Binetti	Baltimore, MD
	Melissa Wells	Wash. D.C.
	DENNIS DUFFER	OHIO STATE B.P.
	David Cox	Eaton Ohio
	Michael Cavanagh	NYC, NY
MICHAEL CAVANAGH		Hoboken N.Y.
JOHN SHEEHY		EMERSON N.J.

Signature	Printed Name	City/Town, State
	JOHN MOHLIS	OREGON CITY, OR. 97045
	ELHAMOD OMAR	DENVER, CO
	Michael Gleiferst	LAKEWOOD, CO
	Justin Pomerville	Saginaw MI.
	Bob DiOnio	SMART
	Leo Lipsio	[illegible]
	Shelby L. Ardolino	Levittown, PA
	Shane Nehls	Portland, OR.
	Joseph Bowers	Portland, OR
	Monte Tarbox	Silver Spring MD
	Michael Fina	New York NY
	GREG GUEST	DAYTON, OH
	Michael Cook	Lakeville, MN
	RICHARD L. TAYLOR	WICHITA, KANSAS
	Bill Urton	wichita KS.

Signature	Printed Name	City/Town, State
	Jean-Paul Itz	Reston, VA
		Old Bridge, NJ
	JASON A. REQUA	Hamlin, N.Y.
	RICK WILLIAMSON	BUFFALO NY
	John F. Capo	Totowa NJ
	KEN SIMONE	HANOVER N.J.
	LARRY-IANNACCONE	ELIZABETH NJ
	LEON E JONES JR	MT. Holly, NJ.
	JAMES B KEHOE	Mt Laurel NJ
MARK ROCHE	MARK ROCHE	BUTLER, NJ
	W. MULLEN	CLARK, NJ
	Congressman Donald Norcross	Camden, NJ
	Richard Sweeney	Marlton NJ
	PAUL W LOUKOWSKI	DEMFORD WEST JERSEY
	MATT F O'BRIEN	Cherry Hill NJ

Signature	Printed Name	City/Town, State
	Mal Mulligan	Commack, NY
	Mike Gary	Queens NY
	John Cistaro	Clark, NJ
	Kim Ciccio	Owings, MD
	Lauren Schap	Philadelphia, PA
	Michael Moran	Chicago IL
	Paul Gunger	Alsip IL
	Brad Spiess	Chicago, IL
	MIKE HOLT	WASHINGTON, DC
	PATRICK O'BRIEN	East Greenwich RI
	Christopher Delany	Chicago, IL
	KATRZYNA PANUMA	CHICAGO IL
	RHODA KACHILO	W., DC
	Jon Bensel	Chicago, IL
	Neal Brown	NY, NY

Signature	Printed Name	City/Town, State
[illegible]	Robert Boskind	Chic IL
[illegible]	Todd R. Villa	CHICAGO IL
[illegible]	Keith McCoy	Chicago IL
[illegible]	Nick Reno	Chicago, IL
Patrick Quigley	Patrick Quigley	Chicago, IL
[illegible]	John Gallagher	Skokie IL
[illegible]	Simona G.	Skokie IL
[illegible]	Scott Murphy	New Orleans LA 70124
[illegible]	Ricardo T. Dox	Santa Fe, TX
[illegible]	Coy Fox	Ogden Dunes, IN
[illegible]	James Blevins	HOBART, IN
[illegible]	Ken Seramur	Hebron IN.
[illegible]	Fred Summers	Portage IN.
[illegible]	Ron Wart, Jr	MUNSTER, IN
[illegible]	ROBERT FULTON	CHGO, ILL

Signature	Printed Name	City/Town, State
	Russell Simon	SF, CA
	Kenneth Slamen	Atlanta GA
	Dale R Cullum	Col. SC
	Dan Prymek	Cumming IA
	Brian Doherty	Boston, MA
	RAY ROBERTSON	FAIRFAX, VA
	Michael J Cogan	Hughesville Md
	Frank Murco	Glen Ellyn, IL
	ED URBAUER	ALSIP, IL
	Michael E. Martin	Republic, MI
	Celeste Burns	Gary, IN
	Vicki O'Leary	Chicago IL
	JAMES V GALLERY	CHICAGO IL
	Pommella Wegmann	Zwingle, IA
	Colin J Millard	Horicon WI

Signature	Printed Name	City/Town, State
	JEFF P. MEYER	FORT MILL, SC.
	Lucille A Marros	Joliet, IL
	[illegible]	[illegible]
	Kevin Byrnes	Reston, VA
	Jack [illegible]	W H CT
	David Murray	Alsip, IL
	Russell Gschwind	Chgo IL
	Rosemary Gschwind	Chgo IL
Patricia Bach	PATRICIA BACH	Bloomingdale, IL
Linda Wojcicki	Linda Wojcicki	Bloomingdale, IL
Gerald Bach	GERALD BACH	BLOOMINGDALE IL
	Stan Wojcicki	Bloomingdale, IL.
	Toni Cosentino	Worth IL
	Larry Cosentino	Worth IL
	Jeff Benoit	Atlanta DL

PL63

Signature	Printed Name	City/Town, State
alba Fulton	ALBA FULTON	CHGO / IL
Thomas Lane	Thomas Lane	local 7 tmt
William Reilly	William Reilly	LOCAL #7
Patrick Bonici	Patrick Bonici	local 7 TmT
William G Hill	William HILL	Local 7 TMT
Adolfo Di Cosmo	ADOLFO DiCOSMO	LOCAL 7 TMT
Matthew Guy	MATTHEW Guy	LOCAL 7 TMT NY/NJ
Kenneth C Kudela	KENNETH Kudela	Vermilion, Oh.
Don Huss	Don HUSS	Oregon, Ohio
Russel Smith	Russel Smith	Cleveland, Ohio
D Stubar	DAVID STUBAR	Detroit MI
Mike Shelton	Mike Shelton	Washington DC
Tom Ward	Tom Ward	Woodhaven, MI
Dale McNabb	Dale McNabb	Warren MI.
Timothy Brown	TIMOTHY BROWN	MILWAUKEE, WI

Signature	Printed Name	City/Town, State
	David Taylor	San Diego, CA
	RANDY KENDER	WASH, DC
	Christopher Griffin	NEW MARKET, TN
	TONY HERBERT	LOU, KY
	James Hewitt	San Jose, CA
	STEVE CASTON	SACRAMENTO, CA.
		Wash DC
	MATT STONE	ST. PAUL MN
	GARY M. WATKINS	Chattanooga TN
	PETE RIMSANS	Indianapolis, IN
	BRAD CHAMNESS	South Bend, IN
	JEFF Hamilton	Portage, IN
	MATT ABERL	TOLEDO, OH.
	Robert J Lynn Jr	Toledo, OH
	Greg Massey	MPLS, Minn

Silica Petition
Safety & Health

Signature	Printed Name	City/Town, State
Joseph Santigate	JOSEPH SANTIGATE	NYC, NY
[illegible]	Michael Theriault	San Francisco, CA
Danny Painter	Danny Painter	Chatt. TN
Bob Greiner	BOB GREINER	PITTSBURGH PA
[illegible]	DAVID C. ZIMMERMAN	ST. LOUIS, MO.
R.J. Trentadue	Ralph Trentadue	Houston, TX
R Allen Spears	Robert Allen Spears	Abingdon, MD
[illegible]	[illegible]	Chicago, IL
[illegible]	MICHAEL ASHMAN	LOS ANGELES CA
Thomas E George	Thomas E. George	STlouis. MO
[illegible]	Thomas Lutzke	St Louis, MO
Mike Compton	Mike Compton	South Bend, IN
[illegible]	Terence P Joyce	Cleveland, Ohio
[illegible]	Ted Chandler	Pasadena. CA
[illegible]	Alvin Warwick	Greensboro, NC

Signature	Printed Name	City/Town, State
	Paul R Moreno	San Bernardino, CA
	Terrence Larkin	Pgh PA
	Bryan Flannery	Akron, OH
	Anthony Dilaura	Rochester NY
	William E Nagel	New York, NY
	Jeremiah Sullivan	Dix Hills New York
	Jim Bolland	Carrick-on Shannon
	Frank Petrowski	Buffalo NY
	Chuck Kukawka	Harsens Island, Michigan
	Tim Russell	Oakdale, LA
	Laine Gehr	Bac Locals Harrisburg, PA
	RANDY EBERLY	BAC LOCAL 5 HARRISBURG, PA
	ERNESTO DANE	IUJAC
	DAN ZAUAGNO	Cleveland Ohio
	MIKE DIVIRGILIO	BFLO, NY

Signature	Printed Name	City/Town, State
	Mike Pulsinelli	50 Passaiqeany Passaiqeany NJ 07054
	Nelson F. Charron	48 Pheasant Way So. Glens Falls, NY 12803
	Jeff Gunyup	Albany NY 890 Third St
	Robert Butler	Braintree MA 02184
	Kevin Collins	Canton MA 02021
KARA Bendery	KARA Bendery	Braintree, MA 02184
	Joseph M Little	Pittsburgh PA
	MICHAEL M LEAF	PITTSBURGH, PA.
	KEVIN Collins	WASH D.C.
	Mike Montero	Mpls / Mn
	Kelli Andrecik	Chicago IL
	Tim Drea	Springfield IL
	Chuck Hytten	Yorktown Hgts. NY
	Gary M. Payer	St. Louis, MO
	Gerard Feeley	New York, N.Y.

Signature	Printed Name	City/Town, State
	John Wade	Brick, NJ
	Ray Woodall	Pen Argyl, PA
	Tom Villanova	Chicago, IL
	Tim Sujke	NY, NY
	Matt Johnson	St. Paul, MN
	Zane Hebbard	Lansing, MI
	Nelson McMath	Ann Arbor, MI
	John Glynn	NY, NY
Melvin L. Brewer	Melvin Brewer	Chattanooga TN
	JOHN MCMANUS	CHICAGO IL
	Brian M. Matejka	Mokena IL
	Edward Otsot	
	Megan Cornish	Syracuse NY
	Thomas Heavrand	Dunmore PA
	Stacey NAVAS	NY, NY

Signature	Printed Name	City/Town, State
	C. AQUIN	LAS VEGAS, NV
	RAYMOND KERN	HENDERSON, NV
	Jolle Wuertenberg	Mickleton, NJ
	Edward NAVARRO	LAWTON, OK
	Tom Brandel	Attleboro, MA
	John O'Donnell	Attleboro, MA
	Kenneth R. Woods	Wilmington, De
	JERRY GONTZ	Phila, PA
	JAMES L Shubeyne	HARRISBURG PA
	Thomas D Trapizon	MARYVILLE TN
	Joe Knott	Owensboro Ky
	GIAN RICCHEZZA	PHILADELPHIA, PA
	JONATHAN DAVIDSON	PHILADELPHIA, PA
	Anthony Bruccoleri	Staten Island, NY
	DAVID B. Williams	Newburgh N.Y.

Signature	Printed Name	City/Town, State
	Brian J. Doherty	McLean VA
	Deborah C. Nisson	Shady Side, MD
	Dan Emery	Brant Rock, MA
	Brian J. Hale	Alexandria, VA
	Larry Paradise	Chicago, IL
	Maimuna Sallou	Silver Spring MD
	Mae Palmer	Washington, DC
	Cori Houlihan	Washington, DC
	Denise Adamson	Dallas, GA
	PAUL Kelly	ANNAPOLIS MD.
	Sean Kelly	Annapolis, MD
	Kevin Murphy	Frederick MD
	Howard Reich	Richmond, VA.
	MICHAEL MOYLAN	Sacramento, CA.
	Brett McCoy	Annapolis, MD

Signature	Printed Name	City/Town, State
	Matthew R. Lydon	Las Vegas Nv.
	Anthony H. Nicholson	Nashville, TN
	L. Todd Diorio	Newburgh N.Y
	Matt Stobbard	Walden N.Y
	Michael Gayclos	New Burgh NY 12550
	Dean M. Tamburri	Newburgh, N.Y. 12550
	Tim Fragoso	Worcester MA
Matthew Harrigan	Matthew Harrigan	Boston MA
	Jamie McCart	Canton, MA
	John Martin	Boston, MA.
	Rick Keogh	Boston, MA
	Michael Hatfield	Providence, RI
	Robert Keogl	Boston, MA
	Marco Frausto	Los Angeles, CA.
	Vidal Zambrano	Los Angeles, CA

Signature	Printed Name	City/Town, State
	John Kleiber	Gladstone MI. 49837
	THOMAS KLINGERBERG	Phila. PA LOCAL 19 19147
	TIM MOENNICH	CLEVELAND OHIO 44145
	John E Driscoll	Medina OHIO 44256
David Kuras	DAVID KURAS	WARREN MICHIGAN 48093
	Shaun Enright	Toledo, OHIO 43605
	TOM GERMUSKA JR.	Willoughby, OH 44095
DAVID SCHUTTA	David S. Schutta	Mpls. MN 55311
Joe DeRasmi	Joe DeRasmi	Mpls. MN. 55413
	Jarrod Asleson	MN 55079
	Chad Morris	Mpls, MN 55413
	A.J. STOKES	Columbus, OH 43209
Kyle McDermott	Kyle McDermott	Columbus, OH 43214
Ralph Affrunti	RALPH AFFRUNTI	CHICAGO, IL
	ANDREW PATAKY	BARRINGTON, IL

Signature	Printed Name	City/Town, State
	Paul Rustand	Chesterfield ME
	James Boylanski	Kittanning ME
	Erik Lynch	Millington ME
	EDWARD C SULLIVAN	LINCOLN NH
	Robert Ozinga	Centreville MD
	Justin Dalton	Sacramento, CA
	Steve Ingersoll	Sparks, N.V.
	BRANDON LEW	RIVERTON, UT
	Mark L. Kyle	Alameda, CA
	Rodney Young	Reno, Nevada
	MICHAEL ASHWORTH	Nashville, TN
	Scott Spring	Los Angeles CA
	KEVIN KIRK	GLEN ROCK NJ
	Pat TIRINO	Albany, NY
	BOB MASTELLO	Schenectady NY

Signature	Printed Name	City/Town, State
	JAY POTESTA	Indianapolis, IN
	BRENT R BEASLEY	ORANGE, CA
	DOUG ZIEGLER	OAKLAND, CA.
	KEVIN NORTON	LONG BEACH, CA.
	Jason B. Smith	Indianapolis, IN
	Susan Fleckauer	Indianapolis, IN
	Blair Boylan	Carmel, IN
	Kathleen L Pappas	Roslyn Harbor, NY
	Patti L. Morgan	Shreveport, La.
	Brian Short	West Terre Haute IN
	Chris Guerrero	Fort Wayne, IN
	DAVID A. FRYE	Indpls, In
	Joe R Hardwick	Gaston, IN
	Jeremy Rivas	Portage, IN
	Steve Knowles	Lafayette, IN

Signature	Printed Name	City/Town, State
	John R McTerre	Wash, DC
	Steve Bailey	St. Louis, MO
	Dustin T. Reinstedler	Louisville KY
	Stephen R. Nemes	Madison, IL
	Ted Champ	Redkey IN
	Fred Hubbard	Cuti OH
	Steve Hunter	Terre Haute, IN
	Timothy D. Ely	Columbus, Ohio
	Tim Spaulding	Indianapolis, IN
	William Orbick	Springfield, Ill.
	Kevin Starr	Anna, Il.
	John Price	Hebron IL
	Glenn Head	Fort Wayne, IN
	David Ybarra	Mplc. BTC
	Johnny Simanski	S.D. CAL

Signature	Printed Name	City/Town, State
[illegible]	Richard E. Tolson	Ocean City NJ 08226
[illegible]	Keith Hocevar	Mentor, OH 44060
[illegible]	Michael J Clifford	Tuxedo NY 10987
[illegible]	JACK ARGILA	LIC NY 11101
[illegible]	MICHAEL BARBERA	LIC, NY 11101
[illegible]	Kevin P. Potter	So. Glens Falls, NY 12803
[illegible]	DALE STEHLIN	WATERTOWN NY
[illegible]	[illegible]	DAYTON KY
[illegible]	[illegible]	[illegible]

Signature	Printed Name	City/Town, State
Freddie R. Hubbard Jr.	Freddie R. Hubbard Jr.	Cincinnati Ohio
George M. Mellert	George M. Mellert	Fairborn, Ohio
Ken Kastelic	Ken Kastelic	Mentor, Ohio
[illegible]	[illegible]	[illegible]
[illegible]	Shawn E Herzog	Huber Heights Ohio

Signature	Printed Name	City/Town, State
	Marvin Monge	- Local 15 Kansas
	Antonio	- Local 5 TX
	Francis Jacobberger	arnold - Local 1 MD

Signature	Printed Name	City/Town, State
	Thomas F McIntyre	Boston, MA
	Michael Norkus	Redondo Beach, CA

Signature	Printed Name	City/Town, State
[illegible]	Michael Jr. Pulsinelli	Washington Twp. N.J. 07675

[Whereupon, at 11:40 a.m., the subcommittee was adjourned.]

○