

**H.R. 2250, THE EPA REGULATORY RELIEF ACT
OF 2011, AND H.R. 2681, THE CEMENT SECTOR
REGULATORY RELIEF ACT OF 2011**

HEARING
BEFORE THE
SUBCOMMITTEE ON ENERGY AND POWER
OF THE
COMMITTEE ON ENERGY AND
COMMERCE
HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS
FIRST SESSION

—————
SEPTEMBER 8, 2011
—————

Serial No. 112-82



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**H.R. 2250, THE EPA REGULATORY RELIEF ACT
OF 2011, AND H.R. 2681, THE CEMENT SEC-
TOR REGULATORY RELIEF ACT OF 2011**

THURSDAY, SEPTEMBER 8, 2011

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND POWER,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

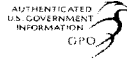
The subcommittee met, pursuant to call, at 10:34 a.m., in room 2322 of the Rayburn House Office Building, Hon. Ed Whitfield (chairman of the subcommittee) presiding.

Members present: Representatives Whitfield, Sullivan, Shimkus, Walden, Terry, Burgess, Bilbray, Scalise, McMorris Rodgers, Olson, McKinley, Gardner, Pompeo, Griffith, Barton, Rush, Inslee, Castor, Dingell, Markey, Green, Doyle, and Waxman (ex officio).

Staff present: Charlotte Baker, Press Secretary; Maryam Brown, Chief Counsel, Energy and Power; Allison Busbee, Legislative Clerk; Cory Hicks, Policy Coordinator, Energy and Power; Heidi King, Chief Economist; Ben Lieberman, Counsel, Energy and Power; Mary Neumayr, Senior Energy Counsel, Oversight/Energy; Chris Sarley, Policy Coordinator, Environment and Economy; Peter Spencer, Professional Staff Member, Oversight; Alison Cassady, Democratic Senior Professional Staff Member; Greg Dotson, Democratic Energy and Environment Staff Director; Caitlin Haberman, Democratic Policy Analyst; and Alexandra Teitz, Democratic Senior Counsel, Energy and Environment.

Mr. WHITFIELD. I would like to call this hearing to order this morning. This is a hearing on two pieces of legislation: H.R. 2681, the Cement Sector Regulatory Relief Act of 2011, and H.R. 2250, the EPA Regulatory Relief Act of 2011.

[The information follows:]



112TH CONGRESS
1ST SESSION

H. R. 2250

To provide additional time for the Administrator of the Environmental Protection Agency to issue achievable standards for industrial, commercial, and institutional boilers, process heaters, and incinerators, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 21, 2011

Mr. GRIFFITH of Virginia (for himself, Mr. BUTTERFIELD, Mr. OLSON, Mr. BARROW, Mrs. McMORRIS RODGERS, Mr. ROSS of Arkansas, Mr. SCALISE, and Mr. MATHESON) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To provide additional time for the Administrator of the Environmental Protection Agency to issue achievable standards for industrial, commercial, and institutional boilers, process heaters, and incinerators, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “EPA Regulatory Relief
5 Act of 2011”.

1 **SEC. 2. LEGISLATIVE STAY.**

2 (a) ESTABLISHMENT OF STANDARDS.—In place of
3 the rules specified in subsection (b), and notwithstanding
4 the date by which such rules would otherwise be required
5 to be promulgated, the Administrator of the Environ-
6 mental Protection Agency (in this Act referred to as the
7 “Administrator”) shall—

8 (1) propose regulations for industrial, commer-
9 cial, and institutional boilers and process heaters,
10 and commercial and industrial solid waste inciner-
11 ator units, subject to any of the rules specified in
12 subsection (b)—

13 (A) establishing maximum achievable con-
14 trol technology standards, performance stand-
15 ards, and other requirements under sections
16 112 and 129, as applicable, of the Clean Air
17 Act (42 U.S.C. 7412, 7429); and

18 (B) identifying non-hazardous secondary
19 materials that, when used as fuels or ingredi-
20 ents in combustion units of such boilers, pro-
21 cess heaters, or incinerator units are solid waste
22 under the Solid Waste Disposal Act (42 U.S.C.
23 6901 et seq.; commonly referred to as the “Re-
24 source Conservation and Recovery Act”) for
25 purposes of determining the extent to which
26 such combustion units are required to meet the

1 emissions standards under section 112 of the
2 Clean Air Act (42 U.S.C. 7412) or the emission
3 standards under section 129 of such Act (42
4 U.S.C. 7429); and

5 (2) finalize the regulations on the date that is
6 15 months after the date of the enactment of this
7 Act, or on such later date as may be determined by
8 the Administrator.

9 (b) STAY OF EARLIER RULES.—The following rules
10 are of no force or effect, shall be treated as though such
11 rules had never taken effect, and shall be replaced as de-
12 scribed in subsection (a):

13 (1) “National Emission Standards for Haz-
14 arduous Air Pollutants for Major Sources: Industrial,
15 Commercial, and Institutional Boilers and Process
16 Heaters”, published at 76 Fed. Reg. 15608 (March
17 21, 2011).

18 (2) “National Emission Standards for Haz-
19 arduous Air Pollutants for Area Sources: Industrial,
20 Commercial, and Institutional Boilers”, published at
21 76 Fed. Reg. 15554 (March 21, 2011).

22 (3) “Standards of Performance for New Sta-
23 tionary Sources and Emission Guidelines for Exist-
24 ing Sources: Commercial and Industrial Solid Waste

1 Incineration Units”, published at 76 Fed. Reg.
2 15704 (March 21, 2011).

3 (4) “Identification of Non-Hazardous Sec-
4 ondary Materials That are Solid Waste”, published
5 at 76 Fed. Reg. 15456 (March 21, 2011).

6 (e) INAPPLICABILITY OF CERTAIN PROVISIONS.—
7 With respect to any standard required by subsection (a)
8 to be promulgated in regulations under section 112 of the
9 Clean Air Act (42 U.S.C. 7412), the provisions of sub-
10 sections (g)(2) and (j) of such section 112 shall not apply
11 prior to the effective date of the standard specified in such
12 regulations.

13 **SEC. 3. COMPLIANCE DATES.**

14 (a) ESTABLISHMENT OF COMPLIANCE DATES.—For
15 each regulation promulgated pursuant to section 2, the
16 Administrator—

17 (1) shall establish a date for compliance with
18 standards and requirements under such regulation
19 that is, notwithstanding any other provision of law,
20 not earlier than 5 years after the effective date of
21 the regulation; and

22 (2) in proposing a date for such compliance,
23 shall take into consideration—

24 (A) the costs of achieving emissions reduc-
25 tions;

1 (B) any non-air quality health and environ-
2 mental impact and energy requirements of the
3 standards and requirements;

4 (C) the feasibility of implementing the
5 standards and requirements, including the time
6 needed to—

7 (i) obtain necessary permit approvals;
8 and

9 (ii) procure, install, and test control
10 equipment;

11 (D) the availability of equipment, sup-
12 pliers, and labor, given the requirements of the
13 regulation and other proposed or finalized regu-
14 lations of the Environmental Protection Agency;
15 and

16 (E) potential net employment impacts.

17 (b) NEW SOURCES.—The date on which the Adminis-
18 trator proposes a regulation pursuant to section 2(a)(1)
19 establishing an emission standard under section 112 or
20 129 of the Clean Air Act (42 U.S.C. 7412, 7429) shall
21 be treated as the date on which the Administrator first
22 proposes such a regulation for purposes of applying the
23 definition of a new source under section 112(a)(4) of such
24 Act (42 U.S.C. 7412(a)(4)) or the definition of a new solid

1 waste incineration unit under section 129(g)(2) of such
2 Act (42 U.S.C. 7429(g)(2)).

3 (e) **RULE OF CONSTRUCTION.**—Nothing in this Act
4 shall be construed to restrict or otherwise affect the provi-
5 sions of paragraphs (3)(B) and (4) of section 112(i) of
6 the Clean Air Act (42 U.S.C. 7412(i)).

7 **SEC. 4. ENERGY RECOVERY AND CONSERVATION.**

8 Notwithstanding any other provision of law, and to
9 ensure the recovery and conservation of energy consistent
10 with the Solid Waste Disposal Act (42 U.S.C. 6901 et
11 seq.; commonly referred to as the “Resource Conservation
12 and Recovery Act”), in promulgating rules under section
13 2(a) addressing the subject matter of the rules specified
14 in paragraphs (3) and (4) of section 2(b), the Adminis-
15 trator—

16 (1) shall adopt the definitions of the terms
17 “commercial and industrial solid waste incineration
18 unit”, “commercial and industrial waste”, and “con-
19 tained gaseous material” in the rule entitled “Stand-
20 ards for Performance of New Stationary Sources
21 and Emission Guidelines for Existing Sources: Com-
22 mercial and Industrial Solid Waste Incineration
23 Units”, published at 65 Fed. Reg. 75338 (December
24 1, 2000); and

1 (2) shall identify non-hazardous secondary ma-
2 terial to be solid waste only if—

3 (A) the material meets such definition of
4 commercial and industrial waste; or

5 (B) if the material is a gas, it meets such
6 definition of contained gaseous material.

7 **SEC. 5. OTHER PROVISIONS.**

8 (a) ESTABLISHMENT OF STANDARDS ACHIEVABLE IN
9 PRACTICE.—In promulgating rules under section 2(a), the
10 Administrator shall ensure that emissions standards for
11 existing and new sources established under section 112 or
12 129 of the Clean Air Act (42 U.S.C. 7412, 7429), as ap-
13 plicable, can be met under actual operating conditions con-
14 sistently and concurrently with emission standards for all
15 other air pollutants regulated by the rule for the source
16 category, taking into account variability in actual source
17 performance, source design, fuels, inputs, controls, ability
18 to measure the pollutant emissions, and operating condi-
19 tions.

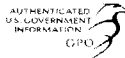
20 (b) REGULATORY ALTERNATIVES.—For each regula-
21 tion promulgated pursuant to section 2(a), from among
22 the range of regulatory alternatives authorized under the
23 Clean Air Act (42 U.S.C. 7401 et seq.) including work
24 practice standards under section 112(h) of such Act (42
25 U.S.C. 7412(h)), the Administrator shall impose the least

9

8

1 burdensome, consistent with the purposes of such Act and
2 Executive Order 13563 published at 76 Fed. Reg. 3821
3 (January 21, 2011).

○



112TH CONGRESS
1ST SESSION

H. R. 2681

To provide additional time for the Administrator of the Environmental Protection Agency to issue achievable standards for cement manufacturing facilities, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 28, 2011

Mr. SULLIVAN (for himself, Mr. ROSS of Arkansas, Mr. KINZINGER of Illinois, Mr. LATTA, Mr. WALDEN, Mr. BARTON of Texas, Mr. CARTER, Mr. DENT, Mr. BOREN, and Mr. ALTMIRE) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To provide additional time for the Administrator of the Environmental Protection Agency to issue achievable standards for cement manufacturing facilities, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Cement Sector Regu-
5 latory Relief Act of 2011”.

1 **SEC. 2. LEGISLATIVE STAY.**

2 (a) ESTABLISHMENT OF STANDARDS.—In place of
3 the rules specified in subsection (b), and notwithstanding
4 the date by which such rules would otherwise be required
5 to be promulgated, the Administrator of the Environ-
6 mental Protection Agency (in this Act referred to as the
7 “Administrator”) shall—

8 (1) propose regulations for the Portland cement
9 manufacturing industry and Portland cement plants
10 subject to any of the rules specified in subsection
11 (b)—

12 (A) establishing maximum achievable con-
13 trol technology standards, performance stand-
14 ards, and other requirements under sections
15 112 and 129, as applicable, of the Clean Air
16 Act (42 U.S.C. 7412, 7429); and

17 (B) identifying non-hazardous secondary
18 materials that, when used as fuels or ingredi-
19 ents in combustion units of such industry and
20 plants are solid waste under the Solid Waste
21 Disposal Act (42 U.S.C. 6901 et seq.; com-
22 monly referred to as the “Resource Conserva-
23 tion and Recovery Act”) for purposes of deter-
24 mining the extent to which such combustion
25 units are required to meet the emissions stand-
26 ards under section 112 of the Clean Air Act (42

1 U.S.C. 7412) or the emission standards under
2 section 129 of such Act (42 U.S.C. 7429); and
3 (2) finalize the regulations on the date that is
4 15 months after the date of the enactment of this
5 Act, or on such later date as may be determined by
6 the Administrator.

7 (b) STAY OF EARLIER RULES.—

8 (1) The following rule is of no force or effect,
9 shall be treated as though such rule had never taken
10 effect, and shall be replaced as described in sub-
11 section (a): “National Emission Standards for Haz-
12 arduous Air Pollutants from the Portland Cement
13 Manufacturing Industry and Standards of Perform-
14 ance for Portland Cement Plants”, published at 75
15 Fed. Reg. 54970 (September 9, 2010).

16 (2) The following rules are of no force or effect,
17 shall be treated as though such rules had never
18 taken effect, and shall be replaced as described in
19 subsection (a), insofar as such rules are applicable
20 to the Portland cement manufacturing industry and
21 Portland cement plants:

22 (A) “Standards of Performance for New
23 Stationary Sources and Emission Guidelines for
24 Existing Sources: Commercial and Industrial

1 Solid Waste Incineration Units”, published at
2 76 Fed. Reg. 15704 (March 21, 2011).

3 (B) “Identification of Non-Hazardous Sec-
4 ondary Materials That are Solid Waste”, pub-
5 lished at 76 Fed. Reg. 15456 (March 21,
6 2011).

7 **SEC. 3. COMPLIANCE DATES.**

8 (a) ESTABLISHMENT OF COMPLIANCE DATES.—For
9 each regulation promulgated pursuant to section 2, the
10 Administrator—

11 (1) shall establish a date for compliance with
12 standards and requirements under such regulation
13 that is, notwithstanding any other provision of law,
14 not earlier than 5 years after the effective date of
15 the regulation; and

16 (2) in proposing a date for such compliance,
17 shall take into consideration—

18 (A) the costs of achieving emissions reduc-
19 tions;

20 (B) any non-air quality health and environ-
21 mental impact and energy requirements of the
22 standards and requirements;

23 (C) the feasibility of implementing the
24 standards and requirements, including the time
25 needed to—

1 (i) obtain necessary permit approvals;
2 and

3 (ii) procure, install, and test control
4 equipment;

5 (D) the availability of equipment, sup-
6 pliers, and labor, given the requirements of the
7 regulation and other proposed or finalized regu-
8 lations of the Environmental Protection Agency;
9 and

10 (E) potential net employment impacts.

11 (b) NEW SOURCES.—The date on which the Adminis-
12 trator proposes a regulation pursuant to section 2(a)(1)
13 establishing an emission standard under section 112 or
14 129 of the Clean Air Act (42 U.S.C. 7412, 7429) shall
15 be treated as the date on which the Administrator first
16 proposes such a regulation for purposes of applying the
17 definition of a new source under section 112(a)(4) of such
18 Act (42 U.S.C. 7412(a)(4)) or the definition of a new solid
19 waste incineration unit under section 129(g)(2) of such
20 Act (42 U.S.C. 7429(g)(2)).

21 (c) RULE OF CONSTRUCTION.—Nothing in this Act
22 shall be construed to restrict or otherwise affect the provi-
23 sions of paragraphs (3)(B) and (4) of section 112(i) of
24 the Clean Air Act (42 U.S.C. 7412(i)).

1 **SEC. 4. ENERGY RECOVERY AND CONSERVATION.**

2 Notwithstanding any other provision of law, and to
3 ensure the recovery and conservation of energy consistent
4 with the Solid Waste Disposal Act (42 U.S.C. 6901 et
5 seq.; commonly referred to as the “Resource Conservation
6 and Recovery Act”), in promulgating rules under section
7 2(a) addressing the subject matter of the rules specified
8 in section 2(b)(2), the Administrator—

9 (1) shall adopt the definitions of the terms
10 “commercial and industrial solid waste incineration
11 unit”, “commercial and industrial waste”, and “con-
12 tained gaseous material” in the rule entitled “Stand-
13 ards for Performance of New Stationary Sources
14 and Emission Guidelines for Existing Sources: Com-
15 mercial and Industrial Solid Waste Incineration
16 Units”, published at 65 Fed. Reg. 75338 (December
17 1, 2000); and

18 (2) shall identify non-hazardous secondary ma-
19 terial to be solid waste only if—

20 (A) the material meets such definition of
21 commercial and industrial waste; or

22 (B) if the material is a gas, it meets such
23 definition of contained gaseous material.

24 **SEC. 5. OTHER PROVISIONS.**

25 (a) ESTABLISHMENT OF STANDARDS ACHIEVABLE IN
26 PRACTICE.—In promulgating rules under section 2(a), the

1 Administrator shall ensure that emissions standards for
2 existing and new sources established under section 112 or
3 129 of the Clean Air Act (42 U.S.C. 7412, 7429), as ap-
4 plicable, can be met under actual operating conditions con-
5 sistently and concurrently with emission standards for all
6 other air pollutants regulated by the rule for the source
7 category, taking into account variability in actual source
8 performance, source design, fuels, inputs, controls, ability
9 to measure the pollutant emissions, and operating condi-
10 tions.

11 (b) REGULATORY ALTERNATIVES.—For each regula-
12 tion promulgated pursuant to section 2(a), from among
13 the range of regulatory alternatives authorized under the
14 Clean Air Act (42 U.S.C. 7401 et seq.) including work
15 practice standards under section 112(h) of such Act (42
16 U.S.C. 7412(h)), the Administrator shall impose the least
17 burdensome, consistent with the purposes of such Act and
18 Executive Order 13563 published at 76 Fed. Reg. 3821
19 (January 21, 2011).

○

OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. WHITFIELD. I would like to commend my colleagues, Mr. Sullivan, who is also the vice chair of this subcommittee, and he is sponsoring the cement bill, and then Mr. Morgan Griffith of Virginia is sponsoring the boiler bill, and I want to thank them for their work on these two pieces of legislation, and of course, we are pleased that Representatives Ross and Butterfield from the full committee are joining as cosponsors on this legislation, and we look forward to working with them as we move forward.

Now, some people have characterized these pieces of legislation as regulatory rollbacks, and I would say quite the contrary. Both the cement and the boiler bills allow, and in fact require, that new emissions controls be implemented, but they replace unrealistic targets and timetables with achievable ones, and we all know that the EPA was acting under duress, a court order, and had to finalize these rules much sooner than they had intended to do, and we do not believe they had adequate time to consider all aspects of the impact of these regulations.

I would also like to say that tonight President Obama is going to be talking to us, and we know that high on his agenda, he is looking at ways to create jobs in America, and we just came back from our August work period, and it was very clear out in the country that one of the reasons jobs are not being created in America today is because of uncertainty, and uncertainty is coming from three sources: number one, the health care bill, of which 8,700 pages of regulations have already been written but it doesn't go into effect until 2014, so no one really knows what impact that is going to have on companies; number two, the regulations relating to the financial industry, the increase of capital requirements has made it more difficult to obtain loans; and then number three, this EPA has been so aggressive. I could read the litany of regulations but there is great uncertainty out there about these regulations. We know they are costly. We know they are costing jobs, and all of this is creating obstacles for our opportunities to produce jobs for America, and so that is what this is all about, and so I look forward to the testimony of our witnesses.

[The prepared statement of Mr. Whitfield follows:]

Opening Statement of Chairman Ed Whitfield
Energy and Power Subcommittee
Hearing on H.R. 2681, The Cement Sector Regulatory Relief Act of 2011, and
H.R. 2250, the EPA Regulatory Relief Act of 2011
September 8, 2011

This morning we will focus on two very important bills, H.R. 2681, the Cement Sector Regulatory Relief Act of 2011, and H.R. 2250, the EPA Regulatory Relief Act of 2011.

I would first like to commend my colleagues, Mr. Sullivan, who drafted the Cement bill, and Mr. Griffith, who drafted the Boiler bill, for their work on these important bipartisan bills. I am pleased that Representatives Ross and Butterfield from the Full Committee were able to join us on these bills. I thank them for their efforts in working with us.

Unemployment remains high, and the EPA's unprecedented regulatory agenda is a significant part of the reason. And, while I welcome President Obama's recent withdrawal of the new ozone standard and his recognition that this measure would have resulted in economic harm, I believe that much more needs to be done in order to rein in EPA's costly overreach. Indeed, given the overlapping nature of EPA's long list of major new rules under the Clean Air Act, withdrawing the ozone rule alone while allowing all the others to move forward is simply not enough. We must do better.

These two bipartisan bills, one addressing new regulations impacting the domestic cement industry and the other taking on the suite of new boiler rules, are an important contribution to the effort to harmonize the nation's economic and environmental goals.

The cement industry is a major employer, and affordable cement is the main ingredient in nearly every infrastructure project. As it is, American cement producers face the world's most stringent standards, but EPA's new proposal would put them at an even greater global disadvantage. According to estimates, as many as 20 percent of domestic cement plants would have to shut their doors. Even worse, these rules would raise the cost of a product that is vital to the construction industry and the economic recovery. Since President Obama is planning to use infrastructure projects in his latest stimulus plan that he will unveil this week, I am perplexed that his own regulations will impede the very jobs plan he reportedly will be promoting.

While EPA is reconsidering its original cement regulation proposal, this process falls short of creating the certainty in order to end the chilling effect on job creation- not to mention the certainty needed to carry out President Obama's infrastructure plan. H.R.

2681 provides the needed certainty by allowing EPA to move forward with cement plant emissions rules but requiring that it be done in a manner that is realistic and achievable.

The story is much the same with the boiler MACT rules, but the threat to jobs is even greater because a wide variety of employers are affected. These rules would apply to most domestic manufacturers, and pose a serious threat to domestic manufacturing jobs and America's industrial competitiveness. But they also apply to universities, hospitals, shopping malls, apartment and office buildings, and municipal buildings. In fact, these rules would impose requirements on approximately 200,000 boilers, which will raise tuition at schools, medical bills at hospitals, costs for consumers, and rent on small businesses and families across America. They would be costly for all, and prohibitive for many.

Among the industrial sectors, the paper industry would be particularly hard hit. The American Forest and Paper Association estimates that the rules would impose compliance costs of \$5 to \$7 billion dollars in their industry alone, and threaten thousands of jobs.

I sincerely hope that these bills are not mischaracterized as regulatory rollbacks. Quite the contrary, both the cement and the boiler bills allow - and in fact require - that new emissions controls be implemented. But they replace unrealistic targets and timetables with achievable ones.

This nation has proven that we can have long periods of economic growth at the same time that we are reducing emissions and improving air quality, and both these bills help get us back on this course. With that I yield the balance of my time to Mr. Griffith, the sponsor of H.R. 2250.

Mr. WHITFIELD. At this time I would like to yield my time to Mr. Barton.

Mr. BARTON. How much time do I have, Mr. Chairman? Is that 2 minutes? Am I supposed to yield to Mr. Sullivan? OK.

**OPENING STATEMENT OF HON. JOE BARTON, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Well, thank you for holding the hearing today on these two issues. I support both bills. I am glad we have our Deputy Administrator from the EPA here. She is a very knowledgeable person and has interacted in a positive manner with the committee and the subcommittee, and we appreciate her being here again today.

I do think, though, that these bills are necessary. I do think that the EPA has issued a plethora of regulations, whether intended or not, that have the actual effect of reducing jobs and preventing jobs from being created in the American economy. That is not to say that there might not be some good that would come out of implementation of these regulations, but I think it is yet to be determined that that good would offset the negative immediate cost in terms of economic decline and loss of jobs.

So I look forward to hearing from our witnesses and I certainly look forward to hearing Ms. McCarthy's testimony.

With that, I yield the balance of my time to Mr. Sullivan.

[The prepared statement of Mr. Barton follows:]

**Opening Statement of the Honorable Joe Barton
Chairman Emeritus, Committee on Energy and Commerce
Subcommittee on Energy & Power Hearing
H.R. 2250 "EPA Regulatory Relief Act of 2011"
H.R. 2681 "Cement Sector Regulatory Relief Act of 2011"
September 8, 2011**

Thank you, Mr. Chairman for holding this hearing today focusing on H.R. 2250, the EPA Regulatory Relief Act which addresses the Boiler Maximum Achievable Control Technology and H.R. 2681, addressing the Cement Sector Regulatory Relief Act.

I am in strong support of both bills - as are my colleagues on both sides of the aisle. Again, I quote the President's Executive Order (Executive Order # 13563) issued earlier this year calling to 'protect the public health, welfare and safety of the environment while promoting economic growth, innovation, competitiveness and job creation using the best available science and creating predictability and certainty in the market'.

With the EPA's proposed implementation of the rules as they stand, most of the affected industries will have no choice but to either shutdown, dramatically reduce operations, which will mean employee layoffs, or go overseas where the regulations are not as burdensome.

The analysis by which the EPA utilized to categorize their 12% 'Top Performers', by industry, is flawed and not achievable in most instances. Many studies performed for Maximum Achievable were performed plant by plant, based on one particular chemical in that one plant. No single one plant could possibly be able to achieve the maximum achievable overall without major equipment upgrades and a change of fuel by which they operate. With entire plant overhauls and new equipment, and/or a move to alternative fuels for production the cost of doing business has exceeded a level that is achievable.

All the EPA will proceed to do with their proposal is allow our landfills to be filled with what had been used and recycled for a fuel source for these industries and export our jobs overseas. This will in turn worsen our global environment. What will happen to the consumer costs when they have to purchase concrete from overseas, as well as the costs to the government for roadway repairs?

Texas alone, just in the cement plants, could lose up to 500 jobs, with several facilities having to be shut down. The EPA wants to talk about the jobs created by these overreaching regulatory demands. These are not fulltime permanent jobs. They don't come close to replacing all of the permanent jobs lost and the tens of billions of dollars cost to the industry that cannot be replaced in an already failing economy. This is real money and these are real people not hypothetical situations.

There have been many medical psychological studies performed of how many years are taken from someone's life after having lost their job due to a layoff from the stress and the inability to eat healthy. Those numbers have not been accounted for within their modeled scenario. However, there has been no direct correlation medically or scientifically attributing the outdoor PM2.5 created from these industries in the cause of premature deaths. The EPA has not used complete thorough data when compiling their case for the reason for these increased regulations.

There is no statutory mandate requiring the EPA to impose these regulations at this time without finalizing all of their analysis' to appropriately address the industry and economic effects of the same. These bills seek only to provide an opportunity of a legislative stay for at least 15 months, for the EPA to re-propose achievable controls that are practicable and financially viable while allowing a more achievable time line of 5 years to be able to comply with upgrades necessary and a labor force to meet that need. I thank you for your testimony today and I yield back my time.

OPENING STATEMENT OF HON. JOHN SULLIVAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Mr. SULLIVAN. Thank you, Mr. Barton. Thank you, Mr. Chairman.

Chairman Whitfield, thank you for holding this important hearing today. Both the EPA Regulatory Relief Act and the Cement Sector Regulatory Relief Act of 2011 seek to do what we need most, and that is to put a stop to the overly burdensome regulations that destroy jobs. Instead of a cut-your-nose-off-to-spite-your-face approach, these bills will allow for rules that are both technically and economically achievable.

Specifically, I introduced the Cement MACT legislation to prevent U.S. cement plant shutdowns, which directly result in job loss. The President is talking about jobs tonight, and I want to be clear: This bill is jobs. If the EPA rules go into effect, nearly 20,000 jobs will be lost due to plant closures and inflated construction costs. EPA's current rules threaten to shut down 20 percent of the Nation's cement manufacturing plants in the next 2 years, sending thousands of jobs permanently overseas and driving up cement and construction costs across the country.

Cement is the backbone for the construction of our Nation's buildings, roads, bridges, tunnels and critical water and wastewater treatment infrastructure. For both of these bills, our goal is to ensure effective regulation.

I have four letters I would like to introduce to this committee, and they are from the International Brotherhood of Boilermakers, Iron Ship Building and Blacksmith Forgers and Helpers, the National Association of Manufacturers, 25 Members of the U.S. Senate, and the U.S. Chamber of Commerce, and I would like to submit these four letters in support of the Cement Sector Regulatory Relief Act for the record.

[The information follows:]

International Brotherhood of
BOILERMAKERS • IRON SHIP BUILDERS

1750 New York Ave., NW, Suite 335
Washington, DC 20006



BLACKSMITHS • FORGERS & HELPERS

202-756-2868
FAX: 202-756-2869

August 25, 2011

Representative Fred Upton, Chair
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

Representative Henry Waxman, Ranking Member
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

SENT VIA FAX - (202) 225-1919, (202) 225-2525

Dear Representatives Upton and Waxman,

On behalf of the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers, and specifically, on behalf of the Boilermaker members who work for many of the largest cement manufacturers in the United States, I write to you regarding H.R. 2681: Cement Sector Regulatory Relief Act of 2011.

As we noted in our letter to the Office of Management and Budget ("OMB") on July 19, 2010, prior to the final rulemaking, Boilermaker members in cement manufacturing have been particularly hard-hit during this severe and on-going economic crisis. The substantial decline in construction, both commercial and residential, has resulted in lay-offs and plant closures for many of our cement workers. Although the U.S. economy is beginning to make slight, but positive employment gains in the private sector, construction recovery and the related jobs are severely lagging behind.

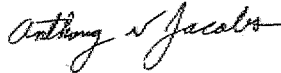
The impact of the current regulations includes the potential loss of up to 30 percent of domestic cement production capacity and the need for a significant capital investment to implement these rules – capital that could go to new cement production facilities and provide additional employment. But, under these circumstances, we see very little chance of maintaining these good paying jobs, let alone adding to them.

We also remain concerned that another unintended consequence of the current NESHAP rules will be the increased importation of cement products to make up the difference once the demand for cement products finally returns. Unfortunately, these imports will be from countries whose concern for the environment, let alone other issues such as decent wages and labor rights, is well below our own. And, as we also explained to OMB over a year ago, we have other concerns for this industry related to dumping and product quality that will only be compounded by the loss of a strong U.S.-based cement industry.

The Boilermakers fully recognize that striking a reasonable balance between two very important goals - environmental protection and job recovery - is no easy task. We appreciate the separate efforts of the Environmental Protection Agency ("EPA") and Congress to find that balance. However, on behalf of our members in the cement industry, we hope this Committee will give serious consideration to possible alternatives and approaches, including H.R. 2681, that would meet EPA's goals while preserving these much-needed American jobs.

Thank you for considering our views on this matter.

Sincerely,



Anthony Jacobs
Special Assistant to the International President
Acting Director of Legislative Affairs

cc: Newton B. Jones, International President
James Pressley, International Vice-President-At-Large, Industrial Sector



Paul A. Yost
Vice President
Energy & Resources Policy

September 1, 2011

The Honorable Fred Upton
Chairman, Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Chairman Upton:

On behalf of the National Association of Manufacturers (NAM) and the 18.6 million jobs supported by the industrial sector, I am writing to express my strong support for H.R. 2681, the Cement Sector Regulatory Relief Act of 2011.

This bipartisan bill provides much-needed support to the Portland cement industry, requiring the Environmental Protection Agency (EPA) to re-propose three burdensome rules specifically directed at this industry. Although domestic cement manufacturers are among the most highly regulated enterprises in the country, the sector faces an avalanche of new regulations at a time when it can least afford them. The bill would vacate the National Emission Standards for Hazardous Air Pollutants (NESHAP) rule for cement kilns; the commercial and industrial solid waste incinerator (CISWI) rule and its change in the definition of "solid waste;" and the new source performance standards rule.

A recent study found that one of these regulations alone – NESHAP – will force the closure of approximately 18 of the United States' nearly 100 cement manufacturing plants. In addition to further downsizing domestic payrolls and manufacturing capacity, the rule will cost the industry – which currently generates barely more than \$6.5 billion in annual revenue – \$3.4 billion over three years.

Manufacturers believe this legislation is needed to rein in the EPA's aggressive regulations, which will severely cripple an industry that is critical to U.S. construction and economic recovery. We urge swift consideration of H.R. 2681.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul A. Yost", with a long horizontal flourish extending to the right.

Paul A. Yost
Vice President, Energy & Resources Policy
National Association of Manufacturers

cc: Members of the House Committee on Energy & Commerce

United States Senate

WASHINGTON, DC 20510

July 28, 2011

The Honorable Harry Reid
Majority Leader
United States Senate
Washington, D.C. 20510

The Honorable Mitch McConnell
Minority Leader
United States Senate
Washington, D.C. 20510

Dear Majority Leader Reid and Minority Leader McConnell,

As the Environmental Protection Agency (EPA) continues to review aspects of the rules regulating the U.S. cement industry, we remain supportive of reasonable relief from regulations relating to the Portland Cement National Emission Standards for Hazardous Air Pollutants (NESHAP) that were finalized in September 2010. These regulations threaten to reduce nearly 20% of domestic cement manufacturing capacity within the next two years. Cement is the key ingredient in concrete, the foundation of American infrastructure.

The U.S. cement industry is suffering through its greatest decline since the 1930s with current employment down to a mere 15,000 high-wage jobs and less than \$6.5 billion in 2009 annual revenues. This represents a 25% reduction in employment and 35% reduction in revenues from pre-recession levels. At a time when the cement industry can least afford significant investments resulting from new mandates, industry analysts estimate that this single EPA rule will cost \$3.4 billion in compliance costs, representing approximately 1/2 of the cement industry's annual revenues. The EPA's own analysis estimates initial capital costs of \$2.2 billion and ongoing annualized costs of \$377 million.

Cement manufacturers do not oppose the regulation of emissions, and have a long history of working with EPA to craft reasonable standards to protect human health and the environment. However, the Portland Cement Association (PCA) estimates that this rule will close or idle 18 cement plants, costing 1,800 high-wage jobs and a loss of up to 9 million tons of domestic production capacity. Since 2007, the cement industry has already shed 4,000 high-wage jobs. Moreover, due to the overly stringent standards in the rule, it will undermine incentives to upgrade existing facilities and build new, greenfield plants.

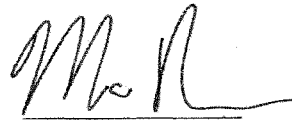
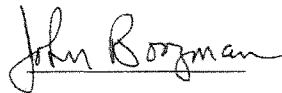
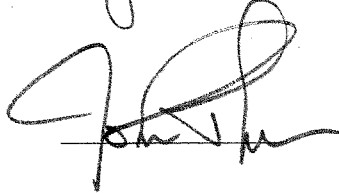
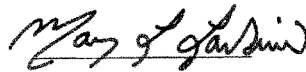
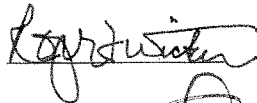
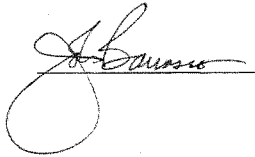
The U.S. cement industry is critical to U.S. construction and economic recovery. Now is not the time to impose new regulations that displace American production and jobs overseas. The increase of cement imports will come predominantly from developing countries with little to no emission controls compared to those that already exist in this country. The net result would be both the increased import of foreign cement, and related increases in unregulated international emissions.

Page Two

We wish to provide the U.S. cement manufacturers the opportunity to recover from the current recession and continue their work with EPA to reconsider aspects of the rule before embarking on a regulatory program that will significantly erode domestic cement capacity. Legislation may achieve the twin goals of allowing sufficient time for the legal and administrative processes to move forward while giving cement manufacturers more time to recover from the recession, and therefore make the necessary investments that will be necessary to grow jobs.

We cannot afford to lose American jobs in an industry that is critical to U.S. infrastructure. Due to our economy's dire financial situation, we request your support for providing a balanced policy approach to an important jobs issue by crafting reasonable legislative relief to allow the cement industry to play a vital and strategic role in the nation's economy now and in the future.

Sincerely,



John Conroy

James McLaughlin

Paul Vitt

Ray Bent

Pat Dooney

Michael B. Eij

Pat Roberts

Jerry Moran

Orin Hatch

Jeff Sessions

Jimmy [unclear]

Sayby Claiborn

Page Four

Lamar Alexander

Les Neuharth

Dan Coats

Joe E. Rink

Mike Glenn

CHAMBER OF COMMERCE
OF THE
UNITED STATES OF AMERICA

R. BRUCE JOSTEN
EXECUTIVE VICE PRESIDENT
GOVERNMENT AFFAIRS

1615 H STREET, N.W.
WASHINGTON, D.C. 20062-2000
202/463-5310

September 7, 2011

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

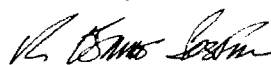
Dear Chairman Upton and Ranking Member Waxman:

The U.S. Chamber of Commerce, the world's largest business federation representing the interests of more than three million businesses and organizations of every size, sector, and region, supports H.R. 2681, the "Cement Sector Regulatory Relief Act of 2011." This bipartisan bill would protect the domestic cement manufacturing industry, which could be forced to shut down up to 20 percent of its plants in order to comply with EPA's flawed "Cement MACT" regulations.

The cement industry has been hard hit by the recent economic slowdown. In addition, the industry faces seven proposed or recently finalized EPA regulations, ranging from fly ash disposal to greenhouse gases to Clean Air Act standards of performance. However, the greatest impact would come from the Cement MACT regulations. EPA's Cement MACT regulations as currently written are too strict for the cement industry to comply with in a cost-effective manner. The Portland Cement Association estimates that the regulations will force the shutdown of eighteen of the nation's nearly 100 existing cement plants. That number does not include the seven cement plants since 2008 that have already announced (due to economic and other reasons) they will permanently close.

H.R. 2681 would require EPA to propose more reasonable emission standards for cement plants and related solid waste incinerators, helping to protect up to 4,000 cement sector jobs at risk due from EPA regulations on the cement industry, and would go a long way toward keeping the nation's cement industry strong.

Sincerely,



R. Bruce Josten

cc: Members of the Committee on Energy and Commerce

Mr. WHITFIELD. Thank you.

At this time I recognize the ranking member of the full committee, the gentleman from California, Mr. Waxman, for his opening statement.

OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WAXMAN. Thank you, Mr. Chairman.

Cancer, birth defects, brain damage—we have long known that toxic air pollutants such as mercury, arsenic, dioxin, lead, and PCBs can cause these serious health effects.

So when Congress passed the Clean Air Act in 1970, we included section 112 to address the public health threat posed by hazardous air pollutants. EPA was required to regulate substances that even at low levels of exposure cause cancer, reproductive disorders, neurological effects, or other serious illnesses.

Unfortunately, over the next 20 years, it became clear that the 1970 law was not working. Out of the scores of known toxic air pollutants, only eight pollutants were listed as hazardous and only seven were regulated. In 1986, industry reported that more than 70 percent of pollution sources were using no pollution controls.

In 1990, we fixed section 112 on a bipartisan basis to deliver the public health protection the American people wanted. The new program was designed to make EPA's job simpler. Instead of requiring laborious pollutant-by-pollutant risk assessments, Congress listed 187 toxic air pollutants and directed EPA to set standards for categories of sources. The standards have to require use of the maximum achievable control technology. For existing sources, this means that the emission standard has to be at least as clean as the average emissions levels achieved by the best performing 12 percent of similar sources.

This approach has worked well. EPA will testify today that industrial emissions of carcinogens and other highly toxic chemicals have been reduced by 1.7 million tons each year through actions taken by more than 170 industries. EPA has reduced pollution from dozens of industrial sectors, from boat manufacturing to fabric printing, from lead smelters to pesticide manufacturing.

But a few large source categories still have not been required to control toxic air pollution due to delays and litigation. These include utilities, industrial boilers and cement plants. EPA's efforts to finally reduce toxic air pollution from these sources are long, long overdue.

The bills we consider today would block and indefinitely delay EPA's efforts to make good on a 40-year-old promise to the American people that toxic air pollutants will be controlled. They would also rewrite the MACT standards once again, this time to weaken the protections and set up new hurdles for EPA rules. We are told that these bills simply give EPA the time they requested to get the rules right. That is nonsense.

EPA asked the court to allow them until April 2012 to issue the boiler rules. The boiler bill nullifies the existing rules and prohibits EPA from issuing new rules before March 2013 or later, assuming enactment this year. The bill also allows an indefinite delay after

that by eliminating the Clean Air Act deadlines for rulemaking and setting no new deadlines. The cement bill contains the same nullification of existing rules, prohibition on rulemaking, and indefinite delay of new rules, even though the rules are already final and in effect, and EPA never asked for additional time for those rules. On top of these delays, the bills would delay air quality improvements for at least 5 years after any rules were issued and potentially far longer. In fact there is no limit in the bill for how long sources may have to comply. That means that infants and children in our communities will continue to be exposed to mercury and carcinogens from these facilities until 2018 or later.

And we are told that these bills provide direction and support for EPA to add flexibility and make the rules achievable. In fact, the language is ambiguous, and an argument could be made that section 5 of the bills overrides the existing criteria for setting air toxic standards. If so, those changes are dramatic. Instead of setting numeric emissions limits, EPA could be required to set only work practice standards, and EPA might be prohibited from setting a standard if it couldn't be met by every existing source, even if all of the better-performing similar sources were meeting it. At a minimum, these changes guarantee substantial additional uncertainty and litigation, which benefits only the lawyers.

Forty years ago, Congress determined that we must control toxic air pollution to protect Americans from cancer, neurological effects and birth defects. Today, EPA is working to finally implement that directive for some of the largest uncontrolled sources of mercury and other toxic air pollution. These bills would stop those efforts, allowing Americans to continue to breathe toxics for years or decades. That would be shameful.

I hear my Republican colleagues say jobs, jobs, jobs. Let me repeat: birth defects, cancer, neurological diseases, unborn babies that will be killed from mercury, newly born babies that will be poisoned by these toxic air pollutants. If that is the legacy the Republicans want, it is a legacy I want no part of. Yield back my time.

Mr. WHITFIELD. At this time I recognize the gentleman from Virginia, Mr. Griffith, for a 5-minute opening statement.

Mr. GRIFFITH. Thank you, Mr. Chairman. I would like to yield 1 minute of my time to the gentlelady from Washington, Ms. McMorris Rodgers.

**OPENING STATEMENT OF HON. CATHY MCMORRIS RODGERS,
A REPRESENTATIVE IN CONGRESS FROM THE STATE OF
WASHINGTON**

Ms. MCMORRIS RODGERS. Thank you for yielding.

Like my colleagues, I have spent the last 5 weeks holding town halls, roundtable discussions, talking with small business owners, farmers, manufacturers, technology companies, and my take away is, people are quite concerned that our country is headed in the wrong direction, and whether I was up in Colville or down in Clarkston, the message is clear: the Federal Government is making it harder to create jobs in America. The frustration and uncertainty caused by the Federal Government's regulatory overreach is smothering any possible economic recovery.

According to a study conducted by the Council of Industrial Boiler Owners, if left final, every billion dollars, \$1 billion spent on mandatory upgrades to comply with the boiler MACT rules puts 16,000 jobs at risk. The full cost of these rules alone could be \$14.5 billion. That is 224,000 jobs at risk.

In eastern Washington, one of the key employers, Ponderay Newsprint, will be forced to spend \$8 million. That is money that they won't spend hiring new workers.

I thank the chairman for moving forward to these bills and look forward to the testimony.

Mr. GRIFFITH. Claiming back my time, Mr. Chairman, I would also yield 1 minute to the gentleman from Texas, Mr. Olson.

**OPENING STATEMENT OF HON. PETE OLSON, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Mr. OLSON. I thank my colleague, and thank you, Mr. Chairman, for holding this hearing to discuss two important pieces of legislation that would help rein in the Environmental Protection Agency that is out of control and out of touch with reality.

The EPA continues to move at full speed ahead with their politically motivated agenda to eliminate affordable and reliable fuel for our Nation's energy portfolio. The overly burdensome regulations that we will discuss today truly reveal this Administration's disregard for our jobs crisis. Left unchecked, these EPA regulations will result in more businesses closing their doors and even more American jobs shipped overseas.

This is why I am an original cosponsor of one of the bills before us, H.R. 2250, the EPA Regulatory Relief Act of 2011. This bill would give EPA the time that they requested to correct the seriously flawed boiler MACT rules and keep American jobs here at home.

I thank my colleague for the time and yield back.
[The prepared statement of Mr. Olson follows:]

Opening Statement of the Honorable Pete Olson
Subcommittee on Energy and Power
Legislative Hearing on H.R. 2250, the EPA Regulatory Relief Act of 2011 and H.R. 2681, the
Cement Sector Regulatory Relief Act of 2011
September 8, 2011

Thank you, Mr. Chairman, for holding this hearing to discuss two important pieces of legislation that would help reign in an Environmental Protection Agency (EPA) that is out of control and out of touch with reality. The EPA continues to move full speed ahead with their politically motivated agenda to eliminate affordable and reliable fuel from our nation's energy portfolio.

The overly burdensome regulations that we will discuss today truly reveal this Administration's disregard for our jobs crisis. Left unchecked, these EPA regulations will result in more businesses closing their doors and even more American jobs shipped overseas. At a time when America is facing a possible double dip recession, we must provide the regulatory certainty needed for our industrial and commercial sectors.

This is why I am an original co-sponsor of HR 2250, "The EPA Regulatory Relief Act of 2011." This bill will give the EPA the time that they requested to correct the seriously flawed Boiler MACT rules and help American businesses. The Boiler MACT rules represent the same sort of regulations that President Obama wisely denied last week. His important acknowledgement of the dangerous impacts that the proposed ozone regulations would have on our economy should apply here as well.

As we will hear from our distinguished witnesses today, many of the EPA's new rules will only serve to damage our fragile recovery effort by placing unrealistic demands on America's job creators. We need regulations that protect human health and the environment while also promoting economic growth and job creation. I believe that this legislation will take us one step closer. Thank you, I yield back.

OPENING STATEMENT OF HON. H. MORGAN GRIFFITH, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Mr. GRIFFITH. Claiming back my time, Mr. Chairman, I would like to introduce into the record the following letters in support of H.R. 2250, the EPA Regulatory Relief Act of 2011, and I have my copy here but I believe staff has a copy for you, Mr. Chairman, and if I might, Mr. Chairman, go over those letters. We have a list of 31 different letters in the packet. The first one is the National Association of Manufacturers, which has 292 signatories from different industry groups, the American Chemistry Council, the American Forest and Paper Association—these are separate letters I am going over now—the American Forest and Paper Association, American Wood Council, Americans for Prosperity, American Home Furnishing Alliance, American Municipal Power Inc., Ohio Municipal Electric Association, Association of American Railroads, Biomass Power Association, Boise Inc. a Business Roundtable statement on the introduction of the bill, Chamber of Commerce, Corn Refiners Association, Council of Industrial Boiler Owners, Domtar, the Florida State Council, the Florida Sugar Industry, Industrial Energy Consumers of America, the International Brotherhood of Electrical Workers, International Paper, Louisiana Pacific Corporation, MeadWestvaco Corporation, National Association of Manufacturers, National Construction Alliance, National Federation of Independent Businesses, National Oilseed Processors Association, National Solid Wastes Management Association, Society of Chemical Manufacturers and Affiliates, South Carolina Manufacturers Alliance, Texas Forest Industries Council, the Virginia Manufacturers Association and the Wisconsin Paper Council.

Mr. Chairman, may those be introduced into the record?

Mr. WHITFIELD. Without objection.

[The information follows:]

September 6, 2011

The Honorable John A. Boehner
U.S. House of Representatives
1011 Longworth House Office Building
Washington, DC 20515

The Honorable Harry M. Reid
United States Senate
522 Hart Senate Office Building
Washington, DC 20510

The Honorable Nancy Pelosi
U.S. House of Representatives
235 Cannon House Office Building
Washington, DC 20515

The Honorable Mitch McConnell
United States Senate
317 Russell Senate Office Building
Washington, DC 20510

Dear Speaker Boehner; Minority Leader Pelosi; Majority Leader Reid; Minority Leader McConnell:

We are writing to express our united and strong support for H.R. 2250 and S. 1392, the "EPA Regulatory Relief Act of 2011," bipartisan legislation to address the serious concerns that remain with EPA's Boiler MACT rules. As they exist today, the final Boiler MACT rules will have serious economic impacts on a vast array of facilities across the industrial, commercial and institutional sectors. These rules place at risk tens of thousands of high-paying manufacturing jobs that our nation cannot afford to lose.

As finalized, the Boiler MACT rules are unaffordable, just as the proposed rules were. The rules are not achievable for real-world boilers across the range of fuels and operating conditions. EPA also has created a presumption that materials commonly used as fuels are wastes subject to the extremely costly and stigmatizing incinerator standards. This would not only impose billions of dollars in unreasonable costs, but it also would cause millions of tons of valuable materials to be diverted to landfills and replaced with fossil fuel – a bad result for the environment.

As EPA has acknowledged, the rules were finalized with serious flaws because EPA was forced to meet a strict court-ordered deadline. The final Boiler MACT rule alone would cost over \$14 billion in capital for the manufacturing sector, plus billions more in annual operating costs. Complying with the incinerator standards could cost several billion dollars more in capital.

Legislation is needed to resolve serious uncertainties and vulnerabilities, including to:

- ensure the rules are stayed for an adequate and certain period, as EPA's current administrative stay is being challenged in court;
- allow EPA adequate time to re-propose the rules and get them right, including time for stakeholders to conduct more emissions testing and to avoid mistakes that occur when rulemakings of this scope and importance are rushed and become vulnerable to legal challenge;
- provide direction and support for EPA to use the discretion it already has under the Clean Air Act and Executive Order 13563 to add flexibility and make the rules achievable;

- clarify that using non-hazardous materials as fuels does not result in boilers being treated as incinerators; and
- give facilities more time to comply with the complex and capital-intensive requirements of the rules.

If enacted, the "EPA Regulatory Relief Act" will provide the much-needed certainty and time for EPA to get the rules right and for businesses that will be investing billions of dollars to rationally plan for the capital expenses. This legislation will preserve jobs and the competitiveness of the U.S. manufacturing sector while protecting the environment.

We urge you to pass this important legislation as soon as possible and send it to the President for his signature.

Sincerely,

A/C Power Colver	Association of American Railroads
AbitibiBowater	Association of Independent Corrugated Converters
Alabama Forestry Association	Atlantic Wood Industries, Inc.
Alabama Pulp & Paper Council	Barge Forest Products Co.
Allegheny Hardwood Utilization Group, Inc.	Beef Sugar Development Foundation
American Architectural Manufacturers Association	Belden Brick Company
American Chemistry Council	Belimed, Inc.
American Coatings Association	Bennett Lumber Company
American Coke & Coal Chemicals Institute	Berco, Inc.
American Composites Manufacturers Association	Biomass One, LP
American Fiber Manufacturers Association	Biomass Power Association
American Forest & Paper Association	Blue Bell Creameries
American Foundry Society	Blue Ridge Paper Products
American Frozen Food Institute	Boise Cascade, LLC
American Home Furnishings Alliance	Boise Inc.
American Loggers Council	Brick Industry Association
American Municipal Power	Business Council of Alabama
American Petroleum Institute	Business Roundtable
American Sugar Cane League	Cahaba Timber Co.
American Wood Council	California Forestry Association
Amerities Holdings LLC	California League of Food Processors
Anthony Liftgates, Inc.	California Metals Coalition
APA – The Engineered Wood Association	Canyon Creek Logging
Appleton Papers Inc.	Carolina Cotton Works, Inc.
APUs by Rex, LLC	Cement Kiln Recycling Coalition
Archer Daniels Midland Company	Chaney Lumber Co., Inc.
ARIPPA	Charles Ingram Lumber Co.
Arkansas Forestry Association	Coast Wood Preserving, Inc.
Arkansas State Chamber of Commerce	Coastal Plywood Company
Associated Industries of Arkansas, Inc.	Collins Pine Company
Associated Industries of Vermont	

Colorado Association of Commerce & Industry
 Composite Panel Association
 Construction Materials Recycling Association
 Corn Refiners Association
 Council of Industrial Boiler Owners
 Cresote Council
 Decker Energy International, Inc.
 Dietz & Watson, Inc.
 Domtar Corporation
 Douglas County Forest Products
 Eastman Chemical Company
 Eaton Corporation
 Electric Mills Wood Preserving
 Empire State Forest Products Association
 Evergreen Packaging
 Fibrek
 Finch Paper LLC
 Flakeboard America
 Flambeau River Papers
 Florida Forestry Association
 Florida Pulp and Paper Association
 Flower City Tissue Mills Co., Inc.
 FMC Corporation
 Forest Landowners Association
 Forest Resources Association Inc.
 Forging Industry Association
 Fowler Post Co, Inc.
 Fox River Fiber Company
 Genesee Power Station LP
 George A. Whiting Paper Company
 Georgia Association of Manufacturers
 Georgia Paper & Forest Products Association, Inc.
 Georgia-Pacific LLC
 Glatfelter
 Glier's Meats, Inc.
 Green Diamond Resources Company
 H. W. Culp Lumber Co.
 Hardwood Federation
 Hardwood Manufacturers Association
 Hardwood Plywood and Veneer Association
 Harrigan Lumber Co., Inc.
 Hawaii Forest Industry Association
 Hesse and Sons Dairy LLC
 Hood Industries, Inc.
 Idaho Forest Group
 INDA, Association of the Nonwoven
 Fabrics Industry
 Indiana Hardwood Lumbermen's Association
 Industrial Energy Consumers of America
 Industrial Fastener Institute
 Industrial Minerals Association - North America
 Innovative Pine Technology Inc.
 Interfor
 International Falls Chamber of Commerce (MN)
 International Paper
 J.T. Fennell Company, Inc.
 JELD-WEN, Inc.
 Jordan Lumber & Supply, Inc.
 Kansas City Power & Light
 Kapstone Paper and Packaging Corporation
 Kentucky Forest Industries Association
 Kercher Industries, Inc
 Kitchen Cabinet Manufacturers Association
 Koppers Inc.
 Lake States Lumber Association
 Land O Lakes Wood Preserving Co.
 Langdale Forest Products Co.
 L'anse Warden Electric Company, LLC
 Leggett & Platt, Incorporated
 Longview Fibre Paper and Packaging, Inc.
 Louis Dreyfus Agricultural Industries
 Louisiana Farm Bureau Federation
 Louisiana Pacific Corporation
 Louisiana Pulp and Paper Association
 LyondellBasell Industries
 Maine Pulp & Paper Association
 Manufacture Alabama
 Manufacturers and Chemical Industry Council
 of North Carolina
 Maple Flooring Manufacturers Association
 Maxi-Seal Harness Systems, Inc.
 McShan Lumber Company, Inc.
 MeadWestvaco
 Melrose Timber Company, Inc.
 Metal Treating Institute
 Metals Service Center Institute
 Michigan Biomass
 Michigan Forest Products Council
 Minnesota Chamber of Commerce
 Minnesota Forest Industries
 Mission Plastics North

Mission Plastics of Arkansas
 Mississippi Manufacturers Association
 Missouri Forest Products Association
 Motor & Equipment Manufacturers Association
 Mount Vernon Mills, Inc.
 Muscatine Foods Corporation
 National Association for Surface Finishing
 National Association of Manufacturers
 National Association of Trailer Manufacturers
 National Concrete Masonry Association
 National Council of Farmer Cooperatives
 National Council of Textile Organizations
 National Federation of Independent Business
 National Lumber and Building Material Dealers Association
 National Oilseed Processors Association
 National Solid Wastes Management Association
 National Spinning Company
 NC Association of Professional Loggers, Inc.
 Neenah Paper Inc.
 Nevada Manufacturers Association
 New Hampshire Timberland Owners Association
 Nippon Paper Industries USA Co.
 Nisus Corporation
 NORA, An Association of Responsible Recyclers (formerly the National Oil Recyclers Association)
 North American Die Casting Association
 North American Wholesale Lumber Association
 North Carolina Chamber
 North Carolina Forestry Association
 Northwest Pulp and Paper Association
 Ohio Chamber of Commerce
 Ohio Forestry Association
 Ohio Manufacturers' Association
 Ohio Municipal Electric Association
 Ohio Willow Wood Company
 OMNOVA Solutions, Inc.
 Oregon Forest Industries Council
 Owens-Illinois, Inc.
 Pacific Wood Laminates
 Packaging Corporation of America
 Page & Hill Forest Products Inc.
 Partnership for Affordable Clean Energy
 Pellet Fuels Institute
 Pennsylvania Business Council
 Pennsylvania Chamber of Business and Industry
 Pennsylvania Forest Products Association
 Pennsylvania Manufacturers' Association
 Peterson Mfg. Co.
 Pile Driving Contractors Association
 Piney Creek LP
 Plum Creek
 Port Townsend Paper Corporation
 Portland Cement Association
 Possum Tree Farm
 Potomac Supply Corporation
 PPG Industries
 Precision Machined Products Association
 Precision Pulley & Idler
 Prince Manufacturing Corporation
 Railway Tie Association
 Rex Lumber, LLC
 Rhodia, Inc.
 River Trading Company
 Rock-Tenn Company
 Rosboro LLC
 Roseburg Forest Products Company
 ROW, INC.
 Roy "O" Martin Lumber Company, LLC
 Rubber Manufactures Association
 Rudd Company, Inc.
 S.I. Storey Lumber Co., Inc.
 Sage Automotive Interiors
 Sappi Fine Paper North America
 Sauder Woodworking Co.
 Scotch Plywood Company, Inc.
 Seymour Manufacturing Co., Inc.
 SierraPine Limited
 Smith Street Mill
 Society of Chemical Manufacturers and Affiliates
 South Carolina Forestry Association
 South Carolina Pulp and Paper Association (SCPPA)
 South Carolina Timber Producers Association
 Southeast Wood

Southeastern Lumber Manufacturers Association
 Southern Appalachian Multiple-Use Council
 Southern Forest Products Association
 Southern Pressure Treateds' Association
 SP Newsprint Co.
 States Industries, LLC
 Steel Manufacturers Association
 Stella-Jones Corporation
 Streater Dependable Mfg. Co.
 Sunbury Textile Mills, Inc.
 Tegrant Corporation
 Ten-Tec, Inc.
 Tennessee Chamber of Commerce & Industry
 Tennessee Forestry Association
 Tennessee Paper Council
 Texas Association of Manufacturers
 Texas Forestry Association
 Textile Rental Services Association
 The Association for Hose & Accessories Distribution (NAHAD)
 The Business Council of New York State, Inc.
 The Carpet and Rug Institute
 The Dow Chemical Company
 The International Association of Machinists and Aerospace Workers
 The Oeser Company
 The United Brotherhood of Carpenters and Joiners of America
 Thilmany Papers
 Thomasson Company
 Thompson Industries, Inc
 Timber Products Company
 TMA
 Tolleson Lumber Company
 Tradewinds International Inc.
 Treated Wood Council

Tri-State Generation and Transmission Association
 TrueGuard - wood preservation
 U.S. Beet Sugar Association
 U.S. Chamber of Commerce
 Uniboard USA LLC
 Unifi Manufacturing Inc.
 USA Rice Federation
 Vector Tool and Engineering
 Verso Paper Corp.
 Virginia Chamber of Commerce
 Virginia Forest Products Association
 Virginia Forestry Association
 Virginia Manufacturers Association
 Washington Contract Loggers Association, Inc.
 Water Treatment Services Inc.
 Wausau Paper
 Webb Consultants, Inc.
 WEBB Furniture Enterprises Corp
 The Westervelt Company
 Weyerhaeuser Company
 Window and Door Manufacturers Association
 Wisconsin Manufacturers & Commerce
 Wisconsin Paper Council
 Wood Machinery Manufacturers of America

cc: The Honorable Fred Upton
 The Honorable Henry Waxman
 The Honorable Barbara Boxer
 The Honorable James Inhofe
 United States Senate
 U.S. House of Representatives



July 5, 2011

The Honorable Frederick Upton
Chairman, Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Upton:

On behalf of one of the nation's most significant manufacturing industries, we urge you to pass the "EPA Regulatory Relief Act of 2011" (H.R. 2250). This bipartisan legislation gives the U.S. Environmental Protection Agency (EPA) time to develop more effective, achievable emission standards for industrial boilers and heaters. It also extends the rules' compliance deadline so that American businesses have time to budget for and make the necessary changes.

As you know, the "Boiler MACT" regulations issued in March will affect 200,000 businesses, institutions and municipalities across the country. They require manufacturers, hospitals, restaurants and other enterprises to buy and install expensive new technologies. Yet some of the final emission standards are not achievable by "real world" boilers. EPA acknowledged flaws in the final rules when it decided to reconsider aspects of them, a process that is underway now.

The EPA Regulatory Relief Act gives EPA the time it needs to get the rules right. It requires EPA to establish emission standards that can be met under actual operating conditions. Equally important, it provides much-needed certainty to U.S. manufacturers and small businesses about when the rules will take effect and how much time they will have to come into compliance. The additional time will support our nation's economic recovery by enhancing business confidence to move ahead with investments, expansions and hiring now. Legislation is vital since EPA's administrative stay is likely to be challenged in court.

Thank you for your help in bringing about more effective, achievable and less costly boiler regulations that will protect the environment, but not compromise U.S. investment, American manufacturing, and job maintenance and creation.

Sincerely,

A handwritten signature in black ink that reads "Cal Dooley".

Cal Dooley
President and CEO

cc: The Honorable H. Morgan Griffith and the Honorable G.K. Butterfield





June 28, 2011

The Honorable Fred Upton
 Chairman, Committee on Energy &
 Commerce
 United States House of Representatives
 2183 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Henry Waxman
 Ranking Member, Committee on Energy
 & Commerce
 United States House of Representatives
 2204 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy
 and Power
 United States House of Representatives
 2368 Rayburn HOB
 Washington, D.C. 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on
 Energy and Power
 United States House of Representatives
 2268 Rayburn House Office Building
 Washington, DC 20515

Dear Chairmen and Ranking Members:

On behalf of the American Forest & Paper Association, the American Wood Council, and the 900,000 U.S. jobs provided by our industry, we want to urge you to pass expeditiously H.R. 2250, the "EPA Regulatory Relief Act of 2011." As you have heard in previous Energy & Commerce Committee hearings, the Boiler MACT rules will have serious economic impacts on a vast array of facilities across the industrial, commercial and institutional sectors, including forest products.

Although there were some important improvements between the proposed and the final rules, EPA published final rules knowing that flaws were included to meet a court ordered deadline. The rules are not achievable for real-world boilers across the range of fuels and operating conditions. They also require extremely costly controls in some areas where work practices would be adequate to protect public health. The rules place at risk tens of thousands of jobs when our nation cannot afford any more job losses.

Moreover, EPA has created a presumption that materials commonly used as fuels are wastes subject to the extremely costly and stigmatizing incinerator standards. The net result is that many facilities would stop using valuable fuels such as renewable biomass residuals, including paper making residuals and resinated wood trim. This would not only impose hundreds of millions of dollars in unreasonable costs, but it also would increase the use of fossil fuels and cause millions of tons of valuable materials to be diverted to landfills – a bad result for the environment.

June 28, 2011
Page 2

Accordingly, the final rules are just as unaffordable as the proposed rules were. The final Boiler MACT rule alone would cost over \$14 billion in capital for the manufacturing sector, plus billions more in annual operating costs. Complying with the incinerator standards could cost several billion dollars more in capital. For the forest products industry, the capital costs of the Boiler MACT and related rules are estimated at \$5 to \$7 billion, plus billions of dollars more in operating costs. Tens of thousands of jobs in the forest products industry are placed at risk by these enormous costs.

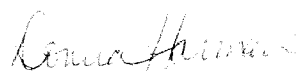
Legislation is needed to resolve serious uncertainties and vulnerabilities, including to:

- ensure the rules are stayed for an adequate and certain period, as EPA's current administrative stay is being challenged;
- allow EPA adequate time to re-propose the rules and get them right, including time for stakeholders to conduct more emissions testing and to avoid mistakes that occur when rulemakings of this scope and importance are rushed and become vulnerable to legal challenge;
- provide direction and support for EPA to use the discretion it already has under the Clean Air Act and Executive Order 13563 to add flexibility and make the rules achievable;
- clarify that various materials, such as biomass residuals, are fuels and that certain gases in manufacturing processes do not result in boilers being treated as incinerators; and
- give facilities more time to comply with the complex and capital-intensive requirements of the rules.

If enacted, H.R. 2250 will provide the much-needed certainty and time for EPA to get the rules right and for businesses that will be investing billions of dollars to plan for the capital expenses. This action will preserve jobs and the competitiveness of the manufacturing sector while protecting the environment.

As our nation struggles to recover from the recession, this is a time when we can least afford another roadblock to jobs and economic recovery. Thank you for your leadership on this issue of great importance to the forest products industry.

Sincerely,



Donna Harman
President & Chief Executive Officer
American Forest & Paper Association



Robert Glowinski
President
American Wood Council

Cc: Congressman Morgan Griffith
Congressman G.K. Butterfield

Letter of Support: Rep. Griffith's EPA Regulatory Relief Act, H.R. 2250

Dear Representative Griffith,

On behalf of more than 1.7 million Americans for Prosperity activists in all 50 states, I write to commend you for introducing H.R. 2250, the EPA Regulatory Relief Act. The Environmental Protection Agency's (EPA) latest regulatory push – setting stringent new emissions standards on more than 200,000 boilers, process heaters, and incinerators nationwide – promises high compliance costs that will sap resources from a diverse array of American job-creators. Your bill would address these new job-killing regulations head on, putting them on at least a temporary hold until regulators can sort out technical problems and address strong concerns that the rules are not workable in the real world and will result in thousands of lost jobs.

After years of uncertainty and court battles that left businesses in the dark about the potential for costly new burdens, in late March the EPA published final rules on four interrelated emissions standards for boilers, process heaters, and incinerators. The rules are collectively known as "Boiler MACT," named for the "maximum achievable control technology" the EPA seeks to impose in order to limit emissions of mercury, dioxin, carbon monoxide, and other similar byproducts that result when boilers and incinerators heat a building or generate electricity.

The EPA's own estimates paint an ugly picture about the costs imposed by the new regulations: to comply with the new rules businesses will need to invest \$5.8 billion in up-front capital expenditures, and annual costs thereafter would amount to more than \$2 billion. Previous cost estimates from industry sources were significantly higher. An August 2010 study conducted for the Council of Industrial Boiler Owners by the economic consulting firm IHS Global Insight estimated nearly \$21 billion in capital costs for required upgrades, with a result of putting well over 300,000 jobs at risk.

These costs would be dispersed across the American economy, affecting everything from office buildings to hospitals, apartment buildings to colleges and universities. But the most pernicious impact falls on manufacturing and industrial facilities that rely on boilers and process heaters to generate heat and electricity for daily production processes. At a time when Americans are decrying the loss of manufacturing jobs due to competition from foreign countries with lower labor costs, why would this administration impose billions in new costs that further reduce the productivity and competitiveness of American manufacturers?

The EPA itself has asked for more time to fully consider the thousands of comments they've received from the public, concerned that they have not yet ironed out all the technical wrinkles that make these new standards un-workable in the real world. At the very least, Congress must step in and allow time for the EPA to re-propose and finalize these rules. Your bill achieves this purpose – providing for a 15 month delay, extending the timeline for allowing companies to comply with the new standards, and giving the EPA further direction to reduce the costs of these burdensome regulations.

Americans for Prosperity believes the last of these points – reducing the regulatory cost incidence of the new emissions standards – is the most vital, especially at a time when the American economy is still struggling to recover from a recession. Complying with federal regulatory burdens cost American businesses more than \$1.75 trillion in 2008. This number is unsettling. We simply cannot afford any more unnecessary regulatory compliance costs.

Americans for Prosperity is proud to support your legislation and similar efforts to relieve American businesses from the "hidden tax" of regulatory compliance costs. I urge your colleagues to support its passage, and I look forward to working with you in the future.

Sincerely,

James Valvo
Director of Government Affairs
Americans for Prosperity

Read more: <http://www.americansforprosperity.org/062811-letter-support-rep-griffiths-epa-regulatory-relief-act-hr-2250#ixzz1QmElpj00>



July 1, 2011

317 W. High Ave., 10th Floor
 P.O. Box HP-7
 High Point, NC 27261
 Phone 336-884-5000
 Fax 336-884-5303

The Honorable Fred Upton
 Chairman, Committee on Energy &
 Commerce
 United States House of
 Representatives
 2183 Rayburn House Office Building
 Washington, DC 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy
 and Power
 United States House of
 Representatives
 2368 Rayburn House Office Building
 Washington, DC 20515

The Honorable Henry Waxman
 Ranking Member, Committee on
 Energy & Commerce
 United States House of
 Representatives
 2204 Rayburn House Office Building
 Washington, DC 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on
 Energy and Power
 United States House of
 Representatives
 2268 Rayburn House Office Building
 Washington, DC 20515

Dear Chairmen and Ranking Members:

On behalf of the American Home Furnishings Alliance (AHFA) and its 450 member companies, I write in support of H.R. 2250, the "EPA Regulatory Relief Act of 2011." The bill would provide much-needed legislative intervention in the ongoing development of the Boiler MACT rules. In their current form, the Boiler MACT rules would cause serious economic harm to numerous industries, including several of AHFA's members who manufacture wood furniture. Therefore, AHFA urges you to pass expeditiously H.R. 2250.

While EPA made significant improvements in the Boiler MACT rules during the rulemaking process that concluded earlier this year, EPA has acknowledged that the rules contain numerous flaws. Indeed, EPA sought a 15-month extension of the court-ordered deadline to address those flaws prior to promulgation of the rules. Because EPA's request was denied, EPA must now evaluate whether those flaws can be resolved through a post-promulgation reconsideration process. AHFA appreciates EPA's delay of the effective date of the rules during its ongoing reconsideration. However, AHFA remains concerned that EPA's ability to correct the flaws in the rule and minimize the impact of the rules on our members will be constrained by EPA's self-imposed time limit and the looming threat of litigation.

July 1, 2011
Page 2

The Boiler MACT rules as written will require many of our members to install costly emission control systems that we believe are not necessary for protection of public health and the environment. These expenditures will threaten numerous jobs within our industry and they will erode our competitiveness in the global market. In addition, the rules do not fully take into account the wide variability in size, fuels, and applications that characterize the combustion units subject to the rules.

Further, EPA has established a new process for evaluating whether materials commonly used as fuels should be classified as waste. The uncertain nature of this process threatens our longstanding practice of combusting resinated wood fuel produced during the manufacture of wood furniture. Because the combustion of a waste would make a boiler subject to even more burdensome incinerator emission standards, we remain concerned that our combustion of renewable wood fuel would no longer be feasible. In that case our wood fuel would need to be landfilled. In addition to wasting a valuable resource, this would increase costs for disposal and for acquiring a substitute fuel.

All of these issues are addressed by H.R. 2250. The bill would authorize the following steps:


- Provide EPA with adequate time to re-propose the rules and for stakeholders to provide meaningful input;
- Direct EPA to use its discretionary authority under the Clean Air Act and Executive Order 13563 to make the rules achievable and flexible;
- Clarify that certain fuels (including our resinated wood fuel) will not be considered a waste, thereby ensuring that our boilers will not be considered incinerators; and
- Provide additional time for regulated facilities to comply with the new emission standards.

In contrast to EPA's current Boiler MACT rulemaking process that has been driven primarily by court-ordered deadlines, the adoption of H.R. 2250 would provide for the orderly development of achievable emission standards. AHFA believes that Congress should establish a clear framework and timeline for completion of this regulatory process. Therefore, AHFA respectfully urges you to pass H.R. 2250.

July 1, 2011
Page 3

Thank you for your leadership on this important matter.

Sincerely,



Bill Perdue
VP Regulatory Affairs
The American Home Furnishings Alliance

cc: Congressman Morgan Griffith
Congressman G.K. Butterfield



September 7, 2011

VIA E-MAIL (Mary.Neumayr@mail.house.gov)

The Honorable Fred Upton
Chairman, Committee on Energy & Commerce
2183 Rayburn H.O.B.
Washington, D.C. 20515

The Honorable Henry Waxman
Ranking Member, Committee on
Energy & Commerce
2204 Rayburn H.O.B.
Washington, D.C. 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy and Power
2368 Rayburn H.O.B.
Washington, D.C. 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee
on Energy and Power
2268 Rayburn H.O.B.
Washington, D.C. 20515

Re: H.R. 2250, the "EPA Regulatory Relief Act of 2011" House Energy and Commerce Committee's Subcommittee on Energy and Power

Dear Chairmen and Ranking Members:

American Municipal Power, Inc. (AMP) and the Ohio Municipal Electric Association (OMEA) support H.R. 2250, the "EPA Regulatory Relief Act of 2011," because it offers significant and immediate benefit to our municipal members that locally generate electricity for their communities. American Municipal Power ("AMP") is the non-profit wholesale power supplier and services provider serving 129 members – 128 member municipal electric communities in the states of Ohio, Pennsylvania, Michigan, Virginia, Kentucky, and West Virginia and the Delaware Municipal Electric Corporation, a joint action agency headquartered in Smyrna, Delaware. OMEA is the state association representing the legislative interests of AMP and 81 Ohio member municipal electric systems. Some of AMP's / OMEA's municipal members generate electricity locally using fossil fuel boilers subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 76 Fed. Reg. 15608 (March 21, 2011) ("the Boiler MACT rule"), which is currently under reconsideration by U.S. EPA. The EPA Regulatory Relief Act would

Page 2

help ensure that EPA properly considers the economic implications of the Boiler MACT rule on municipalities and others and takes the least burdensome approach to obtain the necessary environmental protections.

AMP and OMEA members serve the electric power needs of their communities by supplying reliable, affordable electricity. Municipal electric systems generate electricity without extracting a profit, which allows AMP and OMEA members to offer affordable electricity as an incentive for businesses to locate and grow jobs in their communities. Residents in public power communities also benefit from affordable electricity during these difficult economic times, and they have unique opportunities to participate in decisions about how their power is generated and delivered. These decisions carefully balance economic, environmental, and human health considerations based on local priorities. This may be why AMP / OMEA react so strongly to U.S. EPA actions, like the Boiler MACT rule, that do not choose the least burdensome approach to achieve the purposes of the Clean Air Act. Section 5 of H.R. 2250 would direct EPA to accept the least burdensome regulatory alternative authorized under the Act, which will help protect our municipal members from unnecessary burdens and expenditures.

AMP / OMEA have repeatedly asked U.S. EPA to use its authority under Section 112(d)(4) of the Clean Air Act to establish health-based compliance alternatives for hydrogen chloride (HCl) at levels that protect human health with an ample margin of safety. AMP / OMEA members have demonstrated that their HCl emissions are below the threshold at which adverse human health effects are observed, making HCl control technology unnecessary to protect human health. U.S. EPA has declined to exercise this health-based authority, even though it may offer the least burdensome regulatory alternative. H.R. 2250 would ensure that U.S. EPA consider all authorized regulatory alternatives, including the health-based compliance alternative, and if it was the least burdensome alternative, U.S. EPA would be required to allow that option. Least burdensome regulation makes sense in any economic climate; it is essential to our current economic recovery.

H.R. 2250 also secures the time that U.S. EPA admits it needs to properly consider the many regulatory alternatives raised during the public comment period. U.S. EPA granted an administrative stay of the Boiler MACT rule pending reconsideration, which was promptly challenged in Court. Congress needs to act to ensure that EPA has the time it needs to complete a thorough review of this important rule that could needlessly cost the U.S. economy billions of dollars and thousands of jobs. Without congressional action, courts could once again force EPA to act before it has fully considered the available data and the implications of its action. At this point in our economic recovery, regulatory uncertainty can discourage investment and job growth. A clear statutory time period for the reconsideration of the rulemaking will offer U.S. EPA the time to properly consider the relative burdens of the full range of regulatory alternatives. H.R. 2250 secures a clear and certain regulatory timeline for the Boiler MACT rule.

Page 3

H.R. 2250 also provides for the additional time needed for planning and implementing the changes required by the final rule. Municipalities have extended procedural obligations when investing in significant capital improvements. Public meetings and hearings take place during the decision-making process. Financing a project with municipal bonds can take significantly longer than a bank loan. Significant contracts often require bid specifications that take many months to complete. As you are no doubt aware, obtaining authorization through a political process is far more deliberate and time consuming than for most businesses. Thus, AMP and OMEA members welcome H.R. 2250's authorization for a five-year minimum period for compliance implementation, the minimum we have determined to be necessary to implement Boiler MACT rule requirements at a municipal power station. The Bill also offers municipal utilities time to pursue EPA approval of alternatives that allow for a less burdensome compliance option while still meeting environmental goals.

H.R. 2250 provides necessary and limited statutory direction to ensure that U.S. EPA is acting to protect human health in a measured and responsible way that rewards innovative alternatives that accomplish the statutory purpose in the least burdensome way. AMP / OMEA and our members urge you to expedite consideration of this important legislation.

On behalf of the members,



Jolene M. Thompson
AMP Senior Vice President and OMEA Executive Director

cc: Marc S. Gerken, P.E., AMP President / CEO
AMP Board of Trustees
OMEA Board of Directors
Marty Kanner
Douglas A. McWilliams, Esq.



ASSOCIATION OF
AMERICAN RAILROADS

**Office of the President
Edward R. Hamberger
President and Chief Executive Officer**

July 15, 2011

The Honorable Fred Upton
2138 Rayburn House Office Building
Washington, DC 20515

The Honorable Ed Whitfield
2368 Rayburn House Office Building
Washington, DC 20515

The Honorable Henry Waxman
2204 Rayburn House Office Building
Washington, DC 20515

The Honorable Bobby Rush
2268 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairmen and Ranking Members:

I am writing on behalf of the Association of American Railroads to express strong support for H.R. 2250, the "EPA Regulatory Relief Act of 2011." The legislation would reverse EPA's Boiler MACT rules, one effect of which would be to ban the standard practice of recycling used railroad crossties as fuel in co-generation plants. EPA's action would be counterproductive from an environmental perspective and would substantially increase railroad costs.

EPA's rules classify creosote-treated wood, including crossties, as a solid waste -- rather than a fuel -- for combustion purposes. Yet from an environmental perspective:

- If all the ties presently burned as fuel were instead disposed of in landfills, the space required would be the annual equivalent of a football field 70 stories high.
- Sending crossties to landfills would result in greater total greenhouse gas emissions. The carbon in wood ties necessarily returns to the atmosphere, either through burning or decomposition. Thus, co-generation of ties does not increase greenhouse gas emissions. However, if the same ties were disposed of in landfills, fossil fuels would likely be burned instead with an annual greenhouse gas penalty of 1.65 million tons CO₂eq. Further, some of the ties disposed in landfills would degrade anaerobically, producing methane, an even more potent greenhouse gas.
- Co-generation facilities are subject to clean air permits. Accordingly, emissions from burning ties are already regulated.

Exacerbating these problems, EPA's new rules will cost the railroads between \$59 million and \$76 million annually. These higher costs are attributable to the need to dispose of used crossties in landfills.

From both an environmental and cost perspective, rules that result in millions of tires being disposed of in landfills each year instead of being safely recycled as fuel **make no sense**. For these reasons, AAR urges the prompt enactment of H.R. 2250.

Sincerely,

A handwritten signature in cursive script, appearing to read "Edward R. Hamberger". The signature is written in black ink and is positioned above the printed name.

Edward R. Hamberger

cc: Congressman Morgan Griffith
Congressman G.K. Butterfield



100 Middle Street
PO Box 9729
Portland, ME 04104-5029

Robert E. Cleaves IV
207 228-7376 direct
207 774-1127 facsimile
207 671-0152 mobile
bob@biomasspowerassociation.org

July 14, 2011

The Honorable Fred Upton
Chairman, Committee on Energy
& Commerce
United States House of Representatives
2183 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Henry Waxman
Ranking Member, Committee on Energy
& Commerce
United States House of Representatives
2204 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy
& Power
United States House of Representatives
2368 Rayburn HOB
Washington, D.C. 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee on
Energy & Power
United States House of Representatives
2268 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairmen and Ranking Members:

On behalf of the Nation's biomass to energy industry, the Biomass Power Association urges you to pass expeditiously H.R.2250, the "EPA Regulatory Relief Act of 2011." As you are well aware, the Boiler MACT and related Solid Waste Rules, as currently drafted, will have profoundly negative economic impacts on a vast array of facilities across the forest products, agricultural, and energy sectors, adding needless capital and operating costs at a time when our businesses continue to struggle.

The significance of biomass to our Nation's current and future energy supply is well known. Together with the paper and forest products industry, we contribute almost half the Nation's renewable energy supply, utilizing a wide range of otherwise unusable organic materials—from forest residues to rice hulls, bagasse and other agricultural by-products—in the production of energy. These fuels are vitally important for a broad array of uses. If not used by the biomass industry, these fuels are likely to be burned openly or left to decay. For decades, biomass has provided electricity, supplying the residential and industrial needs of citizens and companies across rural America. It is homegrown, domestically sourced, not subject to commodity speculators, and reliable.

Equally important is the role our industry can play in preventing forest fires, particularly in the West. This spring, more than 500,000 acres burned out of control in Arizona, largely because of decades of neglect in managing that resource. Federal lands are choked with residue and forestry debris that can be used for fuel for renewable energy instead of fuel for ecological and economic

July 14, 2011
Page 2

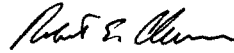
devastation. Our Nation's environmental laws should be written to encourage biomass utilization of these fuels, and not hinder such use with costly and uncertain regulations.

The future of biomass as an energy source is now in jeopardy unless Congress acts. EPA's Boiler MACT and Solid Waste Rule (called the "NHSM" Rule) were promulgated in haste by EPA in order to meet a Court ordered deadline. Simply stated, the MACT and NHSM Rules are not achievable, fundamentally flawed, and will place at risk tens of thousands of jobs in the forest products, agricultural, and energy sectors. Moreover, the NHSM Rule would treat many biomass fuels—long considered valuable sources of energy—as "wastes," resulting in the diversion to landfills, where the energy value would be squandered.

Congress needs to act now by passing H.R. 2250, which will provide much-needed certainty and time for EPA to get the Rules right. In so doing, jobs will be preserved, and investments can be made while protecting the environment in a "common sense" fashion. Additionally, getting these Rules right the first time will save EPA time and money in the long run by avoiding costly revisions.

Thank you for your leadership on this very important issue.

Sincerely,



Robert E. Cleaves
President & CEO
Biomass Power Association

Boise Inc.
1111 West Jefferson Street, Suite 200 PO Box 990050 Boise, ID 83799-0050
T 208 384 7555 F 208 333 1632
AlexanderToeldte@BoiseInc.com

Alexander Toeldte
President and CEO



July 1, 2011

The Honorable Fred Upton
Chairman, House Energy & Commerce
Committee
2183 Rayburn House Office Building
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member, Energy &
Commerce Committee
2204 Rayburn House Office Building
Washington, DC 20515

The Honorable Ed Whitfield
Chairman, Energy & Power
Subcommittee
2368 Rayburn House Office Building
Washington, DC 20515

The Honorable Bobby Rush
Ranking Member, Energy & Power
Subcommittee
2268 Rayburn House Office Building
Washington, DC 20515

Dear Chairmen and Ranking Members:

I am writing on behalf of Boise Inc.'s 5000 U.S.-based employees to express our strong support for H.R. 2250, legislation that would "provide additional time for the Administrator of the Environmental Protection Agency to issue achievable standards for industrial, commercial, and institutional boilers, process heaters, and incinerators." Boise Inc. is a producer of paper packaging, linerboard, corrugated containers, specialty label and release products, and uncoated free sheet paper.

This legislation is critical to our company because it will provide needed certainty while EPA rewrites their Boiler MACT rules and gets them right. In addition, giving our facilities the necessary time to comply with this regulation will allow us to plan for capital investments and utilize approaches that can provide needed flexibility to make the rules achievable. Moreover, we support language in the Non-hazardous Secondary Materials rule clarifying that various biomass residuals are fuels, and that certain gases in manufacturing processes do not result in boilers being treated as incinerators.

We look forward to working with you and your colleagues as this important legislation is considered in the House of Representatives. Please do not hesitate to let us know if you have any questions or comments regarding this critical issue.

Sincerely,

Alexander Toeldte
President & CEO

C: Honorable Morgan Griffith
Honorable G.K. Butterfield

Business Roundtable Statement on Introduction of EPA Regulatory Relief Act

Wednesday June 22, 2011 - 15:29 PM EDT

Source: [Business Wire News Releases](#)

Author: [Business Roundtable](#)

[Click here to read the original story](#)

"New legislation in the U.S. House, the EPA Regulatory Relief Act, is the right approach to forestall excessive, economy-damaging regulation by the Environmental Protection Agency of industrial boilers and incinerators.

"[Business Roundtable](#) welcomes today's introduction of H.R. 2250 by a bipartisan group of members of the House Energy and Commerce Committee. The bill provides a reasonable, balanced and cost-effective strategy to give the EPA time to set workable rules on the boilers.

"After the many months of EPA consideration and court challenges, it has become clear that legislation is necessary to protect job creation and economic growth. Without congressional action, businesses could be forced to spend billions of dollars that could be better used to invest in new jobs and products. U.S. competitiveness would suffer a serious blow.

"The House bill will allow the EPA to move forward while striking the right balance to sustain the environment, public health and the economy. The EPA Regulatory Relief Act also recognizes industry's legitimate interest in matching the right technology with its operations to reduce air pollution.

"The time has come for Congress to prevent the economic harm and job loss that would result from the EPA's regulatory overkill on industrial boilers. We hope the House and Senate move quickly to enact this legislation," said Business Roundtable President [John Engler](#).

Business Roundtable is an association of chief executive officers of leading U.S. companies with nearly \$6 trillion in annual revenues and more than 12 million employees. Member companies comprise nearly a third of the total value of the U.S. stock markets and pay more than 60 percent of all corporate income taxes paid to the federal government. Annually, they return more than \$167 billion in dividends to shareholders and the economy.

Business Roundtable companies give more than \$7 billion a year in combined charitable contributions, representing nearly 60 percent of total corporate giving. They are technology innovation leaders, with more than \$111 billion in annual research and development spending â nearly half of all total private R&D spending in the U.S.

Business Roundtable companies provide health care coverage to more than 35 million employees, retirees, and their families.

Please visit us at www.businessroundtable.org, check us out on [Facebook](#) and [LinkedIn](#), and follow us on [Twitter](#).

Contacts:

Business Roundtable

Kirk Monroe, [REDACTED]

or

Joe Crea, [REDACTED]

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CHAMBER OF COMMERCE
OF THE
UNITED STATES OF AMERICA

R. BRUCE JOSTEN
EXECUTIVE VICE PRESIDENT
GOVERNMENT AFFAIRS

1615 H STREET, N.W.
WASHINGTON, D.C. 20062-2000
202/463-5310

July 8, 2011

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Upton and Ranking Member Waxman:

The U.S. Chamber of Commerce, the world's largest business federation representing the interests of more than three million businesses and organizations of every size, sector, and region, supports H.R. 2250, the "EPA Regulatory Relief Act of 2011." This bill would provide much-needed relief to manufacturers, who face a host of excessive and unmanageable costs in order to comply with EPA's flawed "Boiler MACT" suite of rules.

EPA originally proposed a set of Boiler MACT regulations that were so costly, so burdensome, and received such a massive groundswell of opposition from the regulated community, that the Agency had no choice but to seek a long-term extension to drastically redesign its proposal. It received only one month, and the resulting final rules are simply not adequate. EPA has imposed an administrative stay of the rules and is reconsidering them, but ongoing legal challenges to the stay create great uncertainty for both EPA and the regulated community.

H.R. 2250 provides EPA the time it needs to get Boiler MACT right, and provides assurance to manufacturers that the courts would not restart the compliance clock until EPA has been given adequate time to finalize the rules. Given the significant costs at issue in this rulemaking—the American Forest & Paper Association estimates capital costs of \$14 billion for general manufacturing—EPA must be permitted the time to issue reasonable (and achievable) Boiler MACT regulations.

Sincerely,



R. Bruce Josten

cc: The Members of the House Committee on Energy and Commerce



July 7, 2011

The Honorable Fred Upton
 Chairman, Committee on Energy and
 Commerce
 United States House of Representatives
 2183 Rayburn House Office Building
 Washington, DC 20515

The Honorable Henry Waxman
 Ranking Member, Committee on Energy and
 Commerce
 United States House of Representatives
 2204 Rayburn House Office Building
 Washington, DC 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy and
 Power
 United States House of Representatives
 2368 Rayburn House Office Building
 Washington, DC 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on Energy
 and Power
 United States House of Representatives
 2268 Rayburn House Office Building
 Washington, DC 20515

Dear Chairmen and Ranking Members:

The Corn Refiners Association (CRA) urges Congress to pass H.R. 2250, the "EPA Regulatory Relief Act of 2011." This Act will provide additional time for the Administrator of the Environmental Protection Agency (EPA) to issue achievable standards for industrial, commercial, and institutional boilers, process heaters, and incinerators. The Boiler MACT rules will have serious economic impacts on the corn wet milling industry. CRA member companies operate many of the largest boilers in the agricultural sector and provide over 65,000 jobs throughout our country.

The CRA is the national trade association representing the corn refining (wet milling) industry of the United States. CRA and its predecessors have served this important segment of American agribusiness since 1913. Corn refiners manufacture starches, sweeteners, corn oil, bioproducts (including ethanol), and animal feed ingredients.

Although there were improvements from the proposed rule, the EPA did not have enough time to make appropriate and necessary revisions to the final Boiler MACT rules. The standards are far more stringent than needed to assure protection of health and the environment from industrial boiler HAP emissions. The EPA has the legal discretion and technical justification to substantially reduce the burden of the standard while still providing ample protection to health and the environment.

Our industry faces a withering global economic slump and fierce competition from overseas manufacturers. Therefore, it is imperative for mandatory environmental controls such as the Industrial Boiler MACT standards to be tailored as closely as possible such that health and the environment are protected without requiring unnecessary expenditures of time and resources.

July 1, 2011
Page 2

EPA has also created a presumption that materials commonly used as fuels are wastes subject to extremely costly and stigmatizing incinerator standards. Essentially, EPA is encouraging facilities to stop using valuable fuels such as renewable biomass residuals. This would not only impose hundreds of millions of dollars in unreasonable costs, but would increase the use of fossil fuels and cause tons of valuable materials to be diverted to landfills, negatively impacting the environment and long term U.S. security.

If enacted, H.R. 2250 will provide the time necessary for EPA to get the rules right and the assurance for businesses that will be investing billions of dollars to retrofit countless industrial boilers and process heaters in order to meet the final rule. This action will preserve jobs and the competitiveness of the industrial agricultural sector while protecting the environment.

We truly appreciate your leadership on this critical issue to the corn wet milling industry. If you should have any questions, please do not hesitate to contact me at aerickson@corn.org or (202) 331-1634.

Sincerely,



Audrae Erickson
President



Representing the Interests of America's Industrial Energy Users since 1978

July 20, 2011

The Honorable Fred Upton
Chairman, Committee on Energy &
Commerce
United States House of Representatives
2183 Rayburn House Office Building
Washington, DC 20515

The Honorable Henry Waxman
Ranking Members, Committee on Energy &
Commerce
United States House of Representatives
2204 Rayburn House Office Building
Washington, DC 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy
and Power
United States House of Representatives
2368 Rayburn House Office Building
Washington, DC 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee on Energy
and Power
United States House of Representatives
2268 Rayburn House Office Building
Washington, DC 20515

Dear Chairmen and Ranking Members:

On behalf of the more than twenty economic sectors of manufacturers, universities, and energy providers who make up the Council of Industrial Boiler Owners (CIBO) we strongly urge you to pass the EPA Regulatory Relief Act of 2011 (H.R. 2250). As you know, this common-sense and broadly supported legislation will give the Environmental Protection Agency (EPA) critically important additional time to improve the Boiler MACT rules that it finalized under pressure of a court-ordered deadline.

CIBO is a broad-based association of industrial boiler owners, architect-engineers, related equipment manufacturers, and university affiliates with over 100 members. CIBO members have facilities in every region of the country and a representative distribution of almost every type of boiler and fuel combination currently in operation. CIBO was formed in 1978 to promote the exchange of information within the industry and between industry and government relating to energy and environmental equipment, technology, operations, policies, law and regulations affecting industrial boilers. Since its formation, CIBO has been active in the development of technically sound, reasonable, cost-effective energy and environmental regulations for industrial boilers. CIBO supports regulatory programs that provide industry with

enough flexibility to modernize effectively and without penalty to ensure modernization and cost-effective environmental protection.

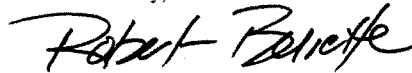
Our members represent just a fraction of the tens of thousands of entities that will be affected by the Boiler MACT rules, but they offer a look at the dangers of the hasty development and implementation of these rules. These rules won't simply drive up costs for large industries, but they will drive up tuition for students at our member universities, drive up costs for energy consumers, and force some manufacturers to lay off workers from permanent high-paying jobs. CIBO estimates the capital cost to install controls to meet the major source standards at \$14 billion, which according the results of an economic impact analysis, equates to 224,000 jobs at risk.

The final Boiler MACT rules in many cases are not achievable by boilers across their range of operations, even with the best available control technology. Very few of the 1594 existing major sources can comply with the standards, and we have been unable to identify any existing unit that can simultaneously comply with the new unit standards for any fuel other than natural gas. Many units would be forced to put in place expensive controls even though the controls may not be guaranteed to achieve the emission standards.

The EPA Regulatory Relief Act will provide time for EPA to correct substantial defects with the MACT rules, as well as provide certainty to employers and employees in these difficult economic times. This legislation will ensure that the environment is adequately protected without unfairly and unnecessarily jeopardizing our nation's competitiveness.

We appreciate your leadership and the leadership of the entire committee on this vital legislation. We would be happy to provide any assistance that you might require.

Sincerely,



Robert D. Bessette
President

Cc: Congressman Morgan Griffith
Congressman G.K. Butterfield



Domtar
100 Kingsley Park Drive
Fort Mill, South Carolina 29715
Telephone 803/802-8041

August 5, 2011

The Honorable Fred Upton
Chairman, House Energy and
Commerce Committee
2183 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Ed Whitfield
Chairman, Energy and
Power Subcommittee
2368 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Henry Waxman
Ranking Member, Energy and
Commerce Committee
2204 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bobby Rush
Ranking Member, Energy and Power
Power Subcommittee
2268 Rayburn House Office Building
Washington, D.C. 20515

SUBJECT: H.R. 2250 TO PROVIDE ADDITIONAL TIME FOR EPA TO ISSUE ACHIEVEABLE STANDARDS FOR BOILERS

Dear Chairmen Upton, Chairman Whitfield, Ranking Members Waxman and Rush:

On behalf of Domtar's more than 8,400 employees, I am writing in support of H.R. 2250, pending legislation to "provide additional time for the Environmental Protection Agency to issue achievable standards for industrial, commercial and institutional boiler, process heaters and incinerators." Domtar is the leading North American producer of printing paper, writing papers and various grades of pulp. We operate 21 manufacturing facilities in the United States and we are directly impacted by the legislation.

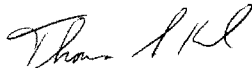
Domtar supports H.R. 2250, understanding it will provide the E.P.A. with the time the Agency has requested to correct serious flaws and deficiencies in the current version of the "Boiler MACT" rules. E.P.A. has acknowledged shortcomings in the current rule and earlier this year the Agency asked for additional time. Unfortunately their request was denied by the Judicial Branch. We also support the legislation's compliance period extension. This will give our Company the necessary time needed to plan for very significant capital investment. Additional compliance time will provide needed flexibility to make the rules ultimately achievable. That does not exist in the current rules.

It is essential that biomass residuals are properly classified as fuels. H.R. 2250 accomplishes this important objective. Otherwise users of biomass face the prospect of this valuable fuel being treated as waste that might otherwise be landfilled or burned in an incinerator.

Chairmen Upton and Whitfield
Ranking Members Waxman and Rush
August 5, 2011
Page two

Domtar wants to work with you and your colleagues as this critical legislation is considered in the United States House of Representatives. We trust you will communicate any questions or comments.

Sincerely,



Thomas S. Howard
Vice President, Government Relations

Copy: The Honorable Morgan Griffith
The Honorable G. K. Butterfield





FLORIDA STATE COUNCIL
International Association of Machinists
& Aerospace Workers



Office of

July 5, 2011

The Honorable Fred Upton
Chairman, Committee on Energy & Commerce
United States House of Representatives
2183 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy & Power
United States House of Representatives
2368 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Henry Waxman
Ranking Member, Committee on Energy & Commerce
United States House of Representatives
2204 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bobby Bush
Ranking Member, Subcommittee on Energy & Power
United States House of Representatives
2268 Rayburn House Office Building
Washington, D.C. 20515

RE: SUPPORT FOR H.R. 2250 FROM FLORIDA, TEXAS, AND HAWAIIAN SUGAR
INDUSTRY

Dear Chairmen and Ranking Members:

The Florida Sugar Industry (FSI) and the sugarcane processors located in Texas and Hawaii respectfully request you to pass H.R. 2250, the "EPA Regulatory Relief Act of 2011." H.R. 2250 will help protect thousands of jobs that have been threatened by EPA's recent adoption of the "Boiler MACT" rule.¹

The Boiler MACT rule will have serious economic impacts on a vast array of facilities across the industrial, commercial, and institutional sectors, including the sugarcane processing industry.

¹ The Boiler MACT (National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters) rule was published in the Federal Register on March 21, 2011.

July 5, 2011
Page 2

The Boiler MACT rule establishes numeric emission limits, work practices, and other requirements for industrial boilers, including the boilers that are operated by the sugar mills in Florida, Texas, and Hawaii. Many of these new requirements are not achievable for real-world boilers. Consequently, the Boiler MACT rule will force the sugarcane industry to spend up to \$350 million on new equipment or, in the alternative, reduce its operations and cut jobs. These economic and employment losses will strike hard in the small, rural, agricultural communities where sugar mills are located.

We believe some of the biggest problems with the Boiler MACT rule have been caused by two factors that Congress can fix by passing H.R. 2250: (1) EPA was under a court-ordered deadline to issue the Boiler MACT rule sooner than EPA wanted; and (2) EPA believes the courts have restricted EPA's ability to provide flexibility in the Boiler MACT rule. As a result of these factors, EPA adopted a Boiler MACT rule that is much more stringent and burdensome than is necessary or required by the Clean Air Act.

H.R. 2250 is needed to resolve the uncertainty about EPA's authority and to reduce the adverse impacts of the Boiler MACT rule. Among other things, H.R. 2250 is needed to:

- Ensure that the Boiler MACT rule is stayed until EPA promulgates a new rule that is consistent with Congressional intent;
- Provide EPA with adequate time to correct and re-propose its rule;
- Provide clear direction to EPA so that the new rule is reasonable, flexible, and achievable; and
- Provide more time for facilities to comply with the rule.

If enacted, H.R. 2250 will provide the time needed for EPA to correctly complete its rulemaking. It also will allow businesses to plan for the tremendous capital expenses required by EPA's rule. By enacting H.R. 2250, Congress can help preserve jobs, while ensuring that EPA's decisions are sound and protective of the environment.

These issues are of great importance to the sugarcane processing industry in Florida, Texas, and Hawaii, including the thousands of people that are directly employed by the industry, and the communities that depend upon the industry for their economic survival.

Thank you for taking a leadership role in addressing our concerns.

Sincerely,

President

Florida Sugar Industry

7/01/2011

The Honorable Fred Upton
Chairman, Committee on Energy & Commerce
United States House of Representatives
2183 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy & Power
United States House of Representatives
2368 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Henry Waxman
Ranking Member, Committee on Energy & Commerce
United States House of Representatives
2204 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bobby Bush
Ranking Member, Subcommittee on Energy & Power
United States House of Representatives
2268 Rayburn House Office Building
Washington, D.C. 20515

**RE: SUPPORT FOR H.R. 2250 FROM FLORIDA, TEXAS, AND HAWAIIAN SUGAR
INDUSTRY**

Dear Chairmen and Ranking Members:

The Florida Sugar Industry (FSI) and the sugarcane processors located in Texas and Hawaii respectfully request you to pass H.R. 2250, the "EPA Regulatory Relief Act of 2011." H.R. 2250 will help protect thousands of jobs that have been threatened by EPA's recent adoption of the "Boiler MACT".¹

The Boiler MACT rule will have serious economic impacts on a vast array of facilities across the industrial, commercial, and institutional sectors, including the sugarcane processing industry. The Boiler MACT rule establishes numeric emission limits, work practices, and other requirements for industrial boilers, including the boilers that are operated by the sugar mills in Florida, Texas, and Hawaii. Many of these new requirements are not achievable for real-world boilers. Consequently, the Boiler MACT will force the sugarcane industry to spend up to \$350 million on new equipment or, in the alternative, reduce its operations and cut jobs. These economic and employment losses will strike hard in the small, rural, agricultural communities where sugar mills are located.

We believe some of the biggest problems with the Boiler MACT rule have been caused by two factors that Congress can fix by passing H.R. 2250: (1) EPA was under a court-ordered deadline to issue the Boiler MACT rule sooner than EPA wanted; and (2) EPA believes the courts have restricted EPA's ability to provide flexibility in the Boiler MACT rule. As a result of these factors, EPA adopted a Boiler MACT rule that is much more stringent and burdensome than is necessary or required by the Clean Air Act.

¹ The Boiler MACT (National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heater) rules were published in the Federal Register on March 21, 2011.

H.R. 2250 is needed to resolve the uncertainty about EPA's authority and to reduce the adverse impacts of the Boiler MACT rule. Among other things, H.R. 2250 is needed to:

- Ensure that the Boiler MACT rule is stayed until EPA promulgates a new rule that is consistent with Congressional intent;
- Provide EPA with adequate time to correct and re-propose its rule;
- Provide clear direction to EPA so that the new rule is reasonable, flexible, and achievable; and
- Provide more time for facilities to comply with the rule.

If enacted, H.R. 2250 will provide the time needed for EPA to correctly complete its rulemaking. It also will allow businesses to plan for the tremendous capital expenses required by EPA's rule. By enacting H.R. 2250, Congress can help preserve jobs, while ensuring that EPA's decisions are sound and protective of the environment.

These issues are of great importance to the sugarcane processing industry in Florida, Texas, and Hawaii, including the thousands of people that are directly employed by the industry, and the communities that depend upon the industry for their economic survival.

Thank you for taking a leadership role in addressing our concerns.

Sincerely,



Jose F. Alvarez

Executive Vice President Operations & General Manager
Sugar Cane Growers Cooperative of Florida
On behalf of the Florida Sugar Industry (FSI) and the sugarcane processors in Texas and Hawaii
P.O. Box 666
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Industrial Energy Consumers of America
The Voice of the Industrial Energy Consumers

1155 15th Street, NW, Suite 500 • Washington, D.C. 20005 202-223-1420

June 30, 2011

The Honorable Fred Upton
 Chairman
 Committee on Energy & Commerce
 Washington, DC 20515

The Honorable Henry Waxman
 Ranking Member
 Committee on Energy & Commerce
 Washington, DC 20515

The Honorable Ed Whitfield
 Chairman
 Subcommittee on Energy and Power
 Washington, DC 20515

The Honorable Bobby Rush
 Ranking Member
 Subcommittee on Energy and Power
 Washington, DC 20515

Dear Chairmen and Ranking Members:

On behalf of the Industrial Energy Consumers of America (IECA) and the competitiveness of manufacturers across the country, we strongly urge the Congress to support H.R. 2250, the "EPA Regulatory Relief Act of 2011." H.R. 2250 does not change the Clean Air Act. It simply allows manufacturing companies to achieve new air quality standards in a more cost effective approach and provides regulatory certainty that is absent under EPA's final rule changes. Nonetheless, implementing new stringent air quality standards under H.R. 2250 will cost our companies billions of dollars. Having lost 5.7 million manufacturing jobs since 2000, the cost effectiveness of regulations are not a luxury, they are an absolute necessity to job retention and creation.

We believe that this legislation meets the intent of President Obama's January 18, 2011 Executive Order 13563 that calls for "Our regulatory system to protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation." H.R. 2250 is a rational alternative and we anticipate his support.

IECA member companies are not opposing meeting the goals of the Clean Air Act. We are opposing the unnecessarily costly approach proposed by the EPA that threatens competitiveness of manufacturing facilities through costly new capital and operating costs. Also, more time is needed for compliance for several reasons, including lowering costs.

Importantly, the EPA final rule changes are just as unaffordable as the proposed rules were. The final Boiler MACT rule alone would cost over \$14 billion in capital for the manufacturing sector, plus billions more in annual operating costs. Complying with the incinerator standards could cost several billion dollars more in capital.

Problems with the EPA Rules:

- EPA published final rules knowing that flaws were included to meet a court ordered deadline.

June 30, 2011

Page 2

- The rules are not achievable for real-world boilers across the range of fuels and operating conditions.
- They also require extremely costly controls in some areas where lower cost work practices would be adequate to protect public health.
- EPA has created a presumption that materials commonly used as fuels are waste – subject to extremely costly incinerator standards. If not changed, many facilities would stop using, for example, renewable and other onsite cost effective fuels. This would not only impose hundreds of millions of dollars in unreasonable costs, but it also would increase the use of fossil fuels and cause millions of tons of valuable materials to be diverted to landfills. This does not make economic or environmental sense.

Legislation is needed to resolve serious uncertainties and costs, including to:

- Ensure the rules are stayed for an adequate and certain period, as EPA's current administrative stay is being challenged.
- Allow EPA adequate time to re-propose the rules and get them right, including time for stakeholders to conduct more emissions testing and to avoid mistakes that occur when rulemakings of this scope and importance are rushed and become vulnerable to legal challenge.
- Provide direction and support for EPA to use the discretion it already has under the Clean Air Act and Executive Order 13563 to add flexibility and make the rules achievable.
- Clarify that various materials, such as biomass residuals are fuels and that certain gases in manufacturing processes do not result in boilers being treated as incinerators.
- Give facilities more time to comply with the complex and capital-intensive requirements of the rules.

So far this year, manufacturing has added 173,000 jobs against the backdrop of the loss of 5.7 million since 2000. This figure puts in perspective the need for responsible and more cost effective regulation. We look forward to working with you on this important issue.

Sincerely,

Paul Cicio
President

cc: President Barack Obama
Congressman Morgan Griffith
Congressman G.K. Butterfield

The Industrial Energy Consumers of America is a nonpartisan association of leading manufacturing companies with \$800 billion in annual sales and with more than 750,000 employees nationwide. It is an organization created to promote the interests of manufacturing companies through research, advocacy, and collaboration for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. IECA membership represents a diverse set of industries including: plastics, cement, paper, food processing, brick, chemicals, fertilizer, insulation, steel, glass, industrial gases, pharmaceutical, aluminum and brewing.



**INTERNATIONAL
BROTHERHOOD
OF ELECTRICAL
WORKERS.**

900 Seventh Street, NW
Washington, DC 20001
202.833.7000
www.ibew.org

EDWIN D. HILL
International President

SAM J. CHILIA
International
Secretary-Treasurer

August 29, 2011

Dear Senator or Representative:

On behalf of the approximately 725,000 members of the International Brotherhood of Electrical Workers (IBEW) I write in support of the bipartisan *EPA Regulatory Relief Act of 2011* (H.R. 2250 and S. 1392), which directs the Environmental Protection Agency (EPA) to develop attainable emission standards for non-utility boilers and grants additional time for compliance with the Maximum Achievable Control Technology (MACT) rule for industrial boilers.

In June 2010 the EPA proposed new rules that reduce emissions from industrial boilers, process heaters, and incinerators. In December 2010, after receiving more than 4,800 comments, the EPA asked a federal court for an additional 15 months to re-propose the rules and accept additional public comment. The court denied the request and instructed EPA to issue the rules. EPA complied and on March 21, 2011 published four final interrelated, highly complex rules.

The *EPA Regulatory Relief Act* gives EPA the time and parameters it needs to develop standards that will protect public health and the environment without undue risk to jobs and the economy. Among other things, H.R. 2250 and S. 1392 provide the EPA with at least 15 months to re-propose and finalize new rules, extend compliance deadlines from three to five years, instruct EPA to adopt definitions that allow heat sources to use a wide range of alternative fuels and direct EPA to ensure that the new rules are achievable by real-world boilers, process heaters, and incinerators.

Absent this legislation I am very concerned IBEW members employed in pulp and paper mills may find themselves unemployed if their company is unable to comply with the regulations in a timely manner. I am also concerned with our construction members employed by electrical contractors who routinely perform service and remodel work in these labor-intensive industrial facilities. If pulp and paper mills close, any future work will be lost as well.

I respectfully request your support for H.R. 2250 and S. 1392, bipartisan legislation designed to protect both jobs and the environment.

Sincerely yours,

Edwin D. Hill
International President

EDH:lgd
Opeiu#2



ANN WROBLESKI
VICE PRESIDENT
GLOBAL GOVERNMENT RELATIONS

1101 PENNSYLVANIA AVENUE NW
SUITE 200
WASHINGTON DC 20004

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F 202 628-1368
ann.wrobleski@paper.com

July 14, 2011

The Honorable Fred Upton
Chairman, Committee on Energy
& Commerce
United States House of Representatives
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member, Committee on Energy &
Commerce
United States House of Representatives
Washington, DC 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy
& Power
United States House of Representatives
Washington, DC 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee on Energy
& Power
United States House of Representatives
Washington, DC 20515

Dear Chairmen & Ranking Members:

On behalf of International Paper and our 35,000 U.S. employees, we urge you to pass H.R. 2250, the "EPA Regulatory Relief Act of 2011." With EPA's administrative stay likely to be challenged in court, this legislation is needed to provide a level of certainty in which IP can operate our businesses while giving EPA adequate time necessary to re-propose Boiler MACT rules that are achievable for "real world" boilers across a range of fuels and operating conditions.

International Paper is committed to operating our facilities in a responsible manner and also believes that Boiler MACT rules should be crafted in a balanced way that sustains the environment, public health and the economy. We are deeply concerned that the potential impact of the Boiler MACT rules could be unsustainable for U.S. manufacturing, in addition to small and large businesses, municipalities, universities, federal facilities and commercial entities.

The EPA Regulatory Relief Act of 2011 would provide much-needed certainty, give EPA the time it needs to get the rules right, clarify that various biomass-based materials are fuels and that non-condensable gases (NCGs) should not be classified as solid wastes, give facilities additional time to comply with the complex requirements and plan for capital expenses, and provide support for EPA to add flexibility and make the rules achievable.

Thank you for your help in promoting cost-effective and achievable Boiler MACT rules that protect the environment and preserve the competitiveness of the U.S. manufacturing sector.

Sincerely,

A handwritten signature in cursive script that reads "Ann Wrobleski".

cc: The Honorable Morgan Griffith
The Honorable G.K. Butterfield



July 13, 2011

The Honorable Fred Upton
Chairman, Committee on Energy
and Commerce
U.S. House of Representatives
2183 Rayburn House Office Bldg.
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member, Committee on Energy
and Commerce
U.S. House of Representatives
2204 Rayburn House Office Bldg.
Washington, DC 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on
Energy and Power
U.S. House of Representatives
2368 Rayburn House Office Building
Washington, DC 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee on
Energy and Power
U.S. House of Representatives
2268 Rayburn House Office Building
Washington, DC 20515

Dear Chairmen and Ranking Members:

On behalf of Louisiana-Pacific Corporation (LP), I am writing to urge you to act as quickly as possible on H.R. 2250, the "EPA Regulatory Relief Act of 2011. As you may know, Louisiana-Pacific manufactures engineered wood products used in residential construction. We presently operate 16 boilers and process heaters fired with resinated wood.

There have been important improvements between the proposed and final Boiler MACT rules; however, we are concerned that the rules are not achievable for real-world boilers. In addition, a related rule on Non-Hazardous Secondary Materials (NHSM) reclassifies many biomass residual fuels as solid wastes, including resinated wood used extensively in our mills. These resinated materials have a long history of use in our industry and are an integral part of the production processes for composite wood products. The design and construction of energy systems at our wood products manufacturing facilities are normally based on the maximum utilization of wood and wood by-products including resinated trim and sander dust. In fact, the composite panel manufacturing industry, since its beginning has designed and built facilities to utilize 100% of the wood by-products generated during the manufacturing process. Excluding resinated wood fuels in our manufacturing process would require a complete re-engineering of our facilities and add insurmountable operating costs for the substitution of fossil fuels and the off-site transportation and disposal of resinated materials.

It is my understanding that you have received the attached letter signed by the American Forest & Paper Association and the American Wood Council that outlines, in detail, the concerns that the wood products industry has with EPA's proposed

LOUISIANA-PACIFIC CORPORATION

414 Union St., Suite 2000 Nashville, TN 37219 T 615.986.5600 F 615.986.5666 WWW.LPCORP.COM

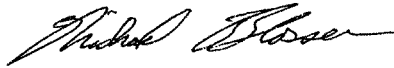


Boiler MACT rule. LP shares these concerns, and we hope you will take them into consideration as you move forward on H.R. 2250.

In closing, with new housing starts at historic lows, LP can ill afford the costs associated with implementing rules that are simply unachievable. Therefore, I urge you to make H.R. 2250 your top priority and get it to the House floor for a vote before the upcoming Congressional recess.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Blosser". The signature is fluid and cursive, written in a professional style.

Mike Blosser
Vice President Environment, Health and Safety
Louisiana-Pacific Corporation

Attachment: Letter dated 6/28/11 from American Forest and Paper Association and American Wood Council



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Dirk J. Krouskop
Vice President
Safety, Health & Environment

July 7, 2011

The Hon. Fred Upton
Chairman
House Committee on Energy & Commerce
2183 Rayburn Building
Washington, D.C. 20515

Dear Mr. Chairman:

On behalf of MeadWestvaco Corporation, I wish to express support for H.R. 2250, the *EPA Regulatory Relief Act*, now pending before the committee. We appreciate the Committee's bi-partisan approach to this issue and legislation, under your leadership. We urge passage of this legislation during the weeks ahead.

I had a personal opportunity to testify before the Energy and Power Subcommittee on April 15, at which time I expressed concerns regarding the major flaws in the Boiler MACT regulation, recognizing as well the serious economic impacts which this regulation will have on hundreds of industrial, commercial and institutional operations. The EPA was obligated under court order to produce final rules in a matter of weeks this spring while recognizing the agency would need at least 15 months to overhaul the regulation. As has now been recognized by your Committee and, indeed, by the EPA itself, the rules issued require limits in many cases that are not achievable for boilers and in particular failed to capture the range of fuels in use and the different operating conditions. The final rules are markedly ineffective, vastly over-costly (potentially over \$14 billion for the manufacturing sector) and in need of major adjustments beyond the scope of the agency's current Reconsideration process.

H.R. 2250, will require a formal stay of the rule, with sufficient time for the EPA to re-propose the rule and "get it right." The bill also includes sensible direction within the scope of the Clean Air Act to allow sources to use a wide range of alternative fuels, additional compliance time and with definitions allowing "work practices" and other methods to provide more flexibility to better assure such rules are achievable and less burdensome. MeadWestvaco also supports the Committee's focus and oversight on the cumulative impact implications of the EPA's current list of pending Air regulations, including the TRAIN Act legislation. The now - recognized massive flaws in the major provisions, underlying data and cost estimates of the Boiler MACT regulation alone map a clear case on the need for a more comprehensive and balanced process to better examine and fashion these regulations, and the implications for manufacturers and the U.S. economy.

Sincerely,

Dirk J. Krouskop, V.P. Safety Health & Environment

CC:

The Hon. Henry Waxman
The Hon. Ed Whitfield
The Hon. Bobby Rush
The Hon. Morgan Griffith



Paul A. Yost
 Vice President
 Energy & Resources Policy

July 13, 2011

The Honorable Fred Upton
 Chairman, Committee on Energy
 and Commerce
 United States House of Representatives
 Washington, DC 20515

The Honorable Henry Waxman
 Ranking Member, Committee on Energy
 and Commerce
 United States House of Representatives
 Washington, DC 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy and
 Power
 United States House of Representatives
 Washington, DC 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on Energy
 and Power
 United States House of Representatives
 Washington, DC 20515

Dear Chairmen and Ranking Members:

On behalf of the National Association of Manufacturers (NAM) and the 18.6 million jobs supported by the industrial sector, we strongly support H.R. 2250, the EPA Regulatory Relief Act of 2011. The Environmental Protection Agency's (EPA) Boiler MACT rules have the potential to be devastating to the manufacturing community.

Although there were some important improvements between the proposed and the final Boiler MACT rules, the EPA published the final rules knowing that flaws were included in order to meet a court-ordered deadline. The rules are not achievable for real-world boilers across the range of fuels and operating conditions. They also require extremely costly controls in some areas where work practices would be adequate to protect public health. The rules place jobs at risk when our nation cannot afford any more job losses.

Moreover, the EPA's final rules create a presumption that materials commonly used as fuels are wastes subject to extremely costly and stigmatizing incinerator standards. The net result is that many facilities would stop using valuable fuels such as renewable biomass residuals. This would not only impose hundreds of millions of dollars in unreasonable costs, but it would also increase the use of fossil fuels and cause millions of tons of valuable materials to be diverted to landfills – a bad result for the environment.

Accordingly, the final rules are just as unaffordable as the proposed rules. The final Boiler MACT rule alone would cost over \$14 billion in capital for the manufacturing sector, plus billions more in operating costs. Complying with the incinerator standards would increase costs by several billion dollars more in capital expenditures.

Legislation is needed to resolve serious uncertainties and vulnerabilities, including to:

- Ensure the rules are stayed for an adequate and certain period, as the EPA's current administrative stay is being challenged;

Leading Innovation. Creating Opportunity. Pursuing Progress.

- Allow the EPA adequate time to re-propose the rules and get them right, including time for stakeholders to conduct more emissions testing and to avoid mistakes that occur when rulemakings of this scope and importance are rushed and become vulnerable to legal challenge;
- Provide direction and support for the EPA to use the discretion it already has under the Clean Air Act and Executive Order 13563 to add flexibility and make the rules achievable;
- Clarify that various materials, such as biomass residuals, are fuels and that certain gases in manufacturing processes do not result in boilers being treated as incinerators; and
- Give facilities more time to comply with the complex and capital-intensive requirements of the rules.

If enacted, H.R. 2250 will provide the much-needed certainty and time for the EPA to get the rules right for businesses that will be investing billions of dollars to plan for the capital expenses. This action will preserve jobs and the competitiveness of the manufacturing sector while protecting the environment.

As our nation struggles to recover from the recession, this is a time when we can least afford another roadblock to jobs and economic recovery. Thank you for your leadership on this issue of great importance to manufacturing.

Sincerely,

A handwritten signature in black ink, appearing to read 'Paul A. Yost', with a long horizontal line extending to the right.

Paul A. Yost
Vice President, Energy & Resources Policy
National Association of Manufacturers



NATIONAL CONSTRUCTION ALLIANCE II

HEADQUARTERS: 1634 Eye Street NW, Suite 805 • Washington, DC 20006 • 202-239-4779

July 11, 2011

The Honorable Morgan Griffith
 United State House of Representatives
 1108 Longworth House Office Building
 Washington, DC 20515

Dear Congressman Griffith:

The National Construction Alliance II supports your legislation, H.R. 2250, the EPA Regulatory Relief Act of 2011. The National Construction Alliance II – a partnership between two of the nation's leading construction unions, the International Union of Operating Engineers and the United Brotherhood of Carpenters and Joiners of America – represents nearly one-million workers, most of whom work in the construction, manufacturing and maintenance industries across the US. Our members are suffering from record high unemployment for the third straight year.

Your bipartisan legislation addresses the EPA "Boiler MACT" rule, a regulation issued under the Clean Air Act Amendments of 1990. The statute requires that EPA regulate hazardous air pollutants from emission sources, including industrial boilers, using maximum achievable control technology ("MACT"). Although most boilers already are well controlled for key pollutants, EPA's Boiler MACT rule will require more than 90% of boilers to make significant changes, some of which are not achievable and others that are not affordable, resulting in the loss of thousands of industrial manufacturing and maintenance jobs.

It is anticipated that the capital cost for all manufacturing from the Boiler MACT rule could be over \$14 billion, plus billions more in annual operating costs. A wide range of manufacturers (and the jobs they sustain) would be adversely impacted, as well as municipal utilities, universities, hospitals, federal and other facilities that operate larger boilers.

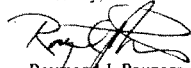
HR 2250 contains the following key provisions:

- Stay the four final rules and provide the EPA with at least 15 months to re-propose and finalize new rules;
- Extend compliance deadlines from 3 to at least 5 years to allow facilities adequate time to comply with the standards and install necessary equipment;
- Direct the EPA, when developing the new rules, to adopt definitions that allow sources to use a wide range of alternative fuels; and
- Direct the EPA to ensure that the new rules are achievable by real-world boilers, process heaters, and incinerators and impose the least burdensome regulatory alternatives consistent with the President's Executive Order 13563.

REGIONAL OFFICE: 100 East Corson Street, Suite 230 • Pasadena, CA 91103 • 626-229-9975

The National Construction Alliance II appreciates your leadership, along with the four Democratic co-sponsors (Representatives Butterfield (NC-01), Barrow (GA-12), Ross (AR-04), and Matheson (UT-02)) and four Republican co-sponsors (McMorris Rodgers (WA-05), Scalise (LA-01), and Olson (TX-22), in addition to you). We are pleased to endorse H.R. 2250 and look forward to working with you to enact the legislation into law.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ray Poupore', written in a cursive style.

Raymond J. Poupore
Executive Vice President



July 6, 2011

The Honorable Fred Upton
 Chairman, Committee on Energy &
 Commerce
 United States House of Representatives
 2183 Rayburn House Office Building
 Washington, DC 20515

The Honorable Henry Waxman
 Ranking Member, Committee on Energy and
 Commerce
 United States House of Representatives
 2204 Rayburn House Office Building
 Washington, DC 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy &
 Power
 United States House of Representatives
 2368 Rayburn House Office Building
 Washington, DC 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on Energy and
 Power
 United States House of Representatives
 2268 Rayburn House Office Building
 Washington, DC 20515

Dear Chairmen and Ranking Members:

The National Federation of Independent Business urges your support of H.R. 2250, the "EPA Regulatory Relief Act of 2011." This legislation will address many of the potentially serious economic impacts that will result from the EPA's Boiler MACT rules. As the Committee knows from the several hearings in which this issue has been raised, EPA was forced to publish this set of final rules despite knowing they contained flaws.

Though the agency has published its intention to reconsider the rules and promulgate a new set of finals in April 2012, NFIB believes the rules and EPA would benefit from the certainty this legislation provides. NFIB's members and their employees stand to be affected both directly and indirectly by these rules. If the rules go into effect as is, some of our members face the possibility of reducing jobs or even closing their doors for good.

H.R. 2250 would help small businesses in several ways. First, it would ensure that the rules are stayed for a sufficient and definite amount of time. This is important since EPA's self-imposed stay is currently the subject of a court challenge and could be lifted at any time. Second, it would give EPA the time it needs to get the rules correct. The agency will benefit from the additional time for industry to provide the accurate data EPA needs to fully assess the impact of this rule.

National Federation of Independent Business

1201 F Street NW * Suite 200 * Washington, DC 20004 * 202-554-9000 * Fax 202-554-0496 * www.NFIB.com

Third, the legislation will provide direction and support for EPA to use its discretion under the Clean Air Act and Executive Order 13563 to make the rules flexible and achievable. Fourth, the legislation will ensure that the definition of some materials do not result in certain boilers being erroneously classified as incinerators. Fifth, H.R. 2250 provides covered facilities with more time to comply with the complex and expensive rules.

NFIB believes this legislation should be enacted to provide the much-needed certainty for small business owners and time for EPA to develop the best possible set of rules. A well-crafted set of rules are critical because of the billions of dollars industry will have to invest to comply. H.R. 2250 strikes the proper balance between protecting jobs and the environment. On behalf of small businesses all across America, we urge your support for quick passage.

Sincerely,



Susan Eckerly
Senior Vice President
Public Policy

CC: The Honorable Morgan Griffith
The Honorable G.K. Butterfield

National Federation of Independent Business

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July 11, 2011

The Honorable Fred Upton
 Chairman, Committee on Energy
 and Commerce
 United States House of Representatives
 2125 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Henry Waxman
 Ranking Member, Committee on Energy
 and Commerce
 United States House of Representatives
 2322-A Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy
 and Power
 United States House of Representatives
 2125 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on
 Energy and Power
 United States House of Representatives
 2322-A Rayburn House Office Building
 Washington, D.C. 20515

Dear Chairmen and Ranking Members:

On behalf of the National Oilseed Processors Association (NOPA), we want to urge you to pass expeditiously H.R. 2250, the "EPA Regulatory Relief Act of 2011." NOPA is a national trade association that represents 13 companies engaged in the production of vegetable meals and vegetable oils from oilseeds, including soybeans. NOPA's member companies process more than 1.7 billion bushels of oilseeds annually at 63 plants located in 19 states throughout the country, including 58 plants that process soybeans.

As you have heard in previous hearings of the Energy and Commerce Committee, EPA's Boiler MACT rules, which are the focus of H.R. 2250, will have serious economic impacts on a vast array of facilities across the industrial, commercial and institutional sectors, including the oilseed processing industry. Although EPA made some important improvements between the proposed and final rules, the Agency knowingly published flawed, final rules to meet a court-ordered deadline. The final rules are not achievable for real-world boilers across the range of fuels and operating conditions. They also require extremely costly controls in some areas where work practices would be adequate to protect public health. The rules place at risk tens of thousands of jobs when our nation can least afford more job losses.

Moreover, EPA has created a presumption that materials commonly used as fuels are "wastes" subject to the extremely costly and stigmatizing incinerator standards. The net result is that many facilities in the industrial, commercial and institutional sectors will stop using valuable fuels such as renewable biomass residuals. This will not only impose hundreds of millions of dollars in unreasonable costs, but will also increase the use of fossil fuels and cause millions of tons of valuable materials to be diverted to landfills – a bad result for the environment.

Chairmen and Ranking Members on the House Energy and Commerce Committee
H.R. 2250
July 11, 2011

Page | 2

Accordingly, the final rules are just as unaffordable as the proposed rules. The final Boiler MACT rule alone will cost the industrial, commercial and institutional sectors over \$14 billion in capital costs and billions more in annual operating costs. Complying with the incinerator standards will cost several billion dollars more in capital costs.

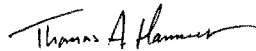
H.R. 2250 would provide the much-needed certainty and time EPA needs to re-do the rules and get them right, and for businesses that will be investing billions of dollars to plan for the capital expenses they will be incurring to comply with them. Specifically, the bill would:

- ensure the rules are stayed for an adequate and certain period, as EPA's current administrative stay is being challenged;
- allow EPA adequate time to re-propose the rules and get them right, including time for stakeholders to conduct more emissions testing and for EPA to avoid mistakes that occur when rulemakings of this scope and importance are rushed and become vulnerable to legal challenge;
- provide direction and support for EPA to use the discretion it already has under the Clean Air Act and Executive Order 13563 to add flexibility and make the rules achievable;
- clarify that various materials, such as biomass residuals, are fuels and that certain gases in manufacturing processes do not result in boilers being regulated as incinerators; and,
- give facilities more time to comply with the rules' complex and capital-intensive requirements.

This would be accomplished while preserving jobs and the competitiveness of the industrial sector of which NOFA is a part and protecting the environment.

As our nation struggles to recover from the recession, this is a time when we can least afford another roadblock to jobs and economic recovery. Thank you for your leadership on this issue of great importance to the oilseed processing industry.

Sincerely,



Thomas A. Hammer
President



4301 Connecticut Avenue, N.W., Suite 300 • Washington, D.C. • 20008 • 202-244-4700 • Fax: 202-364-3792

July 15, 2011

The Honorable Fred Upton
 Chairman, Committee on Energy & Commerce
 United States House of Representatives
 2183 Rayburn House Office Building
 Washington, DC 20515

The Honorable Henry Waxman
 Ranking Member, Committee on Energy and
 Commerce
 United States House of Representatives
 2204 Rayburn House Office Building
 Washington, DC 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy and Power
 United States House of Representatives
 2368 Rayburn House Office Building
 Washington, DC 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on Energy and
 Power
 U.S. House of Representatives
 2268 Rayburn House Office Building
 Washington, DC 20515

Dear Chairmen and Ranking Members:

On behalf of the National Solid Wastes Management Association, I write to ask you to move quickly to pass H.R. 2250, the "EPA Regulatory Relief Act of 2011". As you have heard in previous Energy & Commerce Committee hearings, the four rules that are subject to this bill, known as the Boiler MACT and related rules, will have serious economic impacts on facilities throughout the United States, including processors of biomass and landfill gas.

Although EPA made some important improvements between the proposed and the final rules, the agency was forced to publish final rules to meet a court order deadline, before the agency had eliminated all flaws from the rules. As a result, the rules are not achievable for real-world boilers across the range of fuels and operating conditions. In addition, in the rule known as the Non-Hazardous Secondary Material Rule, EPA created a presumption that materials commonly used as fuels are now wastes subject to the costly incinerator standards. This will result in many facilities no longer using valuable fuels such as processed construction and demolition wood-derived fuel. This will have the unintended consequence of increased use of fossil fuels and an increase in greenhouse gas emissions.

Legislation is needed to resolve serious uncertainties and vulnerabilities in these rules including:

- ensure the rules are stayed for an adequate and certain period, as EPA's current administrative stay is being challenged;
- allow EPA adequate time to re-propose the rules and get them right, including time for stakeholders to conduct more emissions testing and to avoid mistakes that occur when rulemakings of this scope and importance are rushed and become vulnerable to legal challenge;

- provide direction and support for EPA to use the discretion it has already under the Clean Air Act and Executive Order 13563 to add flexibility and make the rules achievable;
- clarify that various materials, such as processed construction and demolition wood, are fuels and that certain gases in manufacturing processes do not result in boilers being treated as incinerators; and
- give facilities more time to comply with the complex and capital-intensive requirements of the rules.

If enacted, HR 2250 will provide much-needed certainty and time for EPA to get the rules right and for businesses that will be investing billions of dollars to plan for the capital expenses.

We appreciate your consideration of our request. If you have any questions please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink that reads "Bruce Parker". The signature is written in a cursive, slightly slanted style with a long horizontal line extending from the end of the name.

Bruce J. Parker
CEO and President
National Solid Wastes Management Association



June 30, 2011

The Honorable Fred Upton
 Chairman, Committee on Energy &
 Commerce
 United States House of Representatives
 2183 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy
 and Power
 United States House of Representatives
 2368 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Henry Waxman
 Ranking Member, Committee on Energy &
 Commerce
 United States House of Representatives
 2204 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on Energy
 and Power
 United States House of Representatives
 2268 Rayburn House Office Building
 Washington, D.C. 20515

Dear Chairmen and Ranking Members:

On behalf of the Society of Manufacturers and Affiliates (SOCMA), I am writing in strong support of H.R. 2250, The EPA Regulatory Relief Act of 2011.

Who We Are

SOCMA is the only U.S.-based trade association dedicated solely to the batch, custom and specialty chemical industry. Having represented a diverse membership of small, medium and large chemical companies since 1921, SOCMA is the leading authority on this sector. SOCMA's more than 200 member companies make the products and refine the raw materials that make our standard of living possible. Over 70% of SOCMA's active members are small businesses. In fact, 71% of our members have fewer than 100 employees. Forty-six percent of our manufacturing members report sales under \$10 million, and another 35% report sales between \$10.1-\$40 million. From pharmaceuticals to cosmetics, soaps to plastics and all manner of industrial and construction products, SOCMA members make materials that save lives, make our food supply safe and abundant, and enable the manufacture of literally thousands of other products.

ChemStewards® is SOCMA's flagship environmental, health, safety and security (EHS&S) continuous performance improvement program. It was created to meet the unique needs of the batch, custom, and specialty chemical industry, and reflects the industry's commitment to reducing the environmental footprint left by members' facilities. As a mandatory requirement for SOCMA members engaged in the manufacturing or handling of synthetic and organic chemicals, ChemStewards is helping participants reach for superior EHS&S performance.

Given the nature of SOCMA's membership, the majority of SOCMA members are affected by the Boiler rule for area sources (the smaller boilers), rather than by the Boiler MACT rule. Nonetheless, some of our members are dramatically affected by the Boiler MACT rule, and SOCMA submitted separate comments to EPA on both of those rules in August 2010.



Support for H.R. 2250

While some would argue that H.R. 2250 is not necessary since EPA stayed the Boiler MACT rule (and the accompanying solid waste incinerator rule) earlier this year, SOCMA contends that, on the contrary, the legislation is very much needed for a variety of reasons, including:

- The stay granted by EPA is by no means set in stone. It is subject to legal challenge -- the Sierra Club has stated that it will seek to have it overturned by the middle of July. Additionally, the stay was granted for an indefinite period of time and, in theory, could certainly be lifted at any time. A stay codified in legislation would address these problems, and would provide much needed certainty to the regulated community.
- The legislation also stays the Boiler area sources rule, something that EPA has not done. As previously noted, this is the boiler rule which will affect the majority of SOCMA members. As currently finalized, natural gas-fired boilers are exempt from the area sources rule. Since many SOCMA members use natural gas-fired boilers, they are consequently exempt from the rule entirely. However, environmentalists are challenging the vitally-important natural gas-fired boiler exemption, and thus a legislative stay of this rule is also necessary.¹
- The bill provides EPA with the time necessary to re-propose the rules and to get them right -- the fifteen months that the agency itself had asked for earlier this year before a federal court sharply limited that extra time to one month. In a court filing on June 24, EPA announced that they are now giving themselves less than a year to redo the boiler rules. Thus a legislative stay of 15 months is especially important.
- The bill's additional two years for compliance is also critical, given the significant changes that we expect to see from the current Boiler rules (particularly the Boiler MACT rule).
- The legislation's emphasis on flexible work practices and achievable standards is essential. Like many other trade associations, SOCMA passionately argued that some of the standards ultimately set in the final Boiler MACT rule are unachievable and that the costs associated with attempting to meet them are grossly disproportionate to any minimal environmental gain that would be achieved.

Along with many others, we will be raising this issue with many of your colleagues, and stressing its importance. Please let me know if I can provide you with any additional information about SOCMA, or if you have any questions.

Again, thank you for your leadership on this issue!

Sincerely,

Daniel Moss
Senior Manager, Government Relations
Society of Chemical Manufacturers and Affiliates

Cc: Congressman Morgan Griffith
Congressman G.K. Butterfield

¹ In fact, we would suggest some additional clarifying language for one of the provisions of the bill because of our particular interest in the boiler area sources rule. We would be happy to discuss this suggested amendment with your staff.



August 3, 2011

The Honorable Fred Upton
Chairman, Committee on Energy & Commerce
US House of Representatives
2183 Rayburn House Office Bldg.
Washington, DC 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy & Power
US House of Representatives
2368 Rayburn House Office Bldg.
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member, Committee on Energy & Commerce
US House of Representatives
2204 Rayburn House Office Bldg.
Washington, DC 20515

The Honorable Bobby Rush
Ranking Member, Committee on Energy & Power
US House of Representatives
2268 Rayburn House Office Bldg.
Washington, DC 20515

Dear Chairman and Ranking Members:

Re: H.R. 2250, the "EPA Regulatory Relief Act of 2011"

On behalf of the South Carolina Manufacturers Alliance (SCMA), we strongly urge you to pass the EPA Regulatory Relief Act of 2011 (H.R. 2250). This common-sense and broadly supported legislation will give the Environmental Protection Agency (EPA) critically important additional time to improve various environmental rules that it finalized under pressure of a court-ordered deadline. SCMA represents over 200 member companies with over 80,000 employees operating and working in South Carolina.

The EPA Regulatory Relief Act will provide time for EPA to correct substantial defects with four related rules – the Major Source Boiler (MACT), Area Source Boiler (GACT), Commercial and Industrial Solid Waste Incinerator (CISWI), and Identification of Non Hazardous Secondary Materials that are Solid Waste (NHSM), as well as provide reasonable future effective dates to impacted entities in these difficult economic times. SCMA supports this legislation because it will help ensure that the environment is adequately protected without unfairly and unnecessarily jeopardizing the competitiveness of our member companies. This Act allows adequate time for EPA to write reasonable, obtainable standards and allows appropriate time for the implementation of those standards.

Our members represent a portion of the tens of thousands of entities that will be negatively impacted as a result of the hasty development and implementation of these rules. These rules won't simply drive up costs for large industries; they will also drive up tuition for students at our member universities, drive up costs for energy consumers, and force some manufacturers to lay off workers from permanent high-paying jobs. The Council of Industrial Boiler Owners (CIBO) estimates the capital cost to install controls to meet the major source standards at \$14 billion, which according to the results of an economic impact analysis, equates to 224,000 jobs at risk nationwide. In addition, EPA estimates that 183,000 existing Area Source boilers will be affected and will have to spend \$435 million annually to comply with the Area Source Rule.

The final rules in many cases are not achievable by boiler operators across their range of operations, even with the best available control technology. Very few of the 1594 existing major sources can comply with the standards. It is unlikely that any existing unit can simultaneously comply with the new unit standards for any fuel other than natural gas. Many units would be forced to put in place expensive controls even though the controls may not be guaranteed to achieve the emission standards. In addition, many alternative fuels which have been traditionally used by industry would be regulated to the point they would no longer be viable. For example, viable fuel sources such as some biofuels may now have to be sent to landfills instead of being beneficially reused as an energy source.

In summary, SCMA requests that you pass the EPA Regulatory Relief Act of 2011 (H.R. 2250) staying these rules for an adequate time period to allow EPA to re-propose the rules with reasonable, achievable standards and implementations dates.

We appreciate your leadership on this vital legislation.

Sincerely,

Lewis F. Gossett



President & CEO

Cc: The Honorable Timothy E. Scott
The Honorable Joe Wilson
The Honorable Jeff D. Duncan
The Honorable Harold W. "Trey" Gowdy, III
The Honorable J. Michael "Mick" Mulvaney,
The Honorable James E. Clyburn



P.O. Box 1647
Lufkin, Texas 75902
Phone: 836.634.7444
Fax: 836.634.7750

July 18, 2011

The Honorable Fred Upton
Chairman, Committee on Energy & Commerce
United States House of Representatives
2183 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy & Power
United States House of Representatives
2368 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Henry Waxman
Ranking Member, Committee on Energy & Commerce
United States House of Representatives
2204 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee on Energy & Power
United States House of Representatives
2268 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairmen and Ranking Members:

Re: H.R. 2250, the "EPA Regulatory Relief Act of 2011"

MEMBERS:

AbitibiBowater Inc.

Georgia-Pacific

International Paper Company

MeadWestvaco Corporation

Smurfit-Stone Container Corporation

Temple-Inland Inc.

Weyerhaeuser

The Texas Forest Industries Council (TFIC) respectfully urges you to expeditiously pass H.R. 2250, the "EPA Regulatory Relief Act of 2011."

As you have heard in previous Energy and Commerce Committee hearings, Boiler MACT rules will have significant economic impacts on a vast array of facilities across the industrial, commercial and institutional sectors, including forest products companies such as ours. TFIC member companies operate a number of boilers in our paper mills and composite wood panel manufacturing plants throughout the United States.

There have been important improvements between the proposed and final Boiler MACT rules; however, we are concerned that the rules are not achievable for real-world boilers. In addition, a related rule on Non-Hazardous Secondary Materials (NHSM) reclassifies many biomass residual fuels as solid wastes, including resinated wood used extensively in our plants. These resinated materials have a long

July 18, 2011
Page 2

history of use in our industry and are an integral part of the production processes for composite wood products. The design and construction of energy systems at our wood products manufacturing facilities are normally based on the maximum utilization of wood and wood by-products including resinated trim and sander dust. In fact, the composite panel manufacturing industry, since its beginning has designed and built facilities to utilize 100% of the wood by-products generated during the manufacturing process. Excluding resinated wood fuels in our manufacturing process would require a complete re-engineering of our facilities and add insurmountable operating costs for the substitution of fossil fuels and the off-site transportation and disposal of resinated materials.

H.R. 2250 would:

- Ensure the rules are stayed for an adequate and certain period.
- Allow EPA adequate time to re-propose the rules to get them right
- Provide direction and support for EPA to use its discretion under the Clean Air Act and Executive Order 13583 to add flexibility and make the rules realistic and achievable.
- Clarify that various materials, including resinated wood residuals, are fuels and that certain gases in manufacturing processes do not result in boilers being treated as incinerators.

H.R. 2250 will provide the required certainty and time for EPA to get the rules right and for businesses to be able to better plan for capital expenditures. The passage of H.R. 2250 will preserve jobs and the competitiveness of our manufacturing sector while also protecting the environment.

Thank you for your leadership on this issue of great importance to our industry.

Respectfully,



Richard A. (Tony) Bennett
Chairman



July 15, 2011

The Honorable Fred Upton
Chairman, Committee on Energy
And Commerce
United States House of Representatives
Washington, DC 20515

The Honorable Henry Waxman
Ranking Member, Committee
on Energy and Commerce
United States House of Representatives
Washington, DC 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy and
Power
United States House of Representatives
Washington, DC 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee on Energy
and Power
United States House of Representatives
Washington, DC 20515

Dear Chairmen and Ranking Members:

On behalf of the Virginia Manufacturers Association (VMA) and the 18.6 million jobs supported by the industrial sector in Virginia and nationwide, we strongly support H.R. 2250, the EPA Regulatory Relief Act of 2011. The Environmental Protection Agency's (EPA) Boiler MACT rules have the potential to be devastating to the manufacturing community.

Although there were some important improvements between the proposed and the final Boiler MACT rules, the EPA published the final rules knowing that flaws were included in order to meet a court-ordered deadline. The rules are not achievable for real-world boilers across the range of fuels and operating conditions. They also require extremely costly controls in some areas where work practices would be adequate to protect public health. The rules place jobs at risk when our nation cannot afford any more job losses.

Moreover, the EPA's final rules create a presumption that materials commonly used as fuels are wastes subject to extremely costly and stigmatizing incinerator standards. The net result is that many facilities would stop using valuable fuels such as renewable biomass residuals. This would not only impose hundreds of millions of dollars in unreasonable costs, but it would also increase the use of fossil fuels and cause millions of tons of valuable materials to be diverted to landfills – a bad result for the environment.

Accordingly, the final rules are just as unaffordable as the proposed rules. The final Boiler MACT rule alone would cost over \$14 billion in capital for the manufacturing sector, plus billions more in operating costs. Complying with the incinerator standards would increase costs by several billion dollars more in capital expenditures.

Legislation is needed to resolve serious uncertainties and vulnerabilities, including to:

Ensure the rules are stayed for an adequate and certain period, as the EPA's current administrative stay is being challenged;

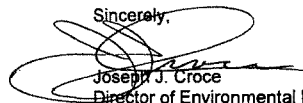
2108 Laburnum Avenue, Suite 100F Richmond, Virginia 23227 804-643-7489 www.vamanufacturers.com

- Allow the EPA adequate time to re-propose the rules and get them right, including time for stakeholders to conduct more emissions testing and to avoid mistakes that occur when rulemakings of this scope and importance are rushed and become vulnerable to legal challenge;
- Provide direction and support for the EPA to use the discretion it already has under the Clean Air Act and Executive Order 13563 to add flexibility and make the rules achievable;
- Clarify that various materials, such as biomass residuals, are fuels and that certain gases in manufacturing processes do not result in boilers being treated as incinerators; and
- Give facilities more time to comply with the complex and capital-intensive requirements of the rules.

If enacted, H.R. 2250 will provide the much-needed certainty and time for the EPA to get the rules right for businesses that will be investing billions of dollars to plan for the capital expenses. This action will preserve jobs and the competitiveness of the manufacturing sector while protecting the environment.

As our nation struggles to recover from the recession, this is a time when we can least afford another roadblock to jobs and economic recovery. Thank you for your leadership on this issue of great importance to manufacturing.

Sincerely,



Joseph J. Croce
Director of Environmental Health, Safety & Security
National Association of Manufacturers



July 26, 2011

The Honorable Fred Upton
 Chairman, Committee on Energy &
 Commerce
 United States House of Representatives
 2183 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Henry Waxman
 Ranking Member, Committee on
 Energy & Commerce
 United States House of Representatives
 2204 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Ed Whitfield
 Chairman, Subcommittee on Energy
 and Power
 United States House of Representatives
 2368 Rayburn House Office Building
 Washington, D.C. 20515

The Honorable Bobby Rush
 Ranking Member, Subcommittee on
 Energy and Power
 United States House of Representatives
 2268 Rayburn House Office Building
 Washington, D.C. 20515

Dear Chairmen and Ranking Members:

The Wisconsin Paper Council supports the EPA Regulatory Relief Act of 2011 (H.R. 2250) and urges the Energy and Commerce Committee to act quickly to approve this important legislation.

Wisconsin is the leading papermaking state in the nation and has been the leader for well over fifty years. Our industry employs over 32,000 men and women at some of the highest manufacturing wages in the state. Paper mills act as economic "anchors" in the areas in which they are located, supporting numerous local businesses and providing an economic foundation for the area. However, recent years have been hard on the industry. Employment has fallen from 52,000 in 2000 to the current level of 32,000. Mills have closed in the Fox River Valley, Wisconsin River Valley, and Northern Wisconsin due to fierce global competition, fundamental societal changes, and the recent recession. To survive and prosper our industry needs government to be our partner in holding down costs, not an adversary that raises costs through excessive regulation.

The EPA Regulatory Relief Act of 2011 sets reasonable timelines, provides critical guidance, and offers compliance flexibility relating to four related rules that EPA admits are flawed. Importantly, it would provide clear Congressional direction regarding extremely complex rules that have been subject to technical shortcomings and seemingly endless litigation, creating investment uncertainty for industries throughout the country.

EPA Regulatory Relief Act of 2011 (H.R. 2250)
July 26, 2011
Page 2 of 3

On March 21, EPA published four related final rules to regulate air emissions from boilers used in a vast array of industrial, commercial, and institutional facilities, including pulp and paper mills. These include: (1) the Boiler Maximum Achievable Control Technology (MACT) rule setting emission standards for larger boilers that burn fuels; (2) the Commercial and Industrial Solid Waste Incineration (CISWI) rule setting emission standards for incinerators that burn solid wastes; (3) the definition of Non-Hazardous Secondary Materials which is used to determine what constitutes a fuel (Boiler MACT regulation) and what constitutes a solid waste (CISWI regulation); and (4) the Boiler Generally Achievable Control Technology (GACT) rule setting standards for boilers at smaller facilities.¹

There are numerous highly technical issues to be sorted through and policy issues to be resolved in these rules. So many issues were unresolved when EPA issued the final rules under a court-ordered deadline that the agency admitted the rules were flawed and – in a move that is very **unusual** – immediately began a reconsideration process. EPA subsequently took the further step of issuing an administrative stay of the rules.

While we appreciate EPA's recognition of the problem, its proposed solution is subject to legal challenge and does not provide sufficient time to properly deal with the outstanding issues. What is necessary is a clear Congressional directive that provides sufficient time to resolve all of the technical and policy issues, and that provides direction to the agency for resolving these issues. That is what the EPA Regulatory Relief Act of 2011 does. Specifically, H.R. 2250 would:

- Provide a clear legislative stay of the four rules and provide EPA with at least 15 months to re-propose new rules (this is the amount of time that EPA, in court proceedings, indicated it would need to complete the rules);
- Extend compliance deadlines from three years to five years to allow facilities adequate time to comply with the new standards;
- Direct EPA to use important definitions from existing regulations to minimize confusion over what is a fuel and what is a solid waste; and
- Direct EPA to ensure that the new rules are achievable by real-world boilers.

It is important to note one thing that H.R. 2250 does not do – it does not amend the Clean Air Act.

The capital cost of compliance with the March 21 rules is estimated by affected groups to be in the range of \$14 billion nationally. Annual operating costs will add billions more. The capital cost for the forest products industry is estimated to be in the \$5-7 billion range, depending on how certain decisions relating to the "fuel v. solid waste" issue

¹ We apologize for all of the acronyms, but such is the nature of environmental regulation. There is really no way to avoid them.

EPA Regulatory Relief Act of 2011 (H.R. 2250)
July 26, 2011
Page 3 of 3

come out. In Wisconsin, statewide capital costs for compliance are estimated to be near \$600 million – over \$400 million for the forest products industry alone (assuming the low end of the \$5-7 billion range).

It is important to understand that the paper industry is not opposed to any regulation. However, these regulations could be back-breaking for many mills. Reasonable resolution of the technical and policy issues could protect our environment at a much lower cost. H.R. 2250 provides the time and direction for reasonable solutions to be found.

We urge the Energy and Commerce Committee to quickly approve the EPA Regulatory Relief Act of 2011 (H.R. 2250).

Sincerely,

A handwritten signature in black ink, appearing to read "J. Landin", written in a cursive style.

Jeffrey G. Landin
President

cc Representative Morgan Griffith
Representative G. K. Butterfield

Mr. GRIFFITH. Further, Mr. Chairman, I would like to introduce into the record a September 2011 study entitled "The Economic Impact of Pending Air Regulations on the U.S. Pulp and Paper Industry." May that be introduced into the record, Mr. Chairman?

Mr. WHITFIELD. Without objection.

[The information follows:]



September 7, 2011

CONTACT: Chuck Fuqua / Jessica McFaul

comm@afandpa.org

New Study: Implementing EPA's Final Boiler MACT Regulations Puts More Than 20,000 Primary Pulp and Paper Jobs At Risk, And Billions in Wages and Taxes
18 Percent of Primary Pulp and Paper Workforce Put At Risk

WASHINGTON – As many as 36 mills across the country and more than 20,000 primary pulp and paper industry jobs would be at risk of elimination due to the costs of implementing the Environmental Protection Agency's (EPA) pending Boiler MACT and other air regulations, according to a new study by Fisher International, a market leader in pulp and paper mill data. These job losses would amount to 18 percent of the primary pulp and paper industry workforce. The job losses rise to more than 87,000 if supplier and downstream industries are figured into the equation, and those losses would result in about \$4 billion in reduced wages and \$1.3 billion in lost state, local and federal taxes (including FICA taxes).

"This study reinforces the harmful job impacts of the March Boiler MACT rules and the need to get the rules right," said American Forest & Paper Association President and CEO Donna Harman. "The Boiler MACT regulations can and must be developed in a way that protects both jobs and the public health. Legislation has been introduced in both chambers of Congress with bi-partisan leadership that will help bring certainty and ensure that a final rule can be implemented."

The results show the Boiler MACT rules issued earlier this year by EPA, when imposed on top of the expected costs of implementing other pending air regulations, would likely cause 36 mill closures and result in the loss of 20,541 jobs – an 18 percent reduction in the primary pulp and paper sector alone. The number of jobs lost increases to 87,299 when supplier and downstream industries as well as jobs associated with the re-spending of wages are included.

In the final report, Fisher International looked beyond the possible effect of the proposed Boiler MACT rule to include the suite of pending EPA air regulations. It found 38,060 potential jobs lost in the pulp and paper sector from those cumulative air regulations. Looking again at the additional impact felt along the supply chain and surrounding community, job losses from these regulations could reach as high as 161,755.

While this study focuses on the impact to the pulp and paper industry, the EPA's proposed Boiler MACT rules also set emission limits for boilers and process heaters located at universities, in small municipalities, food product processors, furniture makers, federal facilities, and a wide range of manufacturers. The rule also creates serious disincentives for the use of renewable energy. The rule is currently being reconsidered by EPA.

AF&PA commissioned the study conducted by Fisher International, a market leader in data on U.S. paper mills, which includes each mill's product line, production process, type and age of boilers, estimated cost structure, and number of employees. The compliance costs data used by Fisher was prepared by URS, a well-known engineering consulting firm with expertise in pollution control costs and operation as well as the pulp and paper industry.

[Click here to view the executive summary.](#)

[Click here to view the full study.](#)

###

The American Forest & Paper Association is the national trade association of the forest products industry, representing pulp, paper, packaging and wood products manufacturers, and forest landowners. Our companies make products essential for everyday life from renewable and recyclable resources that sustain the environment. The forest products industry accounts for approximately five percent of the total U.S. manufacturing GDP. Industry companies produce about \$175 billion in products annually and employ nearly 900,000 men and women, exceeding employment levels in the automotive, chemicals and plastics industries. The industry meets a payroll of approximately \$50 billion and is among the top 10 manufacturing sector employers in 48 states. Visit AF&PA online at www.afandpa.org.



Executive Summary

*Economic Impact of Pending Air Regulations on the U.S. Pulp and Paper Industry
September 2011*

Findings

The costs of implementing Boiler MACT regulations, when combined with the anticipated costs of implementing other pending air regulations, would place at risk 36 mills and 20,541 pulp and paper mill jobs nationally – 18 percent of the primary pulp and paper industry workforce. Those jobs losses would rise to 87,299 if jobs in the supplier and downstream industries and jobs associated with the re-spending of wages are figured into the equation. These 87,299 job losses would result in about \$4 billion in reduced wages and some \$1.3 billion in lost state, local and federal taxes (including FICA taxes).

Background

In March 2011, the Environmental Protection Agency (EPA) issued final rules establishing Maximum Achievable Control Technology for industrial boilers, commonly referred to as the Boiler and Incinerator MACT rules. Several other unrelated air regulations are also pending. They include but are not limited to Cluster MACT reopening, Pulp and Paper Residual Risk, and several National Ambient Air Quality Standard (NAAQS) revisions that directly or indirectly drive more stringent rules.

Fisher International, authors of this report, conducted the economic and job impact analysis of the cumulative impacts of the final Boiler MACT rules and other pending air regulations under consideration by the EPA. Fisher International, a market leader specializing in market and economic data on U.S. paper mills, utilized its proprietary database of mill assets and cost-of-production to make its evaluations of potential job loss and mill closures.

The compliance cost data used in the Economic Impact analysis are attributed to URS, a leading provider of engineering, construction and technical services. While this report uses the same methodology as was used in the 2010 Fisher International report on the proposed rules, the capital and operating costs of compliance to regulations were updated by URS, based on the latest available information.

The focus of the Fisher International study was to quantify the likely impact of potential new air regulations on employment in U.S. pulp and paper mills.

Methodology

Fisher International determined that the typical U.S. paper mill could, at most, absorb an average 12.5% increase in its cost of production before its free cash flow would be exhausted. Using information provided by URS, Fisher then determined mills that reached or exceeded the 12.5% threshold to be in jeopardy of closing. Finally, Fisher isolated the impact of Boiler MACT by determining whether the mills most at risk would not close if Boiler MACT were removed from the suite of pending air regulations.

As most regulations require both capital and operating costs, a formula was devised to translate capital costs into operating costs by using an interest rate of 11 percent and a term of five years. This weighted average cost of capital was based on a 2010 survey of investment bankers and industry analysts. Further details regarding the cost analysis can be found in the report.

Job Losses and Mills At Risk Associated with Boiler MACT and Air Regulations¹

	Mills At Risk	Pulp and Paper Mill job losses	Including jobs in other industries sustained by the mills
Boiler MACT	36	20,541	87,299
All Air Regulations²	79	38,060	161,755

In brief, the Fisher findings suggest that the Boiler MACT regulations, considered along with the costs of other pending air regulations, would place at risk 36 mills and 20,541 pulp and paper mill jobs nationally (18% of the primary pulp and paper industry workforce). If jobs in the supplier and downstream industries and jobs associated with the re-spending of wages are figured into the equation, the job losses rise to 87,299. A multiplier effect of 4.25 was chosen based on a study by the Economic Policy Institute. AF&PA estimates that these 87,299 job losses would result in about \$4 billion in reduced wages and some \$1.3 billion in lost state, local and federal taxes (including FICA taxes).

According to URS, the total capital costs for the forest products industry from upcoming EPA air regulations are about \$17 billion. The Fisher findings indicate that the entire suite of air regulations could place 79 pulp and paper mills in jeopardy of closing, resulting in the loss of 38,060 pulp and paper mill jobs, or 33% of the primary pulp and paper workforce. If jobs in supplier industries and jobs associated with the re-spending of wages are also included, the jobs loss figure rises to 161,755. AF&PA estimates that these 161,755 job losses would result in \$7.4 billion in reduced wages and some \$2.5 billion in lost state, local and federal taxes (including FICA taxes).

This new study, when compared to the 2010 study, shows that the final Boiler MACT rules place about 3,500 more jobs at risk than the proposed rule. This is due partly to the fact that many more boilers using biomass as a fuel will be treated as incinerators rather than boilers and subject to much more costly control technology. Overall, slightly fewer jobs are placed at risk from the cumulative burden in the 2011 study. Several marginal mills have closed since the previous study was completed, taking them out of the calculation and the overall health of the industry improved as the overall economy improved between the two studies.

¹ Note that these estimates do not include jobs losses in the wood products manufacturing sector of the forest products industry from an estimated \$2 billion in new MACT costs.

² Roughly \$2 billion in new capital costs for pulp and paper mills meeting various National Ambient Air Quality Standards (NAAQS); changes to the New Source Review (NSR) requirements; New Source Performance Standards (NSPS) and the Clean Air Interstate Rule (CAIR) were not factored into the mill closure/job loss calculations because they could not be allocated to specific mills.

Economic Impact of Pending Air Regulations on the U.S. Pulp and Paper Industry - Updated

Prepared by Fisher International, Inc.

September 2011



Introduction

This report is an updated version of a report of similar name released in August 2010. It describes the potential impact of a series of rules issued by the Environmental Protection Agency (EPA) in March 2011 establishing Maximum Achievable Control Technology for industrial boilers, commonly referred to as the Boiler and Incinerator MACT rules¹. Several other unrelated air regulations also are pending. They include but are not limited to the Cluster MACT reopening, Pulp and Paper Residual Risk, and several National Ambient Air Quality Standard (NAAQS) revisions that directly or indirectly drive more stringent standards.

This update uses the same assumptions as the original report with the following exceptions:

- Pulp and paper mill assets and costs-of-production were taken from FisherSolve™'s Q1_2011 release;
- Capital and operating costs of compliance to regulations were updated by the consulting firm URS based on the latest available information.

The American Forest & Paper Association (AF&PA) engaged URS to update estimates of the likely costs of complying with these pending regulation changes and Fisher International Inc. to assess the impact of these compliance costs on the economic viability of U.S. pulp and paper mills.

The URS findings are presented in detail in a report entitled, "Cumulative Cost Burden Analysis of Air Regulations Potentially Impacting the Forest Products Industry," dated August 2011. A regulation-specific summary of the URS cost estimates appears in Appendix A of this report and indicates which rules were included in this assessment and which were not.

In summary, this update shows potentially severe impacts on the pulp and paper industry from EPA regulations affecting industry boilers (e.g. Boiler MACT and CISWI) and other upcoming Clean Air rules for which the costs could be estimated, as follows:

- The Boiler MACT rules, after accounting for the impact on jobs of proposed general pulp and paper manufacturing Clean Air regulations, put at serious risk an incremental :
 - o 20,541 jobs in pulp and paper mills alone
 - o 87,299 jobs considering both job losses in pulp and paper mills and jobs lost along their supply chain and in the surrounding community.²

¹ On March 21, EPA published the Boiler MACT rule and three related rules – the Commercial and Industrial Solid Waste Incinerator (CISWI) rule (setting emissions limits for non-hazardous solid waste incinerators); the definition of Non-Hazardous Secondary Materials (a Resource Conservation Recovery Act rule determining which materials are wastes and thus covered under the CISWI rule when burned); and Boiler GACT (Generally Achievable Control Technology for boilers at smaller sites). These four rules often are collectively referred to as the "Boiler MACT rules."

² Note that these estimates do not include job losses in the wood products manufacturing sector of the forest products industry from an estimated \$2 billion in new MACT costs.

- The Boiler MACT rules and other upcoming Clean Air regulations put at serious risk a *total of*:
 - o 38,060 jobs in pulp and paper manufacturing alone
 - o 161,755 jobs considering both the losses in pulp and paper mills and the jobs lost along the supply chain and in the surrounding community.³

Methodology

Fisher International was asked to quantify the likely impact of new air pollution control regulations on employment in U.S. pulp and paper mills by estimating how many mills would be in jeopardy of closing if they had to comply with the relevant new air regulations. To make the estimate, we used two major resources: FisherSolve™, a proprietary industry database describing the assets and costs-of-production of each mill, and descriptions provided by URS of how different types of mills would need to respond to each potential new regulation and the costs of that compliance.

We projected the costs of compliance for each mill and calculated them as a percentage of costs of production. When compliance would increase a mill's cost-of-production by more than a sustainable amount, we listed that mill and its associated employment as being "at-risk." Note that the costs projected in this report for each mill's compliance do not include the costs associated with a number of regulations for which URS was unable to quantify a mill-specific compliance impact.⁴ Moreover, there is another set of regulations that trigger a cost to a mill only when the mill makes a physical change in the future, such as rebuilding a boiler. As we do not know which mills may make changes in the future, these impacts also are not included in this analysis. For this reason, the analysis may understate the impact of regulations on mill costs and jobs.

We assumed that the "sustainable amount" of incremental cost a given mill can absorb is equal to the amount of cash that the average mill produces for its owner after variable costs and capital expenditures. In other words, when a mill gets to a cash break-even level, it becomes a serious risk for closure. It would be fair to argue that this is a conservative assumption because many owners would prefer to shutter a mill well before it reached a cash cost breakeven level to redeploy management time and maintenance capital to other, more profitable facilities. The average sustainable amount of cost increase for the industry based on this analysis is 12.5% of cost of production. (See below for a more detailed explanation of how this figure was derived.)

³ Note these estimates do not include job losses in the wood products manufacturing sector of the forest products industry.

⁴ Roughly \$2 billion in new capital costs for pulp and paper mills meeting various National Ambient Air Quality Standards (NAAQS), changes to the New Source Review (NSR) requirements, New Source Performance Standards (NSPS), and the Clean Air Interstate Rule (CAIR) were not factored into the mill closure/job loss calculations because they could not be allocated to specific mills.

For most regulations, compliance requires both capital and operating costs. We translated capital costs into operating costs by using an interest rate of 11%, representing the industry's weighted average cost of capital (WACC), and a term of five years. We based the WACC on a survey of investment bankers and industry analysts. The five-year term was arrived at by noting that:

- the industry's capital structure is approximately 50% debt and 50% equity,
- the average industry term of debt is about ten years, and
- funding with equity is equivalent to a term of "zero" years (because shares are diluted immediately when a company raises cash by selling equity).

Therefore, the average payback term we used to calculate the cost of funding compliance is five years ((10 years + 0 years) divided by 2 = 5 years).

The table below summarizes how we arrived at the financial "at-risk" rate of spending on compliance that would put a mill in jeopardy of closing. Ideally, we would have compared the cost impact of compliance to mill margins. However, since we did not have data on each mill's profit margin, we assumed an industry average margin, added an industry average factor for cash spent on capital and applied them to cost-of- production data that we do have. This allowed us to create an industry average "at-risk" rate that we could compare to the costs of compliance.⁵

We estimated the industry average "at-risk" rate using data drawn from the financial statements of a group of public U.S. pulp and paper companies. We found the industry's average gross margin over a 10-year period, which is revenue less the cost of goods sold (mainly materials and labor) as a percentage of revenue. We then deducted average capital expenditures per dollar of sales and an average cost-of-sales (such as broker commissions and early payment discounts).

Item	Percent
10-year average industry gross margin	19.7%
Less 10-year average capital expenditures per \$ of sales	7.6%
Less factor for cost of sales	<u>2.0%</u>
Equals at-risk rate as percent of <u>sales</u>	10.1%
At-risk rate as percent of <u>cost-of-production</u>	12.5%

⁵ While the methodology is the same, this description is different from the one supplied in the original report in an attempt to clarify the methodology used.

These calculations resulted in an average "at-risk" rate (the maximum amount of cash cost increase the typical mill could absorb) of 10.1% of sales. Given the industry's average margins, this is equivalent to 12.5% of cash cost-of-production. Hence, if air regulation-related incremental operating costs and annualized costs associated with capital expenditures to comply with the regulations amount to more than 12.5% of a mill's cash costs, the mill is classified as at risk of closing.

The increase in costs of compliance with new air regulations will affect mills in different ways. In some cases, mills will suffer increases in costs greater than their domestic competitors, thus losing competitiveness in their home markets and becoming risks for closure. In other cases, even if all mills in a product category experience similar cost increases, many U.S. mills become "at-risk" for closure because international competitors gain a cost advantage and prevent prices from rising.

As of this date, there still is some uncertainty around how certain rules will be written. Therefore, this report contains the results of two scenarios, each representing one possible outcome. The results for Scenario 1 are presented in this report. The results for Scenario 2 are summarized at the end. The two scenarios are:

- Scenario 1 – many types of biomass that is burned are treated as solid waste, and therefore, are subject to the Solid Waste Incinerator rules instead of the Industrial Boiler MACT rule.
- Scenario 2 - many types of biomass that is burned are treated as fuel, and therefore, are subject to the Industrial Boiler MACT rule and not the Solid Waste Incinerator rule.

Scenario 1 Results

Analysis of mill-specific increases in annualized air regulation compliance costs suggest that the Boiler MACT regulations, if they are incremental to the pending manufacturing-related air regulations, could result in the closure of 36 mills employing 20,541 people or 18% of the primary pulp and paper sector's workforce. (The primary pulp and paper sector encompasses only pulp and paper mill jobs; the risk to logging jobs and converting operations are not included in these figures.)

The calculations suggest that 79 pulp and paper mills would be at significant risk of closing if the larger suite of new air regulations for which we have data were implemented. These mills employ 38,060 people, or 33% of the primary pulp and paper sector's workforce. The following table shows potential mill shutdowns and job losses:

Mills at Significant Risk of Closure					
Incremental from Adding Boiler MACT		P&P Mfg Regs Only		Total of Boiler MACT and P&P Mfg Regulations	
Jobs At Risk	# of Mills	Jobs At Risk	# of Mills	Jobs At Risk	# of Mills
20,541	36	17,519	43	38,060	79
Base				113,858	349
Percent change				33%	23%

Ripple Effect

Pulp and paper mill jobs support jobs in other industries that supply the pulp and paper industry in local communities and throughout the United States. A scholarly paper prepared by the Economic Policy Institute -- "Updated Employment Multipliers for the US Economy, 2003" -- was provided to Fisher by AF&PA. Table 9 of the paper indicates that for every 100 jobs in the paper industry, there are an additional 325 jobs sustained in other industries due to the purchase of supplies and the re-spending of worker incomes. Hence, the pulp and paper industry's multiplier is 4.25.

Applying the 4.25 multiplier in the previous table suggests that 87,299 jobs can be lost by imposing Boiler MACT regulations on top of the proposed new pulp and paper manufacturing-related air regulations ($20,541 \times 4.25 = 87,299$). A total of 161,755 jobs -- inside and outside the pulp and paper industry -- could be lost as a result of the entire suite of proposed air regulations ($38,060 \times 4.25 = 161,755$).

Mill & Community Jobs at Risk at 4.25 Multiplier			
	Incremental from Adding Boiler	P&P Mfg Only	Total of Boiler MACT and P&P Mfg Regulations
Scenario	87,299	74,456	161,755

Fisher International also calculated pulp and paper jobs losses associated with the proposed regulations by region. Regional figures do not include the multiplier effects.

Job losses for Regions (No Multiplier)			
	Incremental At Risk Jobs from Adding Boiler Regulations	At Risk Jobs for P&P Mfg. Regulations Only	At Risk Jobs for Boiler and P&P Mfg Regulations
US - Northeast	2,177	2,877	5,054
US - Midwest	5,505	3,878	9,383
US - Southeast	11,924	7,529	19,453
US - West	935	3,235	4,170
Total US	20,541	17,519	38,060

Scenario 2 Results

Under Scenario 2, many types of biomass that are burned are treated as fuel, and therefore, most plants are subject to the Industrial Boiler MACT rule and not the Solid Waste Incinerator rule.

The calculations for this scenario suggest that the Boiler MACT regulations, if they are incremental to the pending manufacturing-related air regulations, could result in the closure of 35 mills employing 19,921 people, or 17.5% of the primary pulp and paper sector's workforce. If jobs in supplier industries and local communities are factored in, the number of jobs in jeopardy rises to 84,664. The impact of the pending manufacturing-related air regulations on employment and mill closings is the same as under Scenario 1.

Comparison of Findings: This Report vs. August 2010 Report

In August 2010, Fisher prepared a study on EPA's proposed Boiler MACT regulations and other pending air regulations. The August 2010 study found that 43,666 pulp and paper mill jobs would be placed at risk due to a broad suite of pending air regulations.

Of the 43,666 at-risk paper industry jobs identified in the 2010 study, 26,778 were associated with the "other" pending air regulations and 16,888 with Boiler MACT-related compliance spending that is incremental to spending on the other air rules.

This new study examining the final Boiler MACT rules found that 38,060 paper industry jobs would be placed at risk due to the entire suite of air regulations. Among those

38,060 jobs, 20,541 job losses could result from the final Boiler MACT/CISWI-related costs that are incremental to spending needed to comply with the other air regulations, and 17,519 jobs are placed at risk by the costs of non-Boiler MACT air regulations.

The decline in the number of jobs placed in jeopardy by non-Boiler MACT air regulations between the original and updated study reflects several factors:

- Between the first and second studies, the number of mills operating in the U.S. declined by 7, and the employee base declined by 5,302 jobs. Of the 5,302 fewer jobs, 2,600 were lost due to mill closures after the completion of the first report, and the remainder reflected headcount reductions at mills that remained operational.
- Average cost-of-production increased between the two study periods. Because we measured compliance costs as a percentage of cash costs, higher cash costs appeared to raise the threshold for compliance costs that would put mills at risk. In actuality, higher costs might put more U.S. mills at risk rather than fewer because foreign mills gain a cost advantage vis-a-vis U.S. mills.

The increase in the number of jobs put at risk by Boiler MACT rules reflects the underlying fact that the regulations as a whole still threaten a significant number of mills and jobs:

- While fewer mills were placed in jeopardy of closing by the "other" air rules, the *total* number of jobs at risk declined by a smaller number. The Boiler MACT/Incinerator MACT rules, therefore, account for a larger incremental impact.
- In the 2010 study, capital spending was estimated by URS at \$5 billion for the proposed Boiler MACT/CISWI rules and \$13.7 billion for the larger suite of pending air rules, including the Boiler MACT/CISWI rules. However, not all of the costs could be allocated to specific mills, so capital spending-related compliance costs used by Fisher came to \$4.6 billion for Boiler MACT and \$10.3 billion for the entire suite of air regulations.
- Capital spending for the 2011 study was estimated by URS at \$4 billion for the final Boiler MACT/CISWI and \$12.6 billion for all of the pending air rules, including Boiler MACT/CISWI. However, not all of the costs could be allocated to specific mills, so capital spending-related compliance costs used by Fisher came to about \$3.8 billion for Boiler MACT/CISWI and \$10.1 billion for the entire suite of air regulations.
- The Boiler Rules changed between proposal and promulgation. In particular, more fuels were classified as solid wastes and therefore, many plants are subject to the CISWI rule instead of the Boiler MACT rule. In addition, costs were added for NOx emissions reduction requirements to mills in close proximity to projected non-attainment areas.

In sum, this study, like the preceding study, shows that the EPA's Boiler MACT rules would have a major impact on the economic viability of many pulp and paper mills and place at risk tens of thousands of pulp and paper mill jobs as well as jobs in surrounding communities and supplier industries.

Appendix A

URS Estimates of Pulp and Paper Mills Costs of Complying With Proposed Air Regulations:

How Costs Were Determined:

URS Corporation (URS) worked with the American Forest and Paper Association (AF&PA) and its members to develop a rough order of magnitude estimate of the costs of complying with various air regulations that could impact the forest products industry. The cost estimates were compiled in a Microsoft Excel workbook; were based on published information or similar project costs; have been reviewed by member company representatives; and have been made available to the US EPA and others for review. The Boiler MACT and CISWI estimated costs are in large part based on information in EPA's March 2011 survey and emissions databases.

Capital and operating costs estimates are not intended to represent a worst case analysis. Rather, they represent median costs for the various scenarios based on published reports, industry information on specific project costs, EPA reports or control device fact sheets, or actual Best Achievable Control Technology (BACT) or Best Achievable Retrofit Technology (BART) analyses submitted to permitting agencies. A primary resource was the document entitled, "Evaluation of Air Pollution Control Costs for the Pulp and Paper Industry," prepared by National Economic Research Associates (NERA) in May 2003. All costs were discussed with a core team of AF&PA members and reviewed by URS engineers familiar with boiler and other pulp and paper mill operations and controls prior to finalizing the study.

Boiler MACT Costs:

The Boiler MACT will require emissions controls for particulate matter, hydrogen chloride, mercury, carbon monoxide, and dioxin/furan. The control technologies that EPA has identified as necessary to comply with the Boiler MACT are a fabric filter for control of particulate matter, carbon injection for control of mercury and dioxin/furan, a scrubber for control of hydrogen chloride, and combustion improvements or an oxidation catalyst for control of carbon monoxide. In some cases, the emission limits will be very difficult to achieve over all operating conditions, but the cost analysis assumes that for each boiler, facilities can apply emissions controls to achieve the Boiler MACT limits with a comfortable margin of compliance. In some cases, existing equipment configurations may prove impossible to upgrade, and boilers and process heaters may need to be replaced, which is a cost that is not reflected in the analysis. Note also that many facilities may choose fuel switching as a compliance option; however, as the cost of fuel switching is highly dependent on site specific factors (e.g., whether the boiler can burn the alternate fuel, what upgrades must be made to the fuel supply system) and the price of fuel will change over time due to factors like supply and demand, URS did not attempt to quantify costs for fuel switching.

The EPA collected information during Phase 1 of the Boiler MACT information collection request (ICR) on thousands of boilers and process heaters at hundreds of facilities. A detailed spreadsheet was developed to estimate costs for Boiler MACT for individual boilers and process heaters, based on EPA's major source boiler inventory database table and the emissions data included in EPA's boiler MACT database. URS extracted information from EPA's major source boiler inventory database including boiler ID, size, fuel category, emissions, and current air pollution control equipment. Based on the information in EPA's database and the baseline emission factors developed by EPA by boiler type and control device, URS determined whether each unit would require additional air pollution controls to meet the Boiler MACT limits. Note that we did not perform any quality assurance on the information in EPA's database, but where we had knowledge that a boiler had been mis-categorized (e.g., a biomass boiler was listed as a liquid boiler) we did make those changes in our spreadsheet.

A spreadsheet was developed that represents only the units to be regulated by the rule (excludes natural gas boilers, process heaters, boilers and process heaters less than 10 MMBtu/hr heat input, and limited use units). Based on the information in the EPA emissions database, we estimated costs of controls that would likely be necessary to comply with the Boiler MACT for coal, biomass, liquid, and Gas 2 boilers 10 MMBtu/hr and greater (note that for the final rule, EPA moved all gas-fired boilers to the Gas 1 subcategory unless they were burning any amount of coke oven gas or blast furnace gas). As some forest products boilers at major sources did not receive an ICR from EPA in 2008, we added information for those boilers to the detailed spreadsheet based on information from AF&PA/National Council for Air and Steam Improvement (NCASI). There are likely other units that are not included in the study, as other trade groups have submitted comments indicating that EPA has likely underestimated the universe of affected units (e.g., American Chemistry Council (ACC) and American Petroleum Institute (API)/ National Petrochemical and Refiners Association (NPRA)).

Information from various sources was used to determine a base capital cost for a 250 MMBtu/hr boiler for each PM, CO, and HCl control technology option and then scaled using an 0.6 power function based on the size of each boiler in the inventory. For example, the capital cost of a wet scrubber on a 100 MMBtu/hr boiler is calculated as the base cost times $(100/250)^{0.6}$. A fixed cost of \$1 million was assumed for installation of a carbon adsorption system for Hg and/or dioxin control, as these systems do not vary much in cost by boiler size. Base cost assumptions are presented below.

Base Control Size, MMBtu	250
Fabric Filter	\$7,000,000
Scrubber	\$8,000,000
Scrubber/FF/ESP upgrade	\$4,000,000
Carbon Injection for Hg/dioxin	\$1,000,000
Combustion Improvements or Catalyst for CO	\$3,000,000

Controls were evaluated separately, first for particulate matter, then for hydrogen chloride, then for mercury and dioxin/furan, and last for carbon monoxide. To estimate Boiler MACT controls and costs for each unit, if there was no emissions information available for a particular boiler, we use the baseline emission factors developed by EPA for their analysis. In their boiler inventory table, EPA put the boiler pollution controls into categories. The categories are explained in greater detail in EPA's baseline emission factor memo, but basically are as follows: for PM control code, 1=FF, 2=EFB/ESP, 3=venturi scrubber, 4=wet scrubber, 5=multiclone, 6=none/mist eliminator/unknown. If a unit did not already have a FF or ESP and there was information that indicated the unit cannot meet the limit, we assumed a new FF. If the unit already had a FF or ESP and there was information that indicated the unit cannot meet the limit we assumed an upgrade to the existing control equipment. For HCl control code, 1=wet scrubber or spray dryer, 2=dry scrubber, 3=sorbent injection, 4=venturi scrubber, 5=none/dry PM only. To estimate control costs for HCl, if there was information that indicated the unit cannot meet the limit, we assumed either a scrubber upgrade or new scrubber depending on whether the unit currently had a scrubber. For Hg control code, 1=carbon injection, 2=FF plus sorbent injection or spray dryer, 3=FF only, 4=wet scrubber, 5=venturi scrubber, 6=none/multiclone/EFB/mist eliminator. For Hg and dioxin, if there was information that indicated the unit cannot meet the limit, we added carbon injection. For CO, if there was information that indicated the unit cannot meet the limit, then we assumed that capital would be necessary to either perform combustion/fuel feed improvements or other boiler improvement projects to reduce CO or install a CO catalyst.

Although EPA's estimates indicate that the total capital cost of the final rule will be \$5 billion, URS has estimated that the total capital cost of the rule will be over \$14 billion for all industry (\$2.85 to 3.2 billion for pulp and paper mills, depending on whether more materials are waste or fuel). It is evident major capital investments in add-on control technology will be required for continued operation of solid and liquid fueled boilers and process heaters.

URS capital cost estimates differ from EPA's cost estimates as follows:

- EPA has used the outdated Control Cost Manual and URS based cost estimates on more recent information, including actual vendor cost estimates, actual project costs, BACT and BART analyses, industry control cost studies, etc.
- URS used a CO catalyst cost 4 times higher than EPA's. The URS cost is based on a recent quote from BASF and EPA's is based on the 1998 Control Cost Manual section on catalytic oxidizers for VOC control.
- EPA has estimated that a tune-up or burner replacement will be adequate for many units to achieve the CO limits. URS does not agree with this assumption because some of the CO limits are fairly low and must be met over all operating conditions except startup and shutdown, so we have estimated higher costs to implement combustion controls, burner replacements, fuel feed system improvements, or CO catalyst.

- URS CO control capital costs are higher than EPA's, mostly because EPA assumed that tune-ups and replacement burners will be adequate for the vast majority of boilers to comply, and URS does not agree with that assumption.
- EPA has estimated that activated carbon injection will be required on only 120 existing units because installation of a fabric filter is expected to achieve the mercury emission limits, except in cases where a unit already has a fabric filter and does not meet the limits. URS does not agree that fabric filters will be sufficient to reduce mercury emissions to the ultra-low levels in this rule. There is a flaw in the logic that fabric filters are expected to achieve mercury emission limits when there are many boilers in the database that are equipped with fabric filters and have measured mercury emissions higher than the applicable limit. EPA's estimated industry-wide capital cost for activated carbon injection presented in the ERG cost and emissions impacts memo is extremely low, at only \$6.2 million (only \$52,000 per unit average). This cost better represents 12 units than 120 affected units.
- EPA has estimated costs to install packed bed scrubbers for HCl control. Industrial boilers do not use packed bed scrubbers for acid gas control, as the limitations of these devices make them impractical for use on applications with high flow rates, high PM loading, and high inlet pollutant concentration. EPA's own fact sheet on these devices, located at <http://www.epa.gov/ttn/catc/dir1/fpack.pdf>, lists these limitations of these devices and indicates that they are only used in applications up to 75,000 scfm, which limits their use to small units only (EPA responded to this comment by applying multiple packed bed scrubbers to units with higher flow rates). Facilities will instead install wet scrubbers, dry scrubbers, or semi-dry scrubbers to control acid gas emissions from industrial boilers. EPA has estimated HCl control costs for equipment that industry is not likely to install.
- EPA has assumed that facilities will not incur costs to comply with the dioxin/furan standards because they will test for dioxin/furan and be below detection levels. This logic does not make sense, especially when there are boilers in the EPA emissions database with dioxin/furan emissions that are non-detect but actually measured emissions higher than the applicable limit and there are boilers where EPA's baseline emission factor for dioxin/furan is above the applicable limit. We have estimated carbon injection as the control measure for dioxin/furan emissions, assuming that it will be effective at these low levels.

The following capital costs for control additions/upgrades were estimated by URS for pulp and paper coal, biomass, and liquid units having numerical emission limits under Boiler MACT (assuming many materials burned are solid waste and not fuel).

This is Scenario I:

PM Upgrade Cost	HCl Upgrade Cost	Hg/Dioxin Upgrade Cost	CO Upgrade Cost	Total Capital Cost
\$1.1 Billion	\$918 Million	\$232 Million	\$578 Million	\$2.85 Billion

The following capital costs for control additions/upgrades were estimated by URS for pulp and paper coal, biomass, and liquid units having numerical emission limits under Boiler MACT (assuming many materials burned are fuels and not solid waste).

This is Scenario II:

PM Upgrade Cost	HCl Upgrade Cost	Hg/Dioxin Upgrade Cost	CO Upgrade Cost	Total Capital Cost
\$1.3 Billion	\$1 Billion	\$270 Million	\$660 Million	\$3.2 Billion

These estimated costs differ from the costs of the proposed rule as follows:

- The final emission limits and the combination of biomass and coal boilers into a solid fuel subcategory for the fuel-based HAP (PM, HCl, and Hg) resulted in a reduction in control cost for many units.
- For the proposed rule, since many of the limits were so low as to be unachievable, we estimated that controls would be required on boilers where no emissions information was available. For the final rule costs, if no boiler-specific emissions information was available we used EPA's baseline emission factors by boiler type and control type to determine if controls would be required.
- Costs for compliance with the CO limits were adjusted based on information received from companies that had done preliminary engineering and cost estimates. We used a base cost of \$3 million and scaled using the 0.6 factor by boiler size for the final rule, versus a fixed cost of \$2 million for the proposed rule.

- Costs for mercury and dioxin are captured in the same column because it is assumed that carbon injection will be needed to meet both, based on the use of carbon injection to meet dioxin standards for higher emitting source categories such as municipal waste incinerators. However, the costs to achieve the dioxin limits for industrial boilers are uncertain and are likely underestimated because most of the dioxin limits are 100-1000 times lower than any previous MACT and it is unclear what emission reduction strategies could be implemented to meet the standards. The dioxin limits are essentially unachievable for most boilers.

CISWI Rule:

Costs for the CISWI Rule were developed in a similar manner as costs for the Boiler MACT rule. EPA's CISWI ICR database was used to determine which units would be subject to the CISWI rule and what controls would be needed. Units were also identified that were in EPA's Boiler MACT database, but burn NHSM such as wastewater treatment residuals, recycling process residuals, TDF, resinated wood, creosote treated wood/rail ties. Costs were assigned for PM/metals, NOx, acid gas, and mercury/dioxin controls. The estimated capital cost of controls for boilers at large pulp and paper mills, assuming the current NHSM rule, which classifies many existing biomass fuels as solid wastes, is approximately \$950 million. Smaller mills that would otherwise be regulated under the Boiler GACT rule but are burning secondary materials could also face costs under CISWI, but those costs were not modeled in this study. If changes are affected to the NHSM rule that allow more materials to be classified as fuels, the cost for CISWI controls for large pulp and paper mill boilers could be reduced to \$470 million.

Scenario	Solid Waste Determination	Capital Cost for Boilers at Large Pulp and Paper Mills
One	Many materials wastes	\$950 M
Two	Few materials wastes	\$470 M

Other Pending Air Regulations Where Costs Could Be Assigned to Mills⁶

- Cluster MACT /III Re-do and Residual Risk
 - \$780 million – >95% of costs due to MACT organic HAP (Methanol) controls on paper machines; \$360 million in O&M is especially high due to energy intensive nature of controls which also produce over 2 million metric tons of CO₂

⁶ Fisher was unable to allocate about \$2 billion of these costs to specific mills, so the total capital cost used was \$6.3 billion.

- o New Cluster MACT could set limits on additional pieces of equipment (like paper machines) for organic HAPs; EPA has discretion not to undertake de novo review of MACTs
 - o Residual risk review likely to show few risks remain
 - o EPA scheduled to complete in June 2012 with controls by mid-2015
- Cluster MACT II Re-do and Residual Risk
 - o \$3.3 billion: >95% of cost due to MACT; \$300 million in O&M plus 1.5 million metric tons of new CO₂ emissions
 - o New MACT II could lead to addition of mercury, and HCl controls and more stringent PM controls on recovery furnaces, lime kilns, and smelt tanks. Again, EPA has discretion whether to revisit MACTs;
 - o Residual risks from these sources also small
 - o EPA is likely to complete in 2013 with controls by 2016
- Hydrogen Sulfide HAP Listing
 - o \$2.7 billion in capital, plus \$180 million in operating costs
 - o Assumes H₂S listed as HAP and MACT establishes limits for pulping operations and wastewater treatment ponds
 - o EPA has discretion to deny petition or conclude not an issue for pulp mills based on careful risk assessment
 - o Possible final rule in 2015 (maybe sooner), with 2018 implementation
- NO_x Controls due to Tighter NAAQS
 - o Assumed NO_x controls (either low-NO_x burners, SNCR, or SCR) needed on boilers at facilities in or near projected non-attainment areas.
 - o \$600 million in capital, plus \$140 million in operating costs.
 - o Final 1-hour NO_x standard was published in 2010, ozone standard expected to be lowered in 2011 (reductions will be driven by NO_x in many areas), implementation in 2013.
 - o Facilities have had problems meeting new 1-hour NO_x standard when modeling for projects

Other Pending Air Regulations Where Costs Could NOT Be Assigned to Mills

- Boiler Area Source/GACT
 - o Rule sets HAP emission requirements for smaller biomass and liquid boilers at so called "area sources" such as box plants; rule does not apply to gas-fired boilers.
 - o Impact of rule is minimal since EPA adopted work practices (tune-ups) rather than numeric limits for CO for existing biomass and liquid boilers.
 - o Final rule March 2011, compliance within 3 years

- CAIR 3/Cross-State Rule for Industrial Boilers and Recovery Furnaces
 - \$870 million in capital; total O&M would be \$220 million
 - Assumes next phase of rule requires medium and large boilers burning majority coal or oil to significantly reduce SO₂ and NO_x
 - Possible promulgation in 2012 with compliance over the next five years
- Start-up, Shutdown & Malfunctions (SSM) Provisions Removed from MACT
 - \$100 million, plus \$3 million in O&M
 - If EPA compelled to eliminate SSM exemptions and venting allowances then installation of redundant controls or suffer periods of shutdown with no production would drive costs even higher. EPA has discretion to develop reasonable work practices to replace current SSM exemptions
 - EPA linking schedule with pulp and paper MACT rules, so complete by 2012
- Ozone NAAQS revisit
 - \$400 million in capital and \$30 million in O&M
 - Tighter standard will drive more VOC and NO_x controls than other rules require for smaller contributors in or near more numerous non-attainment areas
 - EPA plans to reset NAAQS in 2011; impacts would occur 4 to 5 years after finalization
- PM fine NAAQS Implementation
 - \$284 million in capital and \$40 million in O&M
 - Assume tighter annual standard will drive further SO₂ and NO_x controls. As in all the above NAAQS, EPA has the discretion to determine "ample margin of safety" necessary to protect public health.
 - Final in 2012 with controls needed for attainment 5 or so years out
- Revised NAAQS for SO₂
 - \$40 million in capital and \$7.5 million in operating costs
 - Final in June 2010 with controls on select sources in five years (2015)
 - Significant uncertainty in ability to meet increments modeling for projects
- Kraft Pulp NSPS Revisions
 - \$83 million in capital through 2020 and \$56 million six years after effective date given more mills trigger retrofit requirements
 - EPA can defer action on NSPS or set equivalent to MACT to avoid new costs
 - EPA linking schedule with pulp and paper MACT rules so complete by April 2012

**EPA's Final Boiler MACT Rules – Job Study
Questions and Answers
September 7, 2011**

1) Why do you think EPA should change its final Boiler MACT rules?

As a matter of fundamental fairness and good policy, EPA should avoid unnecessarily onerous regulations that will destroy jobs and upend the lives of workers, their families and communities that already face severe economic stress. In the Clean Air Act, Congress declared that a fundamental purpose of the Act is “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and *the productive capacity of its population*. If EPA continues on its current course, it inevitably will defeat that purpose by destroying jobs, offshoring U.S. manufacturing and compromising this Nation’s productive capacity.

2) Who compiled the study and what are their qualifications?

The jobs study was conducted by Fisher International, which was founded in 1985 and is headquartered in Norwalk, Connecticut. Fisher maintains a detailed data base of U.S. paper mills, which includes each mill’s product line, production process, type and age of boilers, estimated cost structure, and number of employees. The detailed nature of the data base allowed Fisher to rigorously assess which mills would be most at-risk of closing due to the potential costs of complying with future air regulations.

The compliance costs data used by Fisher were prepared by URS, a well-known engineering consulting firm with expertise in pollution control costs and operation as well as the pulp and paper industry.

3) Explain the methodology used to arrive at these conclusions

Fisher first determined that the typical U.S. paper mill could, at most, absorb a 12.5% increase in its cost of production before its free cash flow would be exhausted – the same figure they used for last year’s study. Using information provided by URS, Fisher then determined which mills are likely to sustain a cost increase of that magnitude in order to comply with pending air regulations. Those mills that reached or exceeded the 12.5% threshold were deemed to be in jeopardy of closing.

4) Why is boiler MACT so costly so as to result in lost jobs and possible mill closures?

Boiler MACT is really four rules in one, since it sets five different, stringent emission limits that will require up to four different controls. Each of the controls cost millions of dollars, and for a single boiler, average around \$10 million. Since many mills have multiple boilers, the cost per mill can be \$20-30 million dollars, which may be more than a mill can afford given current profits and the fiercely competitive global market that U.S. forest products manufacturers face. Our global competitors do not face such severe regulatory burdens.

5) If boiler MACT is as devastating as you say to your industry, why is the estimated job loss number not higher?

This study shows tens of thousands of jobs lost which is devastating to those individual families impacted and to many of the rural communities where those jobs provide the cornerstone of the local economy. . Boiler MACT alone, if imposed on top of other air regulations, would be responsible for the loss of more than 20,500 primary pulp and paper mill jobs – which is 18% of the primary pulp and paper workforce - and some 87,000 jobs if supplier industry jobs and local community jobs associated with spending by paper mill employees are factored in. And these are only the paper industry-related jobs losses. The job losses could be amplified many times economy-wide as the result of jobs lost in the chemical, wood products, and metals industries, along with myriad other manufacturing industries, as well as universities, hospitals, small businesses and municipalities.

6) EPA is required by law to issue a Boiler MACT regulation, and the Clean Air Act is very prescriptive. Is EPA really able to address your concerns?

We believe that EPA has the ability and authority to reduce the unnecessary burdens of the proposed Boiler MACT rules significantly, which could save tens of thousands of jobs.

For example, EPA could use a common-sense, reasonable method to set the emissions limits based on what real best performing unit can actually achieve. EPA's proposal applies to a vast universe of boilers, so EPA must factor into the rule the variability in operations, fuels, designs and testing performance across the many types of boilers. Failure to do so would make the final rule legally vulnerable in court because it would be arbitrary and capricious.

EPA itself has said that many parts of the Boiler MACT rules they issued to meet the court's deadline need to be reconsidered. We believe that EPA will not have enough time to do that in a thorough manner unless Congress acts to provide it with the necessary protection from court-ordered deadlines.

7) What are the implications of the Boiler MACT rule for renewable energy from woody biomass?

Even some providers of combustion technology have said that the proposed rule will discourage, if not eliminate, new development of biomass power. The forest products industry is the leading producer and user of carbon-neutral, renewable biomass power and produces more energy from biomass than all the energy produced from solar, wind and geothermal sources combined. We think that EPA's proposed regulations would so severely hinder biomass energy that they run counter to the President's own energy policy, which calls for more renewable biomass energy.

8) EPA claims that the benefits of the rule exceed its costs when they factor in the co-benefits of particulate and sulfur dioxide reductions. Why shouldn't EPA proceed on these grounds?

The improvements we have suggested to Boiler MACT would both reduce costs and still protect public health. EPA's position on this also ignores the significant controls already in place to reduce particulate and other pollutants. Finally, it's important not to lose site of the fact that when a family's primary breadwinner loses their job, or a small town loses its largest employer, there are significant health and financial implications as well that are direct and immediate.

9) Explain how many jobs are lost due to boiler MACT versus each of the other regulations you say could impact your industry.

As noted above, the Fisher study points to 20,500 pulp and paper mill job losses and nearly 87,000 job losses if supplier and local community jobs are factored in due to the Boiler MACT rules.

If the entire suite of pending air regulations are considered, the Fisher analysis points to 38,000 job losses at pulp and paper mills and 161,755 if you include supplier industries and job losses in local communities associated with reduced spending by pulp and paper mill employees.

10) Why did you assume EPA would rule against you in all upcoming regulations as part of your methodology? Is this just posturing?

First, the study does not assume the worst case. It actually represents a middle-of-the-road approach with respect to the cost tipping point, and subsequent results. Second, the trend of EPA regulations is pretty clear that the regulations exceed the needs to produce the desired results, thereby imposing more costs and costing more jobs.

Boiler MACT is a very important precedent for how EPA will implement the Air Toxics and other programs of the Clean Air Act. The study not only looks at the impact of Boiler MACT, but also allows Boiler MACT to be an indicator of those decisions to come. Despite minor modifications from the originally proposed rule, EPA has chosen very stringent requirements for the Boiler MACT rule. That choice commits EPA to a path of other very onerous requirements where reductions are sought at any cost. For example, recent decisions to tighten National Ambient Air Quality Standards for several pollutants suggest EPA is imposing expensive requirements in multiple air programs.

11) In an age when more information is being shared electronically, isn't this just part of the changing landscape of technological advances and a natural shift of jobs from a declining industry to those in emerging industries?

Certainly the use of electronic devices have added to the landscape, but when you look worldwide, paper demand is expected to increase in the future at an average annual rate of about 2-3% due to increased paper consumption by developing nations. The U.S. has the opportunity to narrow its future trade deficits by exporting more pulp and paper. The forest products industry is quite literally part of the fiber this country is built upon. We have a valuable renewable forest resource in this country, and productive workers who simply ask for the right to compete. Our nation cannot afford to squander high-paying jobs and push American manufacturing offshore.

12) EPA estimated in the preamble to the Boiler MACT rule that it would not have a significant jobs impact. As you know, some economic literature supports the potential of regulations to create jobs – for example in pollution control industries. How do you justify the conclusions of the Fisher study, and do you think EPA was wrong?

The EPA analysis is based on old data – from 20 years ago or more - that does not take account of the financially precarious situation that many paper mills currently find themselves in due to the aftermath of the recession and increased international competition.

EPA compliance costs estimates understate the true cost of complying with the proposed Boiler MACT rules.

The EPA's analysis takes a short-term view of job changes, whereas the migration of pulp and paper mill jobs to other countries has long-term consequences for the U.S. economy.

13) Why are the job losses in this year's study for Boiler MACT higher than last year's? When then are the job losses attributed to all air regs lower than last year?

The 2010 jobs study projected that 16,888 pulp and paper mill jobs would be at risk due to the Boiler MACT rules and 26,778 pulp and paper industry jobs would be at risk due to the other Non-Boiler MACT air regulations. The 2011 study estimates that 20,541 pulp and paper mill jobs would be at risk due to incremental spending on the Boiler MACT rules and 17,519 as the result of the other air regulations. Hence, the total number of pulp and paper mill job losses declined from 43,666 to 38,060 between the two studies.

The Non-Boiler MACT air regulations resulted in fewer job losses in the 2011 study as compared with the 2010 study in part because the paper industry's cash flow margins have improved and in part because some of the mills that were deemed likely to close in the earlier study as the result of the Non-Boiler MACT air regulations have already shutdown and were, therefore, removed from the data base.

With fewer mills closing as the result of the other air regulations, Boiler MACT air regulations played the pivotal role of pushing more mills into a free-cash flow negative position, thus putting them at risk of closing.

Note that estimated required capital spending for pulp and paper mills to comply with the Boiler MACT regulations declined from \$5.1 billion in the 2010 study (proposed rules) to \$4 billion in the 2011 study (final rules), while capital spending needed to comply with the other air regulations held steady at about \$8.6 billion.

14) Why is the estimate of capital costs in this year's study lower than last year?

In the 2010 study, capital spending was estimated by URS at \$5 billion for the proposed Boiler MACT/CISWI rules and \$13.7 billion for all the pending air rules, including the Boiler MACT/CISWI rules. However, not all of the costs could be allocated to specific mills, so capital spending-related compliance costs used by Fisher came to \$4.6 billion for Boiler MACT and \$10.3 billion for the entire suite of air regulations.

Capital spending for the 2011 study was estimated by URS at \$4 billion for the final Boiler MACT/CISWI and \$12.6 billion for all of the pending air rules, including Boiler MACT/CISWI. However, not all of the costs could be allocated to specific mills, so capital spending-related compliance costs used by Fisher came to about \$3.8 billion for Boiler MACT/CISWI and \$10.1 billion for the entire suite of air regulations.

The Boiler Rules changed between proposal and promulgation. In particular, more fuels were classified as solid wastes and therefore, many plants are subject to the CISWI rule instead of the Boiler MACT rule. In addition, costs were added for NOx emissions reduction requirements to mills in close proximity to projected non-attainment areas.

15) It seems like you're saying that EPA actually did reduce the costs associated with the Boiler MACT rule. Is that true? If so, why do you still oppose it?

While EPA did reduce the costs of some aspects of the originally proposed Boiler MACT rule, there were other changes that added costs – one example is the change to the Non-Hazardous Secondary Materials rule which puts units that have been traditionally regulated as boilers into the incinerator rule – which is much more costly. The version they issued still would cost so much to implement that it would cost tens of thousands of jobs in our industry. This is unaffordable and unacceptable. Even EPA itself has acknowledged that many part of the rule need to be reconsidered. We want Congress to act to provide EPA the time it needs to do that in a thorough way without being rushed to comply with court-ordered deadlines.

16) EPA will soon be reconsidering the Boiler MACT rule and may make even further changes. So why does Congress need to act on this?

EPA itself has acknowledged that significant portions of the Boiler MACT rules require changes to be achievable under real-world operating conditions and we're hopeful they will make those changes during reconsideration. But at the same time, the rules and EPA's administrative stay are being challenged in court. Legislation is the only way to guarantee EPA has the time they say they need to fix these rules.

Introduction of this bipartisan legislation in Congress will provide EPA that time and also provide businesses with a level of operational certainty while more reasonable rules are established, allowing the opportunity to preserve and create much needed manufacturing jobs.

THE WALL STREET JOURNAL

Another EPA Rule Comes Under Attack

The Wall Street Journal, September 6, 2011
By Deborah Solomon

Just ahead of President Barack Obama's big jobs speech, the American Forest & Paper Association says a pending environmental rule could cost 20,500 jobs or 18% of the industry's workforce.

In a study to be released Wednesday, the group is taking aim at an Environmental Protection Agency rule to cut pollution from factory boilers, saying the regulation will cause 36 U.S. paper and pulp mills to close. The study comes on the heels of a decision by Mr. Obama to jettison another EPA air quality rule related to ozone that industry complained would kill millions of jobs.

The so-called boiler rule has come under sharp attack from both Republican and Democratic lawmakers, as well as industry, which say the regulations would be too costly and difficult to implement. House Majority Leader Eric Cantor included the rule in his list of 10 "job-destroying regulations" that he has vowed to fight.

The boiler rule would affect paper mills, refineries, chemical factories and other facilities that use boilers, such as universities, hospitals and apartment buildings. Boilers are on-site generators that can provide energy for facilities and factories. Bipartisan legislation is now pending in the House and Senate to delay implementation of the rule, with the aim of having EPA reconsider the regulation.

The AF&PA study, conducted by Fisher International, looked at how many mills would be in danger of closing if they had to comply with the new air quality regulations and install new pollution controls. The study found 36 mills would have to close, impacting 18% of the industry's workforce.

Supporters of the rule say the benefits far outweigh the costs and counter job loss claims by saying the new controls being required could provide an economic boost.

"Industry is trying to leverage fears about the economic impact and jobs and ignoring that pollution controls are made and installed here in the U.S.," said Paul G. Billings, vice president of national policy and advocacy for the American Lung Association.

Gina McCarthy, a top EPA official, is expected to testify Thursday before a U.S. House subcommittee about the rule. The agency, which has touted the health benefits of the rule, has delayed issuing final regulations, saying it needs more time for public input. That's frustrated environmental and public-health groups, which say the rules would save lives and help avoid thousands of heart and asthma attacks.

John Walke, clean air director at the Natural Resources Defense Council, said the boiler rule is critical because it will cut mercury and other toxic air emissions from incinerators and boilers at industrial facilities. "The reason it's important is those sectors are one of only a handful that still have not had lawful toxic emission standards adopted for them under the 1990 clean air act amendments," he said.

Donna Harman, president and CEO of AF&PA, said the rule will hurt an already hard-hit sector and said lawmakers and regulators should give the industry more time and impose a less stringent standard.

"We're not asking to not be regulated. We're asking to have a regulation that can be achieved based on the technology that's currently available," she said.

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Mr. GRIFFITH. Mr. Chairman, all of these groups are concerned because of jobs. There is no question about that. And in fact, the study that I just put in shows that a threat that the bills if not enacted, boiler MACT threatens 20,000 jobs, 18 percent of the industry and roughly 36 pulp and paper mills. As you know, my district includes pulp and paper mills, chemical processors. We have employees who work at cement factories.

These are extremely important bills. The EPA has gotten to a point where they are killing jobs, whether they mean to or not. They may not see that as a concern, but to the American people, it is a great concern.

In regard to the health concerns, Mr. Chairman, we are not unsympathetic to health concerns but we would like to see evidence that actually shows that these regulations would in fact, not extrapolated theories or models, but would in fact cause the problems that the previous gentleman referenced, and then there is the concern that I am always raising and in fact had a little amendment in that many of my colleagues on the other side agreed to that would actually ask for a study of what the impacts are of the pollution coming from overseas in the air stream to the United States of America and in part because we have put so many regulations on our businesses, many of those jobs have moved to countries where the regulations are nowhere near what we have.

Thank you, Mr. Chairman, and I appreciate the time.

Mr. WHITFIELD. Mr. Rush is on his way here. His plane was delayed, and when he arrives, we will give him an opportunity to make an opening statement, but at this time I would like to proceed with the panel.

On our first panel, we have the Honorable Gina McCarthy, who is the Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency. Ms. McCarthy, we welcome you here today. I would like to say that John Shimkus and I do appreciate your taking time to have a conference call with us relating to some specific problems of the Prairie State plant, and we thank you for working with us on that important project.

Now, I would also point out something else to you. On Wednesday, August 24, over 2 weeks ago, we talked to EPA about this hearing today, and you all had plenty of advance notice about this hearing. We also accommodated the request that EPA would be the sole witness on the first panel of this hearing. The two pieces of legislation that we are considering today are a mere 15 pages total so there is not that much to prepare for, and our committee has expressed, requested and required that witnesses' testimony be submitted 2 working days in advance of the hearing to give us an opportunity to review it completely and make these hearings more meaningful, and we received your testimony last night at 7:00, and this really is not acceptable. It does not allow us the time to prepare, and I hope that you would talk to your staff or whoever is responsible for this to make sure in the future when we have these hearings that we are able to get the testimony at least 2 days in advance.

So at this time, Ms. McCarthy, I would like to recognize you for your opening statement.

STATEMENT OF REGINA MCCARTHY, ASSISTANT ADMINISTRATOR, OFFICE OF AIR AND RADIATION, ENVIRONMENTAL PROTECTION AGENCY

Ms. MCCARTHY. Thank you, Chairman Whitfield.

First of all, you are more than welcome for the work on Prairie State. Thank you, and thank Congressman Shimkus for bringing that to my attention. It worked out very well, I think for the environment and the company, so thank you so much.

And let me apologize for the tardiness of my testimony. Regardless of who is responsible, it is my responsibility to see that we meet the needs of the committee, and I will take—my personal attention will go to that in the future, so I apologize for that.

So Chairman Whitfield and members of the subcommittee, first of all, thank you for inviting me here to testify. The Administration has major concerns with these two bills. They are a clear attempt to roll back public health protections of the kind that have been in place as part of the Clean Air Act for decades. For 40 years, the Clean Air Act has made steady progress in reducing air pollution. In the last year alone, programs established since 1990 are estimated to have reduced premature mortality risks equivalent to saving over 160,000 lives. They have also enhanced productivity by preventing 13 million lost workdays and kept kids healthy and in school, avoiding 3.2 million lost school days.

History has shown repeatedly that we can clean up pollution, create jobs and grow our economy. Since 1970, key air pollutants have decreased more than 60 percent while our economy has grown by over 200 percent. Every dollar we spend cleaning up the air has given us over \$30 in benefits.

EPA standards to limit air toxic emissions from boilers, incinerators and cement kilns continue that success story. Today's bills, which directly attack the core of the Clean Air Act, raise a number of serious issues. Most importantly they would indefinitely delay the important health benefits from national limits of air toxics, toxic pollution including mercury, which can result in damage to developing nervous systems of unborn babies and young children, impairing children's ability to think and to learn. These bills do not simply give EPA more time to finalize more rules. Rather, they would prohibit EPA from finalizing replacement rules prior to at least as early as March 2013 at best. It would prohibit EPA from requiring compliance until at least 5 years after the rules are finalized and it would fail to set any new deadlines for either EPA action or for compliance. Combined, these provisions make it clear that the authors have no time in mind for when these delayed public health benefits would be delivered to American families.

Just to be clear, the timeline in the boiler bill is not what EPA told the court we needed. We asked for an April 2012 deadline, not a prohibition on finalizing standards prior to March 2013. We are currently reconsidering the boiler standards for major sources. We have stayed those standards. We have used the administrative process to do that. We intend to finalize the reconsideration process by the end of April 2012.

Both the boiler and cement bills would indefinitely delay important public health protections and would create minimum delays lasting at least 3 years for the boiler standards and almost 5 years

for the cement standards. As a result, combined, even minimum delays in these bills would cause tens of thousands of additional premature deaths, tens of thousands of additional heart attacks, and hundreds of thousands of additional asthma attacks that would be avoided under the existing boiler and cement standards that we have either promulgated or will promulgate in the very near future.

We also have serious concerns with section 5 of each of these bills. The language is unclear but we certainly anticipate that some in industry would argue that this section would substantially weaken the act by overriding the current provisions for setting minimum MACT standards. So the mere assertion that EPA regulations are job killers should not justify sacrificing these significant public health benefits.

Some studies have found that the Clean Air Act actually increased the size of the U.S. economy because of lower demand for health care and a healthier, more productive workforce. Another study found a small net gain in jobs due to additional environmental spending in the four industries studied. EPA standards under the Clean Air Act will encourage investments in labor-intensive upgrades that can put current unemployed Americans back to work.

These standards at issue today will provide public health benefits without imposing hardship on American economy or jeopardizing American job creation. It is terrifically misleading to say that implementation of the Clean Air Act costs jobs. It does not. Families should never have to choose between a job and healthy air. They are entitled to both. And as the President recently said, the Administration would continue to vigorously oppose efforts to weaken EPA's authority under the Clean Air Act or dismantle the progress we have made.

I look forward to taking your questions, and thank you for the opportunity.

[The prepared statement of Ms. McCarthy follows:]

**Opening Statement of Regina McCarthy
Assistant Administrator for Air and Radiation
U.S. Environmental Protection Agency**

**Subcommittee on Energy and Power
Committee on Energy and Commerce
U.S. House of Representatives**

**Legislative Hearing On H.R 2250, the EPA Regulatory Relief Act of 2011, and H.R.
2681, the Cement Sector Regulatory Relief Act of 2011**

**September 8, 2011
Written Statement**

Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee, thank you for inviting me to testify today regarding the EPA Regulatory Relief Act of 2011, and the Cement Sector Regulatory Relief Act of 2011. I appreciate the opportunity to testify today on these legislative initiatives, initiatives that are a direct attack at the core of the Clean Air Act.

These two bills would roll back existing Clean Air Act public health protections. We have a number of serious concerns about these bills. Most importantly, they would indefinitely delay the important health benefits associated with rules that establish national limits on emissions of air toxics, including mercury, from certain boilers, solid waste incinerators, and cement kilns. Depending on the degree to which people are exposed, air toxics may be associated with numerous adverse effects, including cancers, respiratory, neurological or developmental effects, and reproductive dysfunction. Mercury and other toxic emissions also damage the environment, polluting our nation's lakes and streams, and contaminating fish. Mercury in fish is a particular concern for women of childbearing age, unborn babies and young children, because high levels of methylmercury are linked to damage to the developing nervous system. This damage can impair children's ability to think and learn.

I want to reiterate my first point because it is a critical to understanding the effects of these bills – they would indefinitely delay public health protections required under the existing Clean Air Act. While I am aware that many advocates for these measures describe them as delaying the final rules for only a specifically limited period of time, the actual language in the bills is not consistent with that description. The bills prohibit EPA from issuing replacement standards prior to 15 months after enactment, but set no deadline by which replacement standards must be issued. The bills also prohibit EPA from requiring compliance earlier than 5 years after the replacement standards are promulgated, but sets no date certain by which compliance must occur. These two provisions combined make it clear that the authors have no mandatory timeline in mind for when these public health protections should be achieved. The bill would thus undermine deadlines for rulemaking and compliance under the Clean Air Act. I will provide more detail on the effects of the legislation later in my testimony, but first I want to remind the Members of the Committee of the tremendous success of the Clean Air Act.

For 40 years, the nation's Clean Air Act has made steady progress in reducing the threats posed by pollution and allowing us all to breathe easier. In the last year alone, programs implemented pursuant to the Clean Air Act Amendments of 1990 are estimated to have reduced premature mortality risks equivalent to saving over 160,000 lives; spared Americans more than 100,000 hospital visits; and prevented millions of cases of respiratory problems, including bronchitis and asthma.¹ They also enhanced productivity by preventing 13 million lost workdays; and kept kids healthy and in school, avoiding 3.2 million lost school days due to respiratory illness and other diseases caused or exacerbated by air pollution.²

However, few of the emission control standards that gave us these huge gains in public health were uncontroversial at the time they were developed and promulgated. Most major rules have been adopted amidst claims that they would be bad for the economy and bad for employment.

Some may find it surprising that the Clean Air Act also has been a good economic investment for our country. In contrast to doomsday predictions, history has shown, again and again, that we can clean up pollution, create jobs, and grow our economy all at the same time. Over that same 40 years since the Act was passed, the Gross Domestic Product of the United States grew by more than 200 percent.³ In fact, some economic analysis suggests that the economy is billions of dollars larger today than it would have been without the Clean Air Act.⁴

Some would have us believe that "job-killing" describes EPA's regulations. It is terrifically misleading to say that enforcement of the Clean Air Act costs jobs. It doesn't. Families should never have to choose between a job and healthy air. They are entitled to both. Studies led by Harvard economist Dale Jorgenson in 2001 to 2002 found that implementing the Clean Air Act actually increased the size of the US economy because of lower demand for health care and a healthier, more productive workforce.⁵ By 2030 the Clean Air Act will have prevented 3.3 million work days lost and avoided the cost of 20,000 hospitalizations every year, based on recent EPA estimates.⁶

A study that examined four heavily regulated industries (pulp and paper, refining, iron and steel, and plastic) and concluded that:

¹ USEPA (2011). *The Benefits and Costs of the Clean Air Act from 1990 to 2020*. Final Report. Prepared by the USEPA Office of Air and Radiation, February 2011. Table 5-5. This study is the third in a series of studies originally mandated by Congress in the Clean Air Act Amendments of 1990. It received extensive peer review and input from the Advisory Council on Clean Air Compliance Analysis, an independent panel of distinguished economists, scientists and public health experts.

² Ibid.

³ Bureau of Economic Analysis, National Economic Accounts, "Table 1.1.5. Gross Domestic Product," <http://bea.gov/national/index.htm#gdp>

⁴ Dale W. Jorgenson Associates (2002a). *An Economic Analysis of the Benefits and Costs of the Clean Air Act 1970-1990. Revised Report of Results and Findings*. Prepared for EPA. [http://yosemite.epa.gov/ee/erm.nsf/vwAN/EE-0565-01.pdf/\\$file/EE-0565-01.pdf](http://yosemite.epa.gov/ee/erm.nsf/vwAN/EE-0565-01.pdf/$file/EE-0565-01.pdf).

⁵ Jorgenson (2002a)

⁶ Jorgenson (2002a)

“We find that increased environmental spending generally does not cause a significant change in employment. Our average across all four industries is a net gain of 1.5 jobs per \$1 million in additional environmental spending These small positive effects can be linked to labor-using factor shifts and relatively inelastic estimated demand.”⁷

The EPA’s updated public health safeguards under the Clean Air Act will encourage investments in labor-intensive upgrades that can put current unemployed or under-employed Americans back to work. Environmental spending creates jobs in engineering, manufacturing, construction, materials, operation and maintenance. For example, EPA vehicle emissions standards directly sparked the development and application of a huge range of automotive technologies that are now found throughout the global automobile market. The vehicle emissions control industry employs approximately 65,000 Americans with domestic annual sales of \$26 billion.⁸ Likewise, the environmental technologies and services industry employed 1.7 million workers in 2008 and led to exports of \$44 billion of goods and services⁹, larger than exports of sectors such as plastics and rubber products.¹⁰ In fact, the world market for environmental goods and services is worth over \$700 billion, a size comparable to the aerospace and pharmaceutical industries.¹¹

Jobs also come from building and installing pollution control equipment. For example, the U.S. boilermaker work force grew by approximately 35 percent, or 6,700 boilermakers, between 1999 and 2001 during the installation of controls to comply with EPA’s regional nitrogen oxide reduction program.¹² Over the past seven years, the Institute for Clean Air Companies (ICAC) estimates that implementation of just one rule – the Clean Air Interstate Rule Phase 1 – resulted in 200,000 jobs in the air pollution control industry.¹³ Similar effects have been recognized by the electric power industry as well. In an Op-Ed in the Wall Street Journal, eight major utilities that will be affected by our greenhouse gas pollution standards said, “Contrary to claims that EPA’s agenda will have negative economic consequences, our companies’ experience complying with air quality regulations demonstrates that regulations can yield important economic benefits, including job creation, while maintaining reliability.”

⁷ Morgenstern, R. D., W. A. Pizer, and J. S. Shih. 2002. “Jobs versus the Environment: An Industry-Level Perspective.” *Journal of Environmental Economics and Management* 43(3):412-436.

⁸ Manufacturers of Emissions Control Technology (http://www.meca.org/cs/root/organization_info/who_we_are)

⁹ DOC International Trade Administration. “Environmental Technologies Industries: FY2010 Industry Assessment.” [http://web.ita.doc.gov/ete/eteinfo.nsf/068f3801d047f26e85256883006ffa54/4878b7e2fc08ac6d85256883006c452c/\\$FILE/Full%20Environmental%20Industries%20Assessment%202010.pdf](http://web.ita.doc.gov/ete/eteinfo.nsf/068f3801d047f26e85256883006ffa54/4878b7e2fc08ac6d85256883006c452c/$FILE/Full%20Environmental%20Industries%20Assessment%202010.pdf) (accessed February 8, 2011)

¹⁰ U.S. Census Bureau, Censtats Database, International Trade Data--NAICS, http://censtats.census.gov/naics3_6/naics3_6.shtml (accessed September 6, 2011)

¹¹ Network of Heads of the European Environment Protection Agencies, 2005. “The Contribution of Good Environmental Regulation to Competitiveness.” http://www.eea.europa.eu/about-us/documents/prague_statement/prague_statement-en.pdf (accessed February 8, 2011).

¹² International Brotherhood of Boilermakers, *Boilermaker Labor Analysis and Installation Timing*, March 2005, EPA Docket OAR-2003-0053 (docket of the Clean Air Interstate Rule).

¹³ November 3, 2010 letter from David C. Foerter, Executive Director of the Institute of Clean Air Companies, to Senator Thomas R. Carper (http://www.icac.com/files/public/ICAC_Carper_Response_110310.pdf) (accessed February 8, 2011).

The air toxic standards at issue today continue the Clean Air Act's 40-year success story. In contrast, the two bills you have asked me to discuss today would roll back important clean air provisions and further delay already long overdue public health protections from toxic air pollution. More than twenty years ago, Congress and President George H.W. Bush, amended the Clean Air Act to establish a path to addressing airborne toxic chemicals within a decade. This goal, although ambitious, seemed within reach. In fact, industrial emissions of carcinogens and other highly toxic chemicals have been reduced by 1.7 million tons each year through actions taken by more than 170 industries. President George H.W. Bush said it best when he proposed the legislation, "Our best minds will apply the most advanced industrial technology available to control these airborne poisons...it will make state-of-the-art technology an everyday fact of doing business. And that's the way it should be."¹⁴

We are now more than 10 years late in meeting this goal for certain boilers and incinerators. The EPA Regulatory Relief Act of 2011 would delay us even further. It would block EPA from issuing new final standards to control air toxic emissions from certain boilers and solid waste incinerators prior to March 2013 (if the bill were enacted at the end of this year) -- a year later than EPA's current schedule. It would also prohibit EPA from requiring compliance earlier than 5 years after promulgation of the replacement standards and would not set a statutory deadline for compliance. The Clean Air Act currently requires compliance with the boiler MACT standard no later than 3 years after promulgation of the standard, or 2015 under EPA's current plan. As a result, this bill would cause -- at a minimum -- at least a 3-year delay in compliance with the air toxic control requirements.

According to EPA's analysis accompanying the rulemakings, for just the major source boiler rule and just a 3-year delay, the bill would allow up to:

- 20,000 additional premature deaths;
- 12,000 additional heart attacks; and
- 123,000 additional asthma attacks that could have been avoided.

For every year of delay beyond the minimum 3 years, the avoidable premature deaths, heart attacks and asthma attacks would continue to mount.

Proponents of this bill reportedly are saying that the delay is consistent with what EPA told the Court we needed to finish the rules. It is not. EPA asked the Court to extend the deadline for finalizing the rules to April 2012. In contrast, if the boiler bill were enacted at the end of this year, it would prevent EPA from finalizing the rule prior to March 2013.

Because there has been some confusion on how much time EPA needs, let me explain what the process has been to date and how EPA intends to proceed in the future. EPA received more than 4,800 comments from businesses and communities on the proposed rules, including a

¹⁴ President George H.W. Bush, June 12, 1989, Remarks Announcing Proposed Legislation To Amend the Clean Air Act
<http://www.presidency.ucsb.edu/ws/index.php?pid=17134&st=clean+air&st1=toxic#axzz1W9OCujA9>

significant amount of information that industry had not provided prior to the proposals. EPA was under a court order to issue the final standards in January 2011. Given the extensive public input, EPA asked the Court for an April 2012 deadline for issuing the rules, which the Court denied. The Court required EPA to issue final rules in February, 2011, but noted that EPA could avail itself of an administrative reconsideration process. EPA is doing so.

EPA issued the final standards in February. Although EPA is currently reconsidering these standards, any final version of these standards would save enormous numbers of American children and adults from harm, as evidenced by the public health benefits described above that would be lost if the boiler bill were enacted. The public health benefits are particularly important for people living in communities close to these facilities.

Moreover, the standards would provide these benefits without imposing hardship on America's economy or jeopardizing American job creation. In fact, the analyses accompanying the standards found that for every \$1 dollar spent to comply with these standards, the public will receive \$15 to \$36 in health and other benefits. EPA estimated that the net employment effects in the sectors regulated by these rules are likely to be small.

The final standards included a number of significant changes from the proposed standards. Those changes were based on the real-world information that the Agency gained from the public comments. For example, we received information at proposal that changed how the rule categorizes different kinds of boilers. This led to emissions limits that the boilers can meet in a more cost-effective way. As a result, the final standards would achieve public health benefits while being more practical to implement and about 50 percent less costly than the proposed standards.

I am proud of the work that the EPA did to craft protective, sensible standards for controlling hazardous air pollution from boilers. These standards reflect what industry told us about the practical reality of operating these boilers. When we issued the rules, however, we were also sensitive to the fact that the standards were substantially different from the ones on which the public had an opportunity to comment last year. That is why EPA announced that it would reconsider certain issues, and also solicited and accepted comments from members of the public regarding what issues EPA should reconsider. In the meantime, EPA has stayed the effective date of the major source rule for certain boilers and incinerators.

EPA intends to issue a reconsideration proposal this fall that will proposed reconsideration of some aspects of the major source boiler and incinerator standards that were promulgated in February. That proposal will be based on our review of issues identified in petitions for reconsideration submitted by the public, along with our further examination of issues that we identified when we announced the reconsideration in January. We intend to take final action on the proposed reconsideration by the end of April 2012, at which time the rules will be final.

The boiler bill would also delay implementation of the area source rule for smaller boilers. Of the smaller boilers that are affected by this rule, virtually all will need only to

perform a tune-up every other year in order to remain in compliance. Many of these smaller boilers already perform tune-ups as part of a regular boiler maintenance program.

The Cement Sector Regulatory Relief Act of 2011 would roll back EPA's 2010 air toxics standards for Portland cement kilns. The cement kiln rules that EPA issued in August 2010 have combined benefits that significantly outweigh costs, yielding an estimated \$7 to \$19 in public health benefits annually for every dollar of costs.

The cement bill would indefinitely delay the important health benefits associated with the cement standards, which establish limits on emissions of mercury, total hydrocarbons, hydrochloric acid (HCl), and particulate matter from Portland cement kilns.¹⁵ The bill would prohibit EPA from issuing replacement rules for cement kilns prior to March 2013 (if the bill were enacted at the end of this year), and would prohibit EPA from setting a new compliance deadline earlier than five years after promulgation. This would delay compliance with the new standards for at least 4 and half years.

If compliance were delayed even by 5 years, according to EPA's analysis accompanying the rulemakings, this bill would allow tens of thousands of adverse health effects from particulate matter exposure alone, including up to:

- 12,500 additional premature deaths;
- 7,500 additional heart attacks; and,
- 85,000 additional asthma attacks that would be avoided under the 2010 cement MACT rules.

Although I have highlighted our concerns based on the bills' harm to public health by indefinitely delaying these important standards, the bills also raise additional public health concerns by weakening substantive Clean Air Act provisions. For example, EPA would be required to select the least burdensome of the range of regulatory alternatives authorized under the Act even if a slightly more stringent standard is feasible, economically viable, and would cost effectively provide far greater public health protection.

Efforts, like the two bills we are discussing today, attempt to halt continued monumental achievements for America based on claims we have heard before - claims that EPA standards would be bad for the economy and bad for employment. In contrast to doomsday predictions, history has shown, that we can clean up pollution, preserve jobs, and help grow our economy all at the same time. Over that same 40 years since the Act's was passed, our air has become enormously cleaner, and the economy of the United States more than doubled.

¹⁵ The Portland cement MACT and New Source Performance Standards (NSPS) rules were published together, and the Federal Register notice bore the title "National Emission Standards for Hazardous Air Pollutants From the Portland Cement manufacturing industry and Standards of performance for Portland Cement Plants". It is unclear whether the bill is intended to vacate both rules or just the air toxics rule.

Again, I appreciate the opportunity to provide the Agency's views as you develop this legislation. I look forward to your questions.

Mr. WHITFIELD. Thank you, Ms. McCarthy.

Of these five rules, of course EPA itself went to the courts and asked for additional time for three of them, and all this legislation does, it gives you 15 months to re-propose and finalize these rules, so it is not like we are saying never implement them.

But let me ask you a question. In your time at EPA, has there ever been a time when a proposed regulation that the cost exceeded the benefits that you are aware of?

Ms. MCCARTHY. In hindsight, I do not know of one, no. And you asked me about the exact cost, the cost as it is born out?

Mr. WHITFIELD. Yes, and as far as you know, you are not aware of one?

Ms. MCCARTHY. The bills that I am familiar with have proven to be much less expensive than anticipated and the benefits have been significant.

Mr. WHITFIELD. Now, you made the comment that these regulations do not cost jobs, and I maybe missed part of it, but even your own estimate on the cement rule says that it will cost up to 1,500 jobs.

Ms. MCCARTHY. Well, let me clarify the job numbers because what we see is that because of the sensitivities of the modeling, we both project that there could be some losses and some gains but we look for the central estimate of what we actually anticipate will be the end result.

Mr. WHITFIELD. How do you calculate the cost of a job lost?

Ms. MCCARTHY. There are actually peer-reviewed models and standards that we use and we go through the interagency process to ensure—

Mr. WHITFIELD. Do you know what the—

Ms. MCCARTHY [continuing]. With the executive—

Mr. WHITFIELD. Do you know what the figure is?

Ms. MCCARTHY. I do not know, actually.

Mr. WHITFIELD. Do you consider the cost of lost health benefits created by job loss?

Ms. MCCARTHY. I do not know the answer to that question. What I do know, Mr. Chairman, is we do a complete regulatory impact analysis that looks at direct economic impacts in the immediate future. In the immediate past, this Administration has really stepped up in terms of doing additional job analysis.

Mr. WHITFIELD. Would you all sit down with us and go over with us the models that you use and the process that you use in determining cost and benefits?

Ms. MCCARTHY. I will. All of the processes that we use are peer-reviewed. They are open to the public. They have been identified by the Administration as those that are most appropriate, and they are available to everyone to take a look at.

Mr. WHITFIELD. Now, when you make these comments that we are going to prevent 18,110 cases of asthma in the future, that really sounds pretty subjective to me, and to most people. So I think there are some legitimate concerns here about cost-benefit analysis and particularly when you have said yourself since you have been at EPA, the costs have never exceeded the benefits.

On the boiler MACT, for example, the industry itself says that it is going to be \$14.4 billion in new costs, that there are at risk

224,000 jobs. On the cement, they say capital costs \$3.4 billion plus 4 billion additional capital costs for the incinerator rule, threaten shutdown of 18 plants by 2013 and four additional plants by 2015. The two rules combined directly threaten up to 4,000 jobs by 2015 and indirectly 12,000 jobs. And all the literature that I have ever read talks about when people lose jobs, it has an impact on the health care of them and their families, and as far as I know, EPA has never considered the cost of additional health care required because someone loses a job, and I don't understand how that is possible, why that is not a legitimate cost.

Now, I know that in California and Oregon under this new cement rule, EPA has recognized that two of these plants cannot meet the new cement MACT standards even with the most state-of-the-art pollution controls, and because of the type of limestone in those areas, and I know that EPA has been asked to create a subcategory for these two plants so that the rules are at least technically achievable, and EPA has refused. Now, why would EPA refuse to create a subcategory for these two plants that cannot in any way meet the standards?

Ms. MCCARTHY. Mr. Whitfield, I am happy to spend as much time as you would like to go through the modeling that we do and the analysis we do for costs as well as benefits, but I think it is appropriate to talk about both costs and benefits and to look at whether or not the benefits far exceed the costs, which in these rules they do.

Secondly, in terms of the Portland Cement, there were a couple of facilities that we actually worked with and we continue to work with closely. We have identified that there are significant opportunities for early reductions of mercury for those technologies with currently available technologies, and they are now working with us in terms of what other technology advances may be available to them so that we can ensure that they will be in compliance and we can make sure that that rule for them becomes achievable. So we are working with those two companies. There are many reasons why we look at subcategorization but the Clean Air Act does limit our ability to look at subcategorization and it does in order to make sure that we are advancing the right technologies moving forward where we are dealing with the most toxic pollution that we have and the impacts associated.

Mr. WHITFIELD. I would just make one comment. My time is expired. But you have talked about mercury, Mr. Waxman has talked about mercury, and it is my understanding the benefits of the reduction in mercury was not even included in the benefits. The benefits come from the reduction of particulate matter.

Ms. MCCARTHY. The benefits would—the benefits to mercury were not calculated. The benefits to particulate matter so outweighed the costs that it wasn't worth the effort, frankly.

Mr. WHITFIELD. OK. Mr. Rush, sorry your plane was late. We are delighted you are here. Would you like to give your opening statement now?

Mr. RUSH. Yes, Mr. Chairman, since the line of questioning that you were traveling I kind of don't necessarily agree with, so I think I will give my opening statement. I want to thank you for your in-

dulgence, and I want to thank you for allowing me to have the opening statement and my questions.

Mr. WHITFIELD. The gentleman is recognized for 5 minutes.

OPENING STATEMENT OF BOBBY L. RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. RUSH. Mr. Chairman, today we are holding a hearing on two bills, H.R. 2250, the so-called EPA Regulatory Relief Act of 2011, and H.R. 2681, the Cement Sector Regulatory Relief Act of 2011.

Mr. Chairman, in the 1990 Clean Air Act Amendments, Congress directed the EPA to take a technologically based approach to reduce hazardous air pollutants, or HAPs, which are pollutants known or suspected of causing cancer and other serious health effects such as reproductive and birth defects, neurological effects and adverse environmental impacts. For example, mercury is a hazardous air pollutant of particular concern because it is emitted into the air and then deposited into bodies of water where it contaminates fish and other aquatic life. Research shows that pregnant and nursing women, women who may become pregnant and young children who eat large amounts of fish that is mercury-contaminated are especially at risk because mercury damages the developing brain and reduces IQ and the ability to learn.

In order to address the entire suite of hazardous air toxins relatively quickly and using readily available technology, Section 112 of the Clean Air Act requires EPA to develop regulations for distinct source categories such as power plants and cement kiln that set specific emission limits based on emission levels already being achieved by other facilities. These regulations, or MACT standards, require that for existing sources, the emission standard must be at least as stringent as the average emissions achieved by the best performing 12 percent of sources in that source category.

As I understand it, the rules targeted by these two pieces of legislation are already years behind of when they were supposed to have been finalized, but yet these two bills, H.R. 2250 and H.R. 2681, would further delay these rules and push action on them further down the road even to the point of indefinitely. Besides postponing issuance and implementation of these rules indefinitely, these two bills would also undermine EPA's authority to require application of the best performing emissions control technology while also weakening the more stringent monitoring, reporting and pollution control requirements required in the Clean Air Act under Section 129.

Mr. Chairman, for many constituents paying attention to the action of this committee and this Congress, it will appear that the intent of these two pieces of legislation is not really to delay these rules but to kill them off altogether to the benefit of some in the industry and to the detriment of the American public as a whole. So Mr. Chairman, I am waiting to hear some testimony from all the panelists today because as of yet, it is still unclear why Congress should force the EPA once again to halt or delay implementation of rules that would protect the public health when everyone including industry knows that these regulations were coming down the pike for almost a decade now.

Mr. Chairman, that concludes my opening statement, and I will now have my 5 minutes of questioning.

Mr. WHITFIELD. The gentleman is recognized for 5 minutes.

Mr. RUSH. Ms. McCarthy, thank you so very much for being here once again. You have a really tough job before this subcommittee, and I empathize with you. You have been a regular here on the witness panel for many hearings, and your expertise and your honesty with this subcommittee is commendable.

There seems to be a misinformation campaign going on around precisely when these rules were scheduled to be issued and implemented and when EPA actually promulgated them. For the record, can you clear up this issue once and for all and provide a timeline for when EPA was initially scheduled to act on these rules by law and when EPA actually did issue these rules. Were there regulations issued in secret so as to surprise industry in order to knock them off guard, knock them off their game and then you come in, the EPA, as a thief in the night with a bunch of rules and regulations that would have detrimentally affected industry, or did EPA take into account any of the input from industry concerning costs or other factors before reissuing these new rules?

Ms. MCCARTHY. I am happy to clarify. I always appreciate the respect with which we work with one another, so it is my honor to be here and answer these questions.

I would just clarify that the Administration actually promulgated the rules associated with Portland Cement in August of 2010. That means we can enjoy significant reductions in toxic pollution as early as August of 2013. Now, this rule would delay those benefits for a minimum of 5 years. It will push out both the timeline. It would actually vacate those rules, require us to propose them, set a timeline far in advance that is almost close to the compliance timeline for when we might actually promulgate those rules, and there is no sense of what the compliance timeline might be for those. In terms of the boiler MACT rules and the incinerator rules, those rules were finalized in February of 2011. The agency took the unusual administrative step to actually stay those rules. We announced that in May. We are on target to re-propose those rules in October and finalize them in April, April of 2012, so we are going to enjoy the reductions in toxic pollution from those rules as early as 2015. Again, this bill, these bills would push that benefit and those benefits out to at least 3 more years and so there is no question that this is not the bill or the timeline that EPA was seeking or asked for or is welcoming.

Mr. RUSH. So was industry made aware, were they at the table or did you do this in a backroom with no input from industry?

Ms. MCCARTHY. Unfortunately, these are a series of rules that were tried before and brought to court. They are rules that have been long overdue. The 1990 Clean Air Act expected them to be done in 2000, and here we are in 2011 continuing to debate just the timeline. And so I would—these went through normal public comment and notice. We have had considerable discussion. The boiler MACT rules will go through another public notice and comment process but we can get these done, and we can get these done without any assistance needed from the legislature using the administrative process.

Mr. RUSH. So these bills that are before this committee right now, these bills would not in any way assist the EPA or the American public in terms of having a set of standards that both industry and the EPA agree on and that will benefit the American public in terms of having known standard. Is that correct?

Ms. MCCARTHY. That is correct. We are on target to deliver substantial public health benefits with the Portland Cement rule that's already been finalized. It would vacate that rule entirely. We are on target to finalize the boiler rule after public comment next year, early next year in April. We did not ask for this. We do not need this. It is in the administrative process. We are continuing to use administrative remedies to address any concerns associated with these rules. And also, the significant concern that the rule doesn't just deal with timing, it does deal with substance. It raises concern about what the standards are that we are supposed to achieve, the compliance timelines associated with that. It raises significant uncertainty about whether or not we can move this forward and what standards would need to be applied.

Mr. RUSH. Thank you, Mr. Chairman. I yield back the balance of my time.

Mr. WHITFIELD. As this time I recognize the gentleman from Texas for 5 minutes for questioning, Mr. Barton.

Mr. BARTON. Thank you.

Madam Administrator, in your written testimony you acknowledge some report that specifically mentions pulp and paper, refining, iron and steel and plastic in this report or study shows that they can't find any significant change in employment because of increased spending on environmental issues. Have you driven through Ohio or Pennsylvania recently?

Ms. MCCARTHY. Actually, I have, yes.

Mr. BARTON. Is there any community you went through that you didn't see a plant that had been shut down?

Ms. MCCARTHY. I can't say that I traveled the roads that you are talking about but there is no question that there has been significant challenges—

Mr. BARTON. So you did—

Ms. MCCARTHY [continuing]. In the manufacturing sector.

Mr. BARTON. You saw plants that were shut down?

Ms. MCCARTHY. The question is whether or not they are attributable to environmental regulations or to economic issues in general.

Mr. BARTON. Of the industries that are mentioned specifically in your testimony, pulp and paper, refining, iron and steel and plastic, are there any of those industries that employment is up as, say, compared to 20 years ago?

Ms. MCCARTHY. I don't know that answer.

Mr. BARTON. Oh, you do know the answer. The answer is no. Would you have your staff look at employment, let us say, base case 1990? Do you want to go back to 1970 and compare it to 2010 and provide that for the committee? Because in every one of those instances, and you know this, employment is not only down, it is significantly down, and you know that. You are too smart of a person. So to sit here and tell this subcommittee that we can do all these great things in the environment and not have an impact on

the employment, my good friend here, Mr. Walden from Oregon, just told me that the pulp and paper industry in his State is about 90 percent gone, 90 percent.

One of the rules that we are looking at is cement. I have got three cements plants in my Congressional district. I just met with one of the companies during the August break. Their business is 40 percent down, 40 percent. They are shutting one kiln, and this is just one company. The cement rules that would be implemented if we don't move these bills cost more to implement than the entire profit of the entire industry, and you don't think that is going to have an impact on jobs?

Now, on the other hand, the health benefits, my good friend, Mr. Waxman, talked about all the potential negative impacts of mercury and some of these other pollutants, and those are real. Mercury is a poison. Mercury is a pollutant. But because of all the things that we have done over the past 40 years, the number of birth defects because of mercury is, I would think, significantly down. Now, I don't know that but that is my assumption. Do you know how many birth defects in the last 10 years have been as a consequence of mercury? Are there any facts on that?

Ms. MCCARTHY. I certainly could get back to you, Congressman, but what we tend to look at is what the status of the industry is now and what impact our rule might have on that industry moving forward.

Mr. BARTON. And I want to stipulate that I think you and Mrs. Jackson are people of good character and integrity and you are doing the best job that you can in your agency, but over and over and over again we get these not really science-based facts to justify these rules, and if we have a problem with mercury, it would show up in birth defects and premature deaths and you could go to the medical records and prove it and justify it, but that is not the case. These are all probabilistic models of what might happen, not what is happening. Do you understand what I am—you know, we need—there is not a member on either side of the aisle of this committee or this subcommittee, if we have a problem, we will address it, but let us at least be able to actually identify the health problem and because of the successes in the Clean Air Act and other environmental bills in the past, we don't have—those numbers are not there.

And my time is expired by 40 seconds.

Mr. WHITFIELD. Thank you.

At this time I will recognize the gentleman from California, Mr. Waxman, for 5 minutes.

Mr. WAXMAN. Thank you, Mr. Chairman.

Ms. McCarthy, if your regulations were not science-based, would they stand up in court for 1 minute?

Ms. MCCARTHY. No.

Mr. WAXMAN. You must base your regulations on the science, and you have to get your figures on the impacts based on a peer-review process. Is that correct?

Ms. MCCARTHY. That is correct.

Mr. WAXMAN. Now, let me just say to you and everybody else on this committee, the statements I have heard members make and the numbers they have thrown out have not been scrutinized by

anybody except they have been given to the members by the industry or they made them up out of whole cloth. I would like to see some of those figures scrutinized carefully.

But Mr. Barton talked about all these plants that are now closed. Your regulations have not even gone into effect. They are closed because of the recession. They are closed because of, my Republican colleagues insist, the deficit, which we inherited for the most part from the Bush Administration. We also inherited the recession from the Bush Administration. Our country is struggling, and to say that the environmental rules are responsible, how could that be if these rules have not yet been in effect? Can you explain that to me?

Ms. MCCARTHY. In fact, Congressman, for the rules that we are talking about today for mercury, there is no national standard in these sectors. These are the largest sources of mercury emissions from stationary facilities and yet there are no national standards to date. So I don't think you can attribute standards in the future that this bill would make potentially way in the future for the closures that you are seeing today.

Mr. WAXMAN. Well, Mr. Barton said that the cost of compliance would be more than the entire profit of the whole industry. I don't know where he got that figure, but do you have any idea of that could be accurate?

Ms. MCCARTHY. I can give you the figures by sector of what we believe the costs are associated with this bill. The costs for the—

Mr. WAXMAN. Well, if you gave us those costs, would that wipe out the profits that the industries have and they would all have to close as a result?

Ms. MCCARTHY. In our assessment, we do not believe there would be broad closures as a result of any of these rules. We believe there would be job growth. We believe that they are manageable, that they are cost-effective and the technology is available to be installed.

Mr. WAXMAN. Mr. Barton just said, well, we have done a lot of things to lower birth defects because of mercury, and he asked you whether that is accurate or not. Now, whether it is accurate or not, it sounds like we are ready to celebrate fewer birth defects, not trying to reduce birth defects even more. I don't ask that as a question, I just ask it as a statement of incredulity.

Proponents of these bills suggest they are simply giving the EPA the time it requested to get the rules right and provide some additional flexibilities to reduce the burdens. I would like to get your views on this. Could you explain what the boiler bill that has been introduced does to the timing of the boiler rules that you are proposing?

Ms. MCCARTHY. Yes, the timing of these rules in terms of the boiler rules, as I indicated, we intend to finalize them in April. That means they will be in effect and we will be achieving these reductions in 3 years. This rule would at the very earliest only allow us to finalize those rules almost a full year later, which would delay compliance considerably, and these rules would also call into question and add uncertainty about how we establish the standards for these rules, and in fact, it would take away any timeline for compliance.

Mr. WAXMAN. In fact, the bill eliminates any deadline for action, allowing indefinite delay. That is fundamentally different from requesting a specific limited extension of time. But this is not all the bills do. Section 5 of both bills may completely change the criteria Congress established in 1990 for how EPA must set limits for air toxics. I say "may" because the language appears to be ambiguous.

Ms. McCarthy, what is the legal effect of this language in EPA's view?

Ms. MCCARTHY. Well, we are clearly concerned that it would raise legal uncertainty. We are concerned that industry would argue that these provisions modify or supersede existing Clean Air Act provisions that have governed these toxic standards since 1990. In particular, we anticipate that industry would argue that EPA would be required to set standards below the current MACT floor and to use a different process for setting that standard, one that identifies the least burden option. I don't even know who that burden would be assessed for. Would it be the regulated industry or the breathing public.

Mr. WAXMAN. In the case of the bill, it says require the least burdensome regulations including work practice standards. Current law allows work practice standards only if the Administrator decides a numeric emissions is not feasible. Maybe you can help us to make heads and tail of this. If the new language does not trump the current law, would it have any effect? In other words, in the boiler rule, is there a situation where you can determine a numeric standard wasn't feasible but still refuse to work practice standards?

Ms. MCCARTHY. No. In fact, between proposal and final, we made a determination on the basis of comments that there were boilers where limits were not feasibly achieved and we have gone to work practice standards.

Mr. WAXMAN. And if it does trump the current law, would EPA be able to set numeric emissions limits for any pollutants from any boilers?

Ms. MCCARTHY. It is unclear.

Mr. WAXMAN. Thank you, Mr. Chairman.

Mr. WHITFIELD. At this time I recognize the gentleman from Oklahoma, Mr. Sullivan, for 5 minutes.

Mr. SULLIVAN. Thank you, Mr. Chairman.

Ms. McCarthy, I disagree with your statement, with your testimony that H.R. 2681 halts Clean Air Act achievements. H.R. 2681 does not halt regulation of cement facilities. It does take the policy position that EPA is regulating too much, too fast and that we need commonsense rules that protect our communities including the jobs they depend upon. The cement sector has expressed major concerns with the workability and the timeline for implementing EPA's recent cement MACT and related rules affecting cement kilns. Would you agree there are legitimate concerns about technical aspects of the cement sector rules?

Ms. MCCARTHY. I would agree that concerns have been expressed but I believe that the final rule is appropriate and necessary and can be achieved.

Mr. SULLIVAN. Would you agree there are legitimate concerns with the compliance timeline for implementing the rules?

Ms. MCCARTHY. I believe that a number of concerns have been expressed, but again, I believe the timelines can be achieved.

Mr. SULLIVAN. EPA stayed the major source boiler MACT and the CISWI rule. Why have you not also stayed the cement MACT rule as well, given it is so intertwined with the CISWI rule?

Ms. MCCARTHY. The Portland Cement rule was finalized earlier. We do not believe that there was significant concern raised about any of the standards or how do achieve those that would warrant a stay unlike the boiler rule and the CISWI rule where we identified that there was significant changes between proposal and final that deserve to have additional public notice and comment. So that is why we have stayed those rules in order to achieve that notice and comment process and to finalize those expeditiously. That was not the case with Portland Cement and it is highly unusual for the agency to stay a rule, and clearly there was no reason to do that for Portland Cement.

Mr. SULLIVAN. How could you not have at least concerns when you are going to shut down 18 plants, though? Why couldn't you—

Ms. MCCARTHY. I am not exactly sure where those numbers are coming from. I do believe in our economic analysis we indicated that the industry itself was facing low demand for its products, that there was significant challenges associated with that. We certainly in no way attributed closures of 18 facilities to these rules.

Mr. SULLIVAN. EPA's cement MACT rule published in September 2010 affects 158 cement kilns located at cement plants throughout the United States. How many of those cement kilns currently meet the emission limits and other requirements established by this rule? Are there any?

Ms. MCCARTHY. As far I know, there are new facilities being constructed that will achieve those standards but at this point I do not believe there is a single facility that is meeting the standards, most notably because most of them have not been under national standards and they have not voluntarily decided to achieve these types of reductions.

Mr. SULLIVAN. Does the Administration have any concerns about the potential importing of cement as a result of forcing the idling or permanent shuttering of U.S. cement plants? The President has stated that new infrastructure projects, roads and bridges, will be a big part of his jobs package. Together with EPA's cement rules, are we supposed to build those roads and bridges with Chinese cement? Did you know that China already makes 28 times more cement than the United States?

Ms. MCCARTHY. We actually did look at this issue when we developed our economic analysis, and it is in the records. We are clearly concerned about the health of U.S. industry. There is no question about that. We did not believe that this rule would have a significant impact in terms of the amount of imported cement that would be coming into this country as a result of compliance.

Mr. SULLIVAN. Thank you. I yield back.

Mr. WHITFIELD. At this time I would like to recognize the gentleman from Michigan, Mr. Dingell, for 5 minutes.

Mr. DINGELL. Thank you, Mr. Chairman. I ask unanimous consent to insert into the record my opening statement, which I think

everybody will find enlightening, well written, entertaining, and I believe, valuable from the point of information.

Mr. WHITFIELD. Thank you for providing it to us.

[The prepared statement of Mr. Dingell follows:]

Statement of Representative John D. Dingell
House Committee on Energy and Commerce
Subcommittee on Energy and Power Hearing
H.R. 2250, the EPA Regulatory Relief Act
H.R. 2681, the Cement Sector Regulatory Relief Act
September 8, 2011

Mr. Chairman, thank you for holding this hearing today.

As we work to improve our fragile economy, it is important that we support businesses so they can have the tools to create and maintain jobs and put Americans back to work. However, it is also important that we not cede ground in our efforts to keep our air clean; the health of our citizens is too important. I believe we have a system already in place to balance both of those objectives.

The Clean Air Act was enacted in 1970, and significantly amended in 1990, with strong bipartisan support. In both instances we had divided government, with a Democratic Congress and Republicans in the White House. We worked together across party lines to enact a law that would protect public health and the environment, as well as our economy. We were successful. Since 1970, the Clean Air Act has reduced key air pollutants by 60 percent, while at the same time the economy grew by over 200 percent.

As the author of the Clean Air Act Amendments of 1990, I am proud of what has been accomplished. Our air is significantly cleaner than it was

20 years ago when the amendments were signed into law and those changes have also shown that we can clean the air while protecting jobs and the economy.

EPA is an essential part of protecting our air quality, our environment, our treasured Great Lakes, fish and wildlife, and the well-being of our people and industry. Like other human entities, it has made mistakes. I have from time to time been critical of EPA. But our job is to see that EPA does its work well in protecting the health and environment of our great country. EPA needs to have the funding and staff it requires to function in a transparent way so that they merit the support of our people in our great effort to protect public health and the environment.

Should this committee move forward with legislation, it is important that the Clean Air Act's health-based and air quality standards be protected. I want to be sure that any solution to air pollution issues represents an equitable balance among all affected industries and parties. The existing Clean Air Act is such a solution and before we take any steps to alter it, we need to know we have developed something much better to put in its place.

Mr. DINGELL. I find myself, Mr. Chairman, somewhat distressed here. I have heard general conclusions from the witness but I have heard nothing in the way of hard statements that relate to what it is this committee needs to know and justification for the legislation, and I have not heard any clear statements from the committee or its members about exactly what is the situation with regard to the impact of this legislation or the EPA's action with regard to the rules, and Madam Administrator, I find that to be somewhat distressing. So I will be submitting to you a letter shortly in which I hope we will get some better details on this. For example, are you able to make the categorical statement that none of these plants being closed are being closed because of the action of EPA? Yes or no.

Ms. MCCARTHY. I apologize. I think I would indicate that we have in the record our economic analysis that looks at these issues. Because of the sensitivity of that, it will have different impacts—

Mr. DINGELL. Simplify my problem by telling me yes, that these will be closed because of the action of EPA, or no, they will not be closed because of the action of EPA. That is a fairly simple conclusion and I hope that you would be able to just give me yes or no on the matter.

Ms. MCCARTHY. Well, we don't believe that there will be significant closures as a result. I cannot indicate whether it will impact a single closure.

Mr. DINGELL. You are under the law permitted to choose amongst the alternatives. You may not take action on the basis of cost alone. But once the question of the most effective way of addressing this from the scientific and health standpoint has been reached, you are then permitted to choose that rule or rather that approach which costs the least and which is most helpful in terms of the industry. Isn't that so? Yes or no.

Ms. MCCARTHY. Yes.

Mr. DINGELL. Now, having said this, have you done that?

Ms. MCCARTHY. Yes.

Mr. DINGELL. Where is it stated in the rule, if you please? Submit that for the record to us. And I ask unanimous consent, Mr. Chairman, that the record be kept open so we can get that information.

Mr. WHITFIELD. Without objection.

Mr. DINGELL. Now, I know that our economy has grown over 200 percent since the Clean Air Act of 1970, and key pollutants have been reduced by 60 percent. I regard that as a good thing, and it is an example that we can count on the law to do both of the things that the Congress wanted when we wrote the original legislation. Now, we find that these things cause us considerable problems with regard to business certainty. I note that nobody seems to know about the certainty about how these rules are going to be enacted. Has the EPA given thought to establishing the certainty that business needs to accomplish its purposes? Yes or no.

Ms. MCCARTHY. Yes.

Mr. DINGELL. All right. Now, am I correct that H.R. 2250 would vacate the area source rules and require EPA to reissue them? Yes or no.

Ms. MCCARTHY. Yes.

Mr. DINGELL. Area source boilers are smaller boilers such as ones at hospitals and other institutional and commercial facilities. What is it that they would have to do under this rule? I would like to have that submitted for the record in a clear statement, and I ask unanimous consent that the record stay open for that purpose, Mr. Chairman.

Mr. WHITFIELD. Without objection.

Mr. DINGELL. Now, I also understand that some area sources have complained that they will not be able to meet the tune-up requirement by the deadline in your legislation, or rather in your regulation, and asked you to reconsider the deadline. Are you reconsidering the deadline? Yes or no.

Ms. MCCARTHY. We are considering that comment and that petition, yes.

Mr. DINGELL. How soon will you come to a conclusion on that particular point?

Ms. MCCARTHY. Well, we are clearly trying to do that very shortly.

Mr. DINGELL. It is very clear that if industry cannot meet the requirements, that you should consider this most seriously. Is that not so?

Ms. MCCARTHY. Yes, and we will be considering it in the proposed rule, taking comment and—

Mr. DINGELL. Do you have the ability to move the deadline back as a result of the reconsideration process? Yes or no.

Ms. MCCARTHY. Yes.

Mr. DINGELL. And you would make the clear statement that you would not rule out that action? Is that correct?

Ms. MCCARTHY. No—that is correct. Sorry.

Mr. DINGELL. Now, in the testimony, he submitted, Mr. Rubright states several times that the regulation is unsustainable. Is that statement correct or not?

Ms. MCCARTHY. No.

Mr. DINGELL. Should this legislation pass, what do you think the timetable should be to issue final rules regarding these industries?

Ms. MCCARTHY. The timetable that is in the Clean Air Act and the timetable that we have agreed to and that we are on.

Mr. DINGELL. Now, you indicated you think that the regulation is unsustainable. Why do you make that statement? Or rather that the regulation is sustainable. Why do you make that statement?

Ms. MCCARTHY. Because we have done a complete cost-benefit analysis. We have done the same health-based benefits assessment as we have always done, and we believe that the technology is in place. We have looked at the most cost-effective alternatives to achieve the best benefits that we can.

Mr. DINGELL. Have you considered his particular concerns and the points that he makes or is this a statement with regard to general findings by the agency?

Ms. MCCARTHY. Both.

Mr. DINGELL. OK. Now, one last question. Should this legislation pass, what do you think the timetable should be to issue the final rules regarding these industries? If you will give us a quick answer on that and then a more detailed answer for the record, please.

Ms. MCCARTHY. The bill does not establish a timetable. It sets a time before which we cannot issue a rule.

Mr. DINGELL. What do you suggest should be done with regard to that particular matter?

Ms. MCCARTHY. I think we should continue with the rules under the Clean Air Act as it currently exists.

Mr. DINGELL. Mr. Chairman, you have been most courteous. Thank you.

Mr. WHITFIELD. Thank you.

At this time I recognize the gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman, and I appreciate Assistant Administrator McCarthy. We have had a good working relationship on some issues, and I think a lot of the issue is time and being able to get people to move in a direction. I think the concern with a lot of these is, and I will do it based upon the numbers, and really it kind of follows up on what Mr. Dingell was talking about, is there will be no time and this will be a major change.

You made a statement on the proposed health benefits. If all the major boilers stopped operating, if all the area source boilers were shut down, if we stopped waste incineration, based upon your opening statement, the proposed health benefits from the shutting down of these would go up. Is that correct?

Ms. MCCARTHY. Mr. Shimkus, it is not intention to shut—

Mr. SHIMKUS. No, I am just—I mean—but that is true based upon the opening statement. If we shut down every boiler—

Ms. MCCARTHY. It is true that if—

Mr. SHIMKUS [continuing]. That your—

Ms. MCCARTHY [continuing]. There is no pollution, then—

Mr. SHIMKUS. Your proposed health benefits—

Ms. MCCARTHY [continuing]. Would go away.

Mr. SHIMKUS. Thank you. And these are your numbers. There are major source boilers, 13,840 major source boilers. Is that correct?

Ms. MCCARTHY. That is right.

Mr. SHIMKUS. Do you have an estimation of how many of these boilers will meet your proposed rules as we think they will come out?

Ms. MCCARTHY. Actually, there are boilers in a variety of categories that already meet all of these standards.

Mr. SHIMKUS. I have been told that there are 31 so that 13,809 major source boilers would not comply.

Ms. MCCARTHY. The only thing I would remind you, Mr. Shimkus, is, we are in a reconsideration process. That rule will be re-proposed in October—

Mr. SHIMKUS. So would it go up to—would there be 800 then or maybe 1,000 of the 13,000?

Ms. MCCARTHY. As you know, we established the standards because it deals with toxic pollution to try to—

Mr. SHIMKUS. You understand my point that I am making—

Ms. MCCARTHY [continuing]. Look at the best performing and bring the others up.

Mr. SHIMKUS. OK. You understand the point—

Ms. MCCARTHY. I do.

Mr. SHIMKUS [continuing]. That I am making that of the area source boilers, you estimate there are 187,000 boilers. We can't get an idea, even industry has no idea based upon what we envision the proposed rules would be that a single one would meet the standard.

Ms. MCCARTHY. On the area source boilers?

Mr. SHIMKUS. Right.

Ms. MCCARTHY. The vast majority of those have no emission standards. They have work practice standards. Most boilers out in commercial and hospital settings actually are natural gas and are governed by this. Of the remainder, unless it is a large coal facility, it—

Mr. SHIMKUS. No, I am talking about, you know, just the area source boilers. Let us go to the—

Ms. MCCARTHY. It just needs to do a tune-up every 2 years.

Mr. SHIMKUS. Let us go to the incinerators. You estimate 88 incinerators from your numbers, and do you know the percentage that probably meet the standard?

Ms. MCCARTHY. Three currently meet all standards that I am aware of.

Mr. SHIMKUS. So 85 do not?

Ms. MCCARTHY. Eighty-five would have to make changes in their facilities—

Mr. SHIMKUS. And those changes would be a capital expense outlay, and that kind of follows into this whole debate about your job calculations, because part of your job calculation is retrofitting these facilities. Retrofitting jobs, are they short term, 6 months, 12 months? How long is a major operating facility those jobs remain? I mean, they remain for decades. So that is long-term consideration of the length of that.

My time is rapidly clicking away, and I want to make sure I raise this issue on the science-based debate. We have had this in my subcommittee hearing, Mr. Chairman, and that the courts give deference to the Federal Government when there is a court case over any other advocacy in the court case, and the standard of proof is very high and it is arbitrary and capricious. So for my colleagues here, part of this debate on reform would be a debate on judicial reform in the courts to give the complainants equal standing as the Federal Government when they have litigation. Currently now, the courts assume that the Federal Government is correct and so the plaintiffs have a higher burden, and I think that is one of the major reforms that has to be done. I yield back my time.

Mr. WHITFIELD. Thank you.

At this time I recognize the gentlelady from Florida, Ms. Castor, for 5 minutes.

Ms. CASTOR. Thank you, Mr. Chairman.

Good morning, Ms. McCarthy.

Ms. MCCARTHY. Good morning.

Ms. CASTOR. I think I would like to start by saying how proud I am to live in a country that for decades has protected the air that all Americans breathe, for decades. And I remember very well as a youngster in the 1970s the improvement in air quality in my hometown in Florida. I remember smoggy mornings early in the

1970s, especially during these hot summer months where the air was just stifling and we weren't getting much of a breeze off of the Gulf of Mexico, and the air stunk, but over the years it improved. It got a lot better. And the health of the community improved. And then in 1990, the Congress came back based upon science and everything they had learned and adopted Clean Air Act Amendments, and that was over 20 years ago and those Clean Air Act Amendments required EPA to establish emission standards for particular sources, and Congress said to the EPA back in 1990, OK, you have 10 years to adopt standards for these particular sources, so that is by the year 2000, right? Eleven years ago. And they gave them a few years after the adoption of those regulations for these particular sources to have some basic standards. But it took EPA many years. EPA first targeted these particular sources, adopted some standards for boilers in 2004. It got caught up in court challenges, and pursuant to a court-ordered deadline EPA finalized rules for industrial, commercial and institutional boilers and other particular sources of air pollution in February of this year.

This has a long history, and I think it is time to bring it in for a landing rather than continuing to delay it. The Congress gave very clear direction in 1990, and we have been grappling with this. We understand now the science involving the public health when you clean the air and the impact on our families.

So I am very concerned that the bills at issue today appear to be hazardous to the health of the Nation and our economy because they delay vital health protections and they create great uncertainty for everyone. So let us look at H.R. 2250 which indefinitely delays the rules to reduce toxic air pollution. Based upon the evidence, the rules if finalized as scheduled would provide tremendous health benefits to Americans by cutting emissions of pollutants linked to a range of serious health effects, developmental disabilities in children, asthma, cancer. EPA estimates that these rules will avoid more than 2,600 premature deaths, 4,100 heart attacks and 42,000 asthma attacks every year. I don't know about you all but this is an epidemic in our country, the rates of asthma and heart disease, and people, we are all part of the solution. And I don't think we can turn a blind eye to this evidence.

Ms. McCarthy, after the years that EPA has been gathering evidence from all corners, from industry, how would nullifying these rules now affect the public health in your opinion?

Ms. MCCARTHY. It would leave incredible public health benefits on the table, benefits that are significantly important to American families, and it would do so in clear recognition that for every dollar we spend on these rules, we are going to get \$10 to \$24 in benefits for people in terms of better health for them and for individuals and their families. There is no reason for it. We have administrative processes that we are going through. We are following the same notice and comment process that Congress intended. We should be allowed to proceed with these rules and to get the public health benefits as delayed as they are finally deliver them for the American family.

Ms. CASTOR. And the statutory deadline originally that the Congress directed in 1990 was 2000.

Ms. MCCARTHY. It was, and I will tell you it would be inexcusable to not deliver these knowing the health benefits, knowing the impacts associated with these toxic pollutants and knowing that we can do this cost-effectively and actually at the same time increase jobs. These are not job-killing bills. These are bills that will require investments that will put people back to work and that will grow the economy.

Ms. CASTOR. Thank you very much.

Mr. WHITFIELD. The gentleman from Oregon is recognized for 5 minutes, Mr. Walden.

Mr. WALDEN. I thank the chairman very much and I welcome our witness today. I want to make a couple of comments.

First of all, I would say up front that one of the two cement plants that your regulations put great burdens on is in my district, Durkee, Oregon, so I would like you to submit for the committee within a week or so these specific health issues that you have identified relating to mercury poisoning, asthma and all as it relates to Oregon specifically, because you must have them broken down by region, I would assume, or by county.

Ms. MCCARTHY. We certainly look at exposures around facilities.

Mr. WALDEN. So if you could provide those, it would be most helpful. I have got a chart here somewhere that shows the percent of mercury deposition that originates outside the United States, and I believe that your own data indicate that most of this comes from China or foreign sources, most of the mercury coming into the United States. Is that accurate?

Ms. MCCARTHY. It also is emitted by us and comes back at us.

Mr. WALDEN. Indeed. Now, you said in your testimony or in response to a question that there have been no mercury control MACT standards for mercury?

Ms. MCCARTHY. I said national standards. That is correct.

Mr. WALDEN. Right, and that nobody had really invested ahead of those standards.

Ms. MCCARTHY. No, I indicated that for the most part the investments weren't sufficient to get compliance with the standards that we have.

Mr. WALDEN. So in the case of Ash Grove in my district in Durkee, they have spent about, I think it is \$20 million. They have reduced their emissions by 90 percent, and my information—correct me if I am wrong—is there a more advanced technology they can use than what they are using today with the carbon injection system?

Ms. MCCARTHY. Actually, they have been very responsive to the needs of the State and working with them and—

Mr. WALDEN. No, they would have met the State standards. It is your new Federal standards that is causing them the problem is my understanding.

Ms. MCCARTHY. We are working with them on that, yes.

Mr. WALDEN. So my question, though, is yet to be answered. Is there an achievable control technology available today that is better than the one they are implementing?

Ms. MCCARTHY. I do not know, but they are working on that.

Mr. WALDEN. Now, I want to know from you because you are writing the rules. Because the rules in the Clean Air Act talk about

achievable control technology, right? And in the committee report in 1990 in the Clean Air Act Amendments, the House report itself on page 328 of part 1 stated, "The committee expects MACT to be meaningful so that MACT will require substantial reductions in emissions from uncontrolled levels. However, MACT is not intended to require unsafe control measures or to drive sources to the brink of shutdown." So I guess the question is, if you have got two plants because the mercury levels in the limestone next to them exceed these standards you are setting, you may be driving them to the brink of shutdown. I mean, they have reduced 90 percent, but under your rules proposed, it would be 98.4 percent.

Ms. MCCARTHY. The facility that you are talking about has made substantial investments in technologies——

Mr. WALDEN. Yes, they have.

Ms. MCCARTHY [continuing]. To achieve these mercury reductions. They are continuing to do that.

Mr. WALDEN. I understand that.

Ms. MCCARTHY. I have ever reason to believe that the Clean Air Act in this instance will behave exactly as history has shown us, which is to drive new technologies into the market and to successfully achieve——

Mr. WALDEN. And today there is no technology superior to what they are using, is there?

Ms. MCCARTHY. There are technologies that will achieve these. The challenge, as you know——

Mr. WALDEN. To the 98.4 percent?

Ms. MCCARTHY. The challenge, as you know, for this particular facility is the limestone quarry that they are using and the mercury content there.

Mr. WALDEN. And I believe also in the conference committee report from the 1990 Clean Air Act, it talked about substituting orinol, and it said, "The substitution of cleaner ore stocks was not in any event a feasible basis on which to set emission standards where metallic impurity levels are variable and unpredictable both from mine to mine and within specific ore deposits." So there was a recognition, as I understand it, in the Clean Air Act about different ore levels in different places.

Here is the deal. You know, we are going to listen to the President tonight, and as Americans, we are all concerned about losing jobs. I represent a very rural district that is suffering enormously from Federal regulation, whether it is on our Federal forest and the 90 percent reduction in Federal forestlands that by the way are burning—we can get into that whole discussion and what that does to health quality—or whether it is this boiler MACT standard. I have got three letters, Mr. Chairman, that I would like to submit into the record from——

Mr. WHITFIELD. Without objection.

[The information follows:]

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BOISE

Virginia Aulin
Vice President, Corporate Affairs

May 6, 2011

The Honorable Greg Walden
House of Representatives
2182 Rayburn House Office Building
Washington, DC 20515-3702

Via Fax: (202) 225-5774

Dear Representative Walden:

On behalf of our employees, I am writing to update you on EPA's Boiler MACT rulemaking, issued under the 1990 Clean Air Act Amendments. As you may be aware, the statute regulates hazardous air pollutants from industrial boilers using maximum achievable control technology (MACT).

As required by court order, EPA signed the Boiler MACT rule on March 21, 2011. This new regulation is a replacement for an earlier regulation that was vacated in 2007 when a court determined that elements of the rule needed to be redone. EPA then entered into a consent decree with the Sierra Club, which put in motion the complete rewrite of the rule.

Although most of our boilers are well controlled for key pollutants, we continue to have major ongoing concerns regarding achievability, affordability, and lack of accounting for variability within our operations for the newly released rule. EPA continues to ignore what real-world, best performing boilers can achieve over the range of normal operating conditions. To be in compliance, 100% of the time with the final limits, Boise will need to spend millions of dollars in new investments for multiple control systems, which can conflict with other existing control strategies.

We request that you consider a possible legislative approach that could involve amending the Clean Air Act to legislatively stay the rule and give more time to get the rule right. Giving facilities more time to comply with the complex requirements will allow them to plan for significant capital investments; and/or, require EPA to issue new rules using approaches that add flexibility, encourage the use of a wide variety of fuels, and make the rules achievable.

Thank you for your ongoing support. We look forward to updating you on this issue as it evolves in the coming weeks.

Sincerely,



Virginia Aulin

Cc: Susan Petniunas for Boise Inc., Washington, DC



Boiler MACT

P.O. Box 269
305 South 4th Street
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Fax: (541) 744-4237

Date: July 15, 2011

The Honorable Greg Walden
United States House of Representatives
2182 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Walden:

Re: H.R. 2250, the "EPA Regulatory Relief Act of 2011"

We are herewith respectfully urging you to expeditiously pass H.R. 2250, the "EPA Regulatory Relief Act of 2011." As you have heard in previous Energy and Commerce Committee hearings, Boiler MACT rules will have significant economic impacts on a vast array of facilities across the industrial, commercial and institutional sectors, including forest products companies such as ours.

We are an integrated forest products company with production facilities in Oregon (4), California, Michigan (2), and Mississippi. Two Oregon manufacturing facilities utilize resinated wood by-products (sanderdust and plywood trim) to provide the energy needed for wood particle and veneer drying.

There have been important improvements between the proposed and final Boiler MACT rules; however, we are concerned that the rules are not achievable for real-world boilers. In addition, a related rule on Non-Hazardous Secondary Materials (NHSM) reclassifies many biomass residual fuels as solid wastes, including resinated wood used extensively in our plants. These resinated materials have a long history of use in our industry and are an integral part of the production processes for composite wood products. The design and construction of energy systems at our wood products manufacturing facilities are normally based on the maximum utilization of wood and wood by-products including resinated trim and sander dust. In fact, the composite panel manufacturing industry, since its beginning has designed and built facilities to utilize 100% of the wood by-products generated during the manufacturing process. Excluding resinated wood fuels in our manufacturing process would require a complete re-engineering of our facilities and add insurmountable operating costs for the substitution of fossil fuels and the off-site transportation and disposal of resinated materials.

H.R. 2250 would:

- Ensure the rules are stayed for an adequate and certain period.
- Allow EPA adequate time to re-propose the rules to get them right
- Provide direction and support for EPA to use its discretion under the Clean Air Act and Executive Order 13583 to add flexibility and make the rules realistic and achievable.
- Clarify that various materials, including resinated wood residuals, are fuels and that certain gases in manufacturing processes do not result in boilers being treated as incinerators.

H.R. 2250 will provide the required certainty and time for EPA to get the rules right and for businesses to be able to better plan for capital expenditures. The passage of H.R. 2250 will preserve jobs and the competitiveness of our manufacturing sector while also protecting the environment.

Thank you for your leadership on this issue of great importance to our industry.

Respectfully Submitted,



Joe Gonyea III

JHGIII/ppt

ROSEBURG

HR 2250
Boiler MACT

July 18, 2011

Representative Greg Walden
2352 Rayburn HOB
Washington, D.C. 20515

Subject: H.R. 2250 – EPA Regulation Relief Act

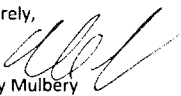
Dear Representative Walden:

I am writing to encourage you to support passage of H.R. 2250 "EPA Regulation Relief Act of 2011." As you are probably aware, the EPA recently finalized a series of regulations intended to minimize pollutants from the country's boilers, process heaters and incinerators. These regulations have resulted in serious controversy and confusion. It is still unclear whether the standards they impose are even achievable for most sources, regardless of the cost. The EPA has also amended the definition of non-hazardous solid waste resulting in language that may now classify many currently used fuels as a solid waste. If retained in its current form, this definition will result in many fuels being discarded as solid waste with a corresponding increase in the use of fossil fuels.

Roseburg Forest Products is a longstanding wood products company operating in 7 states and based in Roseburg, Oregon. As involved, supportive members of its communities Roseburg is conscientious in our efforts to protect the environment; however, we are concerned about the uncertainty and excessive costs these regulations create.

Again, we urge you to support passage of H.R. 2250. Thank you for your support.

Sincerely,


Grady Mulbery
Vice President Composite Manufacturing
Roseburg Forest Products

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R O S E B U R G

July 18, 2011

The Honorable Fred Upton
Chairman, Committee on Energy & Commerce
United States House of Representatives
2183 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy & Power
United States House of Representatives
2368 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Henry Waxman
Ranking Member, Committee on Energy & Commerce
United States House of Representatives
2204 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee on Energy & Power
United States House of Representatives
2268 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairmen and Ranking Members:

Re: H.R. 2250, the "EPA Regulatory Relief Act of 2011"

I am writing on behalf of Roseburg Forest Products (RFP) based in Roseburg, Oregon. RFP respectfully urges you to expeditiously pass H.R. 2250, the "EPA Regulatory Relief Act of 2011." As you have heard in previous Energy and Commerce Committee hearings, Boiler MACT rules

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will have significant economic impacts on a vast array of facilities across the industrial, commercial and institutional sectors, including forest products companies such as ours.

We are a wood products manufacturing company who operates facilities 7 states where we manufacture plywood, particleboard and engineered wood products. Our facilities rely on steam and process heat from 30 boilers and process heaters that will be affected by these rulemakings. Of the 30 affected combustion units 16 units burn substantial quantities of resinated wood fuel.

There have been important improvements between the proposed and final Boiler MACT rules; however, we are concerned that the rules are not achievable for real-world boilers. In addition, a related rule on Non-Hazardous Secondary Materials (NHSM) is both vague and ambiguous; as a result, it has created much confusion in that some believe it reclassifies many biomass residual fuels as solid wastes, including resinated wood used extensively in our facilities. These resinated materials have a long history of use in our industry and are an integral part of the production processes for composite wood products. The design and construction of energy systems at our wood products manufacturing facilities are typically based on the maximum utilization of wood and wood by-products including resinated trim and sander dust. In fact, the composite panel manufacturing industry, since its beginning has designed and built facilities to utilize 100% of the wood by-products generated during the manufacturing process.

Accordingly, the exclusion of resinated wood fuels in our manufacturing process would require a complete re-engineering of six of our facilities and add insurmountable operating costs for the substitution of fossil fuels and the off-site transportation and disposal of resinated materials.

H.R. 2250 would:

- Ensure the rules are stayed for an adequate and certain period.
- Allow EPA adequate time to redraft the rules in order to eliminate much of the current confusion, uncertainty and potential for litigation
- Provide direction and support for EPA to use its discretion under the Clean Air Act and Executive Order 13583 to add flexibility and make the rules realistic and achievable.
- Clarify that various materials, including resinated wood residuals, are fuels and that certain gases in manufacturing processes do not result in boilers being treated as incinerators.

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H.R. 2250 will provide the required certainty and time for EPA redraft the rules and for businesses to be able to better plan for capital expenditures. The passage of H.R. 2250 will preserve jobs and the competitiveness of our manufacturing sector while also protecting the environment.

Thank you for your leadership on this issue of great importance to our industry.

Respectfully Submitted



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Mr. WALDEN. And these are about the uncertainty that is out there in the marketplace over your boiler MACT standards. While you may have some improvements, these companies in my district are saying we continue to have major ongoing concerns regarding achievability, affordable and lack of accounting for variability within our operations for newly released rule. Boise Cascade in this case, Boise will need to spend millions of dollars in new investments for multiple control technologies which can conflict with other existing control technologies. There is also an issue they raise about how they use every bit of the wood stream back into their facilities, which we used to applaud them for doing, no waste, and apparently in some of the other rules that are coming out of your agency, they now would have to treat some of that resin that they now burn in their boilers as solid waste and put it in landfills and replace that with fossil fuels. I mean, this is why—and I understand unless you are out there you don't get this, this is why a lot of Americans are not investing in their own companies because there is such uncertainty in the marketplace over all these rules and regulations, and I hear it every day I am out in my district, and my time is expired.

Mr. WHITFIELD. Thank you, Mr. Walden.

At this time I recognize the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

Ms. McCarthy, good to see you again.

Ms. MCCARTHY. You too as well.

Mr. GREEN. Like my colleague, Joe Barton, we appreciate your working with us on a lot of issues. Obviously sometimes we don't get to the end result that each of us can agree to.

In the boiler MACT rule, you make a change in the definition of waste because the courts found in 2000 the definition was not strict enough. This change has meant that some traditional fuels in many of these plants are now classified as waste and now the facilities in a regulatory sense become commercial industrial solid waste incinerators. I have a couple questions.

Are you sympathetic to the argument from the cement companies they are in a bind because they are being forced to comply with the new NESHAP rule but then might end up being regulated as a commercial industrial solid waste incinerator, then some of their compliance investment would be for nothing and they will have to completely start over. It seems like that would be an economic waste, and to me, it seems they are really in a bind for the planning side. How would you work with them on this and given the massive job losses in the sector they really can't afford to apply for permits for one designation and then take these costs and then turn around and have to start over?

Ms. MCCARTHY. We are actually working with these companies right now. The rule has been finalized and they are making investment decisions and we are more than willing to sit down. The good news is that the incinerator rule, they can either decide to be regulated as a cement facility or they can decide to burn solid waste, which would allow them to be regulated and require them to be regulated under the incinerator rule.

Mr. GREEN. So they have a choice to make which one they come under?

Ms. MCCARTHY. They do, and depending upon what they want to do, they make that choice themselves and we allow that, but the good news is that any technology investment they might make if they decide to be regulated under the Portland Cement rule is the same type of technology that they would have to put in place to be regulated under the incinerator rule. The main difference is that they would have to look at developing much more explicit monitoring requirements and doing things differently for that purpose under CISWI, which is an area that we are looking at under our reconsideration and that will clarify itself.

Mr. GREEN. One of my concerns is that some of these plants, they burn tires, they burn construction debris, and particularly with tires because of instead of having them on the side of the road people dump, we can actually have a beneficial use, and so that is part of my concern.

A couple of people on the second panel will talk about they cannot design, install and commission emission controls under existing coal-fired boilers within 3 years. They claim this is particularly true because third-party resources with the expertise to design and install these controls will be in high demand as multiple boiler rules are being implemented in a short time by both the industry and electric utility industries. Do you share that concern, that there may not be the available technology to get there in 3 years?

Ms. MCCARTHY. We have certainly looked at it. Let me hit the solid waste issue very briefly for you, Mr. Green. We know that concerns have been raised. We are working and we have developed guidance to address the tire issue so that we eliminate any uncertainty and clarify those rules.

In terms of the coal-fired boilers, each one gets 3 years with the opportunity if there are technology problems to go to 4 years. We also know that there is fuel switching that is often done to achieve compliance because many of these coal boilers switch between biomass and coal, and it is a very effective strategy to achieve some of these compliance limits. So we are more than happy to work to ensure that compliance is achieved in a timely way.

Mr. GREEN. Todd Elliott from Celanese Corporation is here to testify on the second panel. In his testimony, he talks at length about some of their boilers at the Narrows, Virginia, facility. I don't have Narrows, Virginia, but I do have Celanese plants in our district. These boilers are identified by the EPA as top-performing units and used to set the proposed regulatory standards for hydrochloric acid and mercury emissions yet not even one of these top-performing units will meet the emissions standards for both mercury and hydrochloric simultaneously without installing costly emission controls. How is it they can be a top performer and yet not meet these new standards on a consistent level?

Ms. MCCARTHY. Well, we know that that is an issue that has been raised to us. We have gathered more data. We are going through the reconsideration process and we fully believe that we will be able to assess that data and come up with standards that are meaningful and achievable.

Mr. GREEN. Hopefully we will come to an agreement on some of our other issues.

My last question is, we have a plant that in addition to burning natural gas burns refinery fuel gas, petrochemical processed fuel gas in their boilers and process heaters. In both these cases, their blends of methane, propane and butane are clean-burning fuels. Does EPA does intend to exempt both refinery and petrochemical processed fuel gases from the numerical standards similar to natural gas?

Ms. MCCARTHY. Yes, we did establish a process for that. We heard loud and clear during the comment period that we shouldn't be segregating refinery gas any differently if it is as clean as natural gas. We have set a process to look at that. We are also looking at that again in the reconsideration process. So I feel very confident that we can come to a good understanding on that issue and have a very clear, well-defined process so that there is certainty in the business community, and I do believe that most of the refinery gas will most likely be required to do work practice standards as opposed to an emissions limit.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. WHITFIELD. The chair now recognizes the gentleman from Louisiana, Mr. Scalise, for 5 minutes.

Mr. SCALISE. Thank you, Mr. Chairman. I appreciate you having this hearing. I am proud to support the legislation that we are discussing today, and Ms. McCarthy, I appreciate you coming as well. I spent the last 5 weeks, as I am sure all my colleagues have, going throughout my district meeting with small business owners, middle-class families talking about the challenges that they are facing and things that we can do in Congress to get the economy back on track, to create jobs, and I have got to tell you, there was one recurring theme that came across with every single small business I met with, and they said the primary impediment to creating jobs today for them are the regulations coming out of this Administration, and EPA was at the top of the list of agencies that are bombarding them with regulations that have nothing to do with safety or improving the quality of life but in fact seem to be going through, I think, an extreme agenda of carrying out what is an agenda for some at the agency but is flying in the face of things that they want to do in creating jobs and investing. I mean, there is money on the sidelines. Anybody that follows markets today, that follows what is happening throughout our country will tell you there is trillions of dollars on the sidelines that could be invested right now at creating jobs, and the job creators, those people that have that money to invest, are telling us that it is the regulations coming out of agencies like EPA that are holding them back and so, you know, when you give your testimony, and I have listened to some of your testimony about the ability that you think your agency has to create jobs by coming out with regulations, you know, maybe you are living in a parallel universe to the one I am living in, but when I talk to people—and, you know, you gave a statement saying for every dollar in new rules that you then give back \$24 in health benefits, for example, with the regulations you are proposing. You are saying that the rules that will require in-

vestment, these rules that you are coming out with will require investments that will create jobs and put people back to work.

You know, first of all, tell me, when you make rules, do you all really look and think that the rules you are making are going to create jobs?

Ms. MCCARTHY. That is not their primary but we—

Mr. SCALISE. But do you—

Ms. MCCARTHY [continuing]. Certainly look at the economic impacts of our rules—

Mr. SCALISE. Because you have given some testimony—

Ms. MCCARTHY [continuing]. Looking at jobs.

Mr. SCALISE. So, for example, I think you had testimony that for every million or million and a half dollars a business spends to comply with rules, you said that creates a job?

Ms. MCCARTHY. I certainly—I did not say that and I don't think I have submitted testimony to that effect.

Mr. SCALISE. I think that was your testimony, and I will go back and look, and—

Ms. MCCARTHY. Maybe in the past, and that certainly does not sound unachievable. Oh, that is one of the studies that we use as a basis for our economic analysis. It indicates that.

Mr. SCALISE. So what does it indicate, if you can give me the exact indication, because I read that in one of your statements.

Ms. MCCARTHY. I think it indicates that for every million dollars expended on control equipment. We find that increased environmental spending generally does not cause a significant change in employment, and this is referencing a Morgan Stearns study that has been peer reviewed, and the scientific literature says our average across all four industries is a net gain of 1.5 jobs per \$1 million in additional environmental spending.

Mr. SCALISE. So basically what you are saying is, if you force a company to spend another million dollars complying with some rule that you come up with, Congress didn't pass it but you all came with a rule, you are acknowledging that that is forcing businesses to spend money. So if you say a business is forced to spend a million dollars to comply with your rule, according to your metrics, that creates one and a half jobs. Is that one and a half jobs at your agency?

Ms. MCCARTHY. I certainly don't want to give the impression that EPA is in the business to create jobs. What we—

Mr. SCALISE. You are definitely not.

Ms. MCCARTHY. We are in the business—

Mr. SCALISE. From everybody I have talked to, you are in the business of putting people out of work right now.

Ms. MCCARTHY. No, we are in the business of actually—the Clean Air Act, its intent is to protect public health.

Mr. SCALISE. Well, let me ask you this—

Ms. MCCARTHY. As a result of that, money gets spent and jobs get—yes.

Mr. SCALISE. And jobs get what?

Ms. MCCARTHY. Jobs grow.

Mr. SCALISE. Again, maybe a parallel universe we are living in, but when you think jobs grow because of these regulations, I can show you small business after small business that can't grow jobs

because of your regulations directly related to your regulations, not nebulous.

And now we will get into the health issue because one of the things we hear and it was talked about in opening statements and yours as well is, you know, this has got to be done for health reasons. Let me bring you to a decision the President just made on the Ozone National Ambient Air Quality Standards where the President even acknowledged that EPA's regulations and specifically as it related just a couple days ago to ozone actually shouldn't go forward and asked you all to pull back. I would like to get your opinion, what is your reaction to the President saying your smog ruling is not a good move to make and asked you all to pull that back.

Ms. MCCARTHY. The President issued a statement and it should speak for itself.

Mr. SCALISE. But you are the agency that is tasked with that rule. I mean, what is your opinion on it?

Ms. MCCARTHY. Once again, the President made the decision and he asked the agency to pull back that rule, and clearly the agency will and we will work very aggressively on the next review, which is what he asked us to do, the most current science, and we will move forward in 2013 to look—

Mr. SCALISE. Hopefully you all take that approach with these other rules that are costing jobs.

I yield back. Thanks.

Ms. MCCARTHY. The chair now recognizes the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. GRIFFITH. Thank you, Mr. Chairman.

I am a little concerned. Earlier today you said that you all are going through public comment and you didn't need any help with the legislature, and I am just curious about that statement. Did you really mean that?

Ms. MCCARTHY. Well, what I meant was there an indication or an inference that this legislation was in response to a need that EPA expressed, and it is not.

Mr. GRIFFITH. So you understand that it is in fact the legislature's job that all of us, as many have already stated, it is our job to go out and listen to our constituents and then we face election each year. You understand that?

Ms. MCCARTHY. And it is EPA's job to implement the laws that you enact.

Mr. GRIFFITH. And it is also our job then to review those laws to determine whether or not we believe it in the best interest of the United States and if the public believes that there is something we should do that we should change it which is why the Founding Fathers gave us a 2-year time and not a lifetime term. Do you agree with that?

Ms. MCCARTHY. I would not presume to do your job.

Mr. GRIFFITH. And were you just getting a little testy with us when you said in Section 5 that you weren't sure who was being— who the burden was on, whether it was the industries or whether it was the air-breathing public. Was that just a little testy comment, or do you really believe that?

Ms. MCCARTHY. I think I was trying to make a point about the lack of clarity in that language and the uncertainty that it would bring to the table and the potential it has to add uncertainty in the legal world that would preclude us from moving forward to achieve the benefit, the health benefits that the Clean Air Act intended.

Mr. GRIFFITH. But you wouldn't acknowledge that the line in section 5 that says the Administration shall impose the least burdensome refers back to the beginning of that paragraph where it says for each regulation promulgated?

Ms. MCCARTHY. But whose burden should we look at? What we look at are the health benefits compared with the costs associated with the implementation of that rule and we maximize the benefits and we minimize the cost to the extent that we can.

Mr. GRIFFITH. But you said earlier, and I am just curious about it, because you said earlier that, you know, you weren't sure whether that—and the same thing you just said to me—you weren't sure who that applied to as to the burden and you said the air-breathing public, and I guess I am questioning that because the air-breathing public, we breathe out what you all have determined to be a pollutant, CO₂, and I am wondering if that is some precursor to—I mean, I don't think so, I thought it was just a testy comment, but now I am getting some of the same stuff back. Is that a precursor to you all anticipating regulations on the air-breathing public because this paragraph clearly only deals with regulations promulgated in relationship to the Clean Air Act. Are you following me?

Ms. MCCARTHY. I don't think so, but let me—

Mr. GRIFFITH. OK. Let me state to you then that it looks very clear to me it applies to regulations that you all—I don't think there is any question that that paragraph deals with regulations that you all implement—

Ms. MCCARTHY. Oh, I think I misinterpreted—

Mr. GRIFFITH [continuing]. In Section 2A in the Clean Air Act—

Ms. MCCARTHY [continuing]. Your comment. What I was—

Mr. GRIFFITH [continuing]. And so if you think it applies to the air-breathing public, you must be getting ready to regulate it.

Ms. MCCARTHY. No, no. When the agency interprets burden, is it the burden to industry to comply or is it the health burdens associated with the pollution for the breathing public? That was my point. I apologize if I was indicating that I would be regulating individuals.

Mr. GRIFFITH. Well, I didn't think you were but then I have seen strange—

Ms. MCCARTHY. That is certainly what I intended.

Mr. GRIFFITH [continuing]. Things coming out of the EPA, so I wasn't certain. That being said, you all don't think that there are any time problems for these industries? You are dealing with a number of them. We heard about Oregon and other places and you don't think there are any time issues. You think that we should stay, and in your responses to Congressman Dingell, you indicated that you thought the timelines should remain exactly the same and go into effect in April notwithstanding other questions have come up and said there is a problem here and you say we are working

with them. Do you still think the timeline that you all have laid out is perfectly reasonable?

Ms. MCCARTHY. I would tell you that administratively, we have the tools available to us to address the timeline concerns and we will certainly be looking at these with three out of the four rules. We have stayed them ourselves, and we are going through a reconsideration process. All I am suggesting is——

Mr. GRIFFITH. But I am correct that that reconsideration process has actually been objected to by certain groups and the courts. Is that not true?

Ms. MCCARTHY. That is true.

Mr. GRIFFITH. And so there is a possibility that if the court rules that your reconsideration was not proper, that we are stuck with the March 2011 regulations. Isn't that true?

Ms. MCCARTHY. The agency believes that that the authority that Congress has afforded EPA allows us to stay the rules in exactly the way we have done it and that we are not at——

Mr. GRIFFITH. But that is currently in the courts being thought out, so——

Ms. MCCARTHY. As is most of our rules, yes.

Mr. GRIFFITH. But we don't have any guarantee unless we do something that we are not going to get stuck with the March 2011 rules. Isn't that true? Knowing that the courts—that we can disagree with the courts but sometimes they rule in ways that we don't anticipate. Isn't that true?

Ms. MCCARTHY. I do not believe that you are at risk of having a court tell you that we should be stopping our reconsideration process and completing it by April of next year.

Mr. GRIFFITH. But you would agree that any good lawyer has been wrong at some point in time as to what the courts might do, would you not?

Ms. MCCARTHY. I have pointed that out a few times.

Mr. GRIFFITH. I yield back my time, Mr. Chairman.

Mr. WHITFIELD. At this time I recognize the gentleman from Massachusetts, Mr. Markey, for 5 minutes.

Mr. MARKEY. Thank you, Mr. Chairman, very much.

Forty-nine years ago in September of 1962, President Kennedy issued an urgent call to the Nation to be bold. He said that we shall send to the moon 240,000 miles away from the control station in Houston a giant rocket more than 300 feet tall, the length of a football field, made of new metal alloys, some of which have not yet been invented, capable of standing heat and stresses several times more than have ever been experienced, fitted together with a precision better than the finest watch, and we did it, and we did it less than 7 years after that speech.

Today we are holding a hearing on Republican legislation that essentially exempts the cement industry and industrial boiler sector from having to install existing technologies. Nothing has to be invented at all to remove mercury and other toxics from their smokestacks because evidently the can-do Nation that sent a man to the moon in under 10 years just can't do it when it comes to cleaning up air pollution using commercially available technologies that already are on the shelf today.

Now, shortly after the 1996 Telecommunications Act was passed out of this committee, it became the law. We were transformed as a Nation from a black rotary dial phone Nation to a BlackBerry and iPad nation. This committee say we can do it, but can we install the best available technologies in cement kilns to reduce the amount of mercury poisoning in children's brains? No, that is just too hard. We can't find anyone smart enough to figure it out. Instead of installing commercially available technology on cement kilns, cement plants, we will just install a Portland cement shoe on the EPA and throw it in the river, and if the EPA doesn't die from drowning, the mercury will definitely kill it.

Ms. McCarthy, 2 months ago the House considered a bill to ban compact fluorescent light bulbs. During debate on that bill, we were repeatedly told by the Republicans that the mercury vapors from those light bulbs is dangerous, and even that "exposing our citizens to the harmful effects of the mercury contained in CFL light bulbs is likely to pose a hazard for years to come."

Now, the cement rule that we are debating here today alone would reduce mercury emissions, which the Republicans really care about, by 16,600 pounds per year. Now, there are three 3 milligrams of mercury in one compact fluorescent light bulb, almost seven-millionths of a pound. So the cement rule will eliminate the same amount of mercury in 1 year as banning two and a half billion compact fluorescent light bulbs.

Ms. McCarthy, what is the greater public health threat, the tons of mercury coming out of cement kilns that are being sent right up into the atmosphere or light bulbs?

Ms. MCCARTHY. Based on the information provided, it is clear that it is cement.

Mr. MARKEY. Cement. Well, I am glad that the Republicans can hear that. Cement is a greater threat because we have heard so much concern about light bulbs from them this year and mercury.

Now, we have been told that all these bills do is to give EPA an extra 15 months to study and refine its proposals though, of course, that is on top of the 20 years it has been since Congress told the EPA to set these standards in the first place. Now, EPA asked the courts for an extra 15 months to refine its boiler regulations. Did EPA also ask for an additional 15 months to refine its cement regulations?

Ms. MCCARTHY. No.

Mr. MARKEY. Now, isn't it true that these bills actually remove any deadline for finalizing the rules?

Ms. MCCARTHY. Yes.

Mr. MARKEY. Do you agree that if the EPA for some reason chose not to finalize them for years, it would be virtually impossible to force the EPA to act?

Ms. MCCARTHY. It would be unclear how.

Mr. MARKEY. Now, the way I understand this part of the Clean Air Act, EPA basically grades on a curve. To get an A, you just have to do what the other A students do by installing the same commercially available technologies that the cleaner facilities have. Is that not right?

Ms. MCCARTHY. Yes.

Mr. MARKEY. So no one has to invent anything new in order to comply with the rule?

Ms. MCCARTHY. This is existing equipment that can achieve these standards.

Mr. MARKEY. I thank the chairman.

Mr. WHITFIELD. Thank you.

At this time I recognize the gentleman from Texas, Mr. Olson, for 5 minutes.

Mr. OLSON. I thank the chair, and first of all, as a member who represents the Johnson Space Center, I appreciate my colleague from Massachusetts with his comments about human spaceflight and the Johnson Space Center, and for all of you out there, that is an example of bipartisanship on Capitol Hill, so thank you for those comments.

Assistant Administrator McCarthy, great to see you again, and thank you so much for coming here today. I appreciate your willingness to testify, and I appreciate your apology about the tardiness of your written testimony for the committee members, but my point is, and my only comment about that is, apologizing to me is important but you should apologize to the people of Texas 22, the people I represent. They have got many, many questions about what EPA is doing there and how it is impacting their business, and because we got this testimony in a tardy manner, I am not doing the best job I can representing them, so I appreciate your apology and your commitment to making sure this never, ever happens again. And that is all I have to say about that, as Forrest Gump would say.

But I do have other things I want to say, and I am concerned that the EPA did not do their homework when they determined the maximum achievable control technology floor, and as I understand it and as we are going to hear in the panel after you, in many cases these standards are not achievable by real-world boilers. The 1990 Clean Air Act Amendments require the EPA to promulgate technology-based emission standards but it allows for the possible supplementation of health-based standards. In your opening statement, and this is a rough quote, you said that every American is entitled to healthy air and a job. The committee agrees with that, but there has to be some balance, and again, the Clean Air Act Amendments of 1990 recognize that. Technology-based is the primary one balanced in some cases with supplementation by health-based standards. And so my question for you is, is there enough data out there to supplement health-based standards over technology-based standards for the hazardous air pollution sources?

Ms. MCCARTHY. There is not enough information for us to make the decision under the law that using a health-based emissions limit would be sufficiently protective with an adequate margin of safety.

Mr. OLSON. OK. So if there is not enough data, how does the EPA determine and monetize the health benefits, positive health benefits that can be attributed to the boiler MACT rule?

Ms. MCCARTHY. I think it is a bit of apples and oranges. A health-based emissions limit is something that would be proposed to us to take a look at that would identify risks associated with a health standard as opposed to technology being installed. We can

clearly and have assessed the health benefits the same way the prior Administration did. We assess the health benefits associated with our rule, taking a look at what technologies are available and how those rules could be achieved using that technology. A health-based emissions limit wouldn't establish a limit. It would simply say everything is OK at this facility if you manage it in a particular way. We did not certainly feel that with toxic pollutants that we could do anything other than have a complete assessment as to whether or not that health-based limit would actually achieve the kind of health protections that are required under the Clean Air Act, and we simply didn't have that information to make that judgment.

Mr. DINGELL. Would the gentleman yield?

Mr. OLSON. I have got a couple more questions and I will yield back the remainder of my time, but one more question following up on that. So you said there isn't enough data to determine and monetize the health benefits that can be attributed to the boiler MACT rule. Just following up on my colleague from Virginia's comments about foreign sources. As you know, Texas is a border State. I mean, one-half of the southern border is the great State of Texas, 1,200 miles, and I am very concerned that many of the emissions that are coming across the border standards that our businesses in Texas are being held to the Clean Air Act standards, and you say that there is not enough data to supplement the health standards yet we are promulgating standards. Why can't we determine some sort of health standard for the emissions coming from foreign sources? Why do our businesses in the great State of Texas have to be penalized because they are being required the emissions that are somehow coming across the border, they are going to be in the line of fire. How come we can't separate that out and give them some sort of credit so we can keep the business right here in America?

Ms. MCCARTHY. We actually do have a wealth of information and it is part of the public disclosure associated with this rule and others on what type of pollution is coming in from other parts of the world and we do not challenge our facilities to account for that or to reduce that but we do account for their own emissions and we do look at what technologies are available that are cost-effective that will achieve significant public health improvement.

Mr. OLSON. Well, just in summary, I will tell you that every time I go back home, the businesses back there, particularly the petrochemical businesses on the Port of Houston, feel like they are required to carry these emissions coming from foreign sources. It is unfair. It kills American jobs.

I yield back the balance of my time.

Mr. DINGELL. Will the gentleman yield to me?

Mr. OLSON. I will yield, sir, but I have got a zero zero zero on the clock.

Mr. DINGELL. Madam Administrator, you are giving me in your comments to my colleagues the impression that you are going to come forward with decisions on rules, which you will put in place before the questions associated with those rules have been fully answered and before you can assure us that you are not going to have to run out very shortly and initiate a new set of rules. It strikes

me that if that is the case, you are creating a serious problem both in terms of the administration of the law and politically for the agency. Can you assure me that you are not doing that and that when you conclude these rules that you will have then a rule which will be settled so that business can make the decisions and so that they will not have to run out and make new investments to satisfy a subsequent enactment of a new rule which will be made after the first rule has been completed?

Ms. MCCARTHY. Mr. Dingell, perhaps I wasn't as clear in what I was speaking about. When I was talking about the health-based emissions limit, which is I think what you are talking about, I believed that we were talking about the cement rule, which has actually been finalized, and the fact that in that rule we did tee up comment and we solicited comment on whether or not we could do a health-based emissions limit, and we asked for the data necessary to ensure that an emissions limit could be established that was lower than a technology limit, a technology-based limit that would be sufficiently protective. I was not speaking to the rules that are going to be reconsidered.

Mr. DINGELL. You have given me no comfort, Madam Administrator. I am driven to the conclusion that you are telling me that when you have completed this, there is a probability that you will initiate new efforts to come forward with a new rule under perhaps different sections of the Clean Air Act. I regard that as being an extraordinarily unwise action by the agency in several parts.

Mr. WHITFIELD. The gentleman from West Virginia, Mr. McKinley, is recognized for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman.

I am trying to grasp all this, and I appreciate your coming back in. We have had some interesting discussions here in this committee with you. Go back to the issue that we brought up a minute ago about 1962. I certainly wouldn't take offense to that because it is something taken out of context. We weren't in the middle or the tail end of a recession in 1962, were we?

Ms. MCCARTHY. I don't remember.

Mr. MCKINLEY. But we were someplace, you and I. but that was a different time, and I don't think anyone is saying that there is not a can-do ability, but right now we have 9.1 percent unemployment. We just got announced last month that there were no job increases whatsoever across America. So our businesses are trying to make some decisions. They know they can replace the boilers. If he is correct that they are on the shelf, for right now I will accept that. I am not sure I am going to completely buy that but I will accept that premise. But they have to make a decision. They have to make a decision right now in this economy. And over the break, I had an opportunity to visit two lumber producers in West Virginia, and both of them pleaded with me to give us time, more time. They have gone to—they are talking to the banks. First they are saying we meet some standards now, we are not polluting under the old standard, we are meeting some standards, we are meeting Clean Air Act, we are meeting the EPA standards, we are meeting those standards, and for someone to tighten the bolt right now in this economy is threatening them because there is already

one other major manufacturer in West Virginia lumber that went out of business due to this economy.

We are hearing because of Dodd-Frank, some of the banks are not as anxious to loan money to the lumber industry now in this economy because it is a risky loan in this economy so there is some reservation for that. So they are asking us—the one company was \$6 million, they have already got an estimate to make this replacement, and they are trying—how do I make this choice because their own analysis has said if they do make this investment, the likelihood of their company surviving over a period of time won't be. They know it is marginal right now. They have lost money for the last 2 years, and to go out and borrow \$6 million more puts 600 people at risk, 600 people.

So I am asking you, if you had—if you were sitting in that boardroom and you know that your company has lost money the last numbers of years, but yet the EPA is saying we want you to buy something off the shelf and put it in place and it is going to cost you \$6 million and you probably are going to lose your 600 jobs, what do you do? What would you do under that—what is wrong with their business decision to ask for a delay until this economy gets a little stronger and they can be more competitive? What is the matter with that?

Ms. MCCARTHY. Mr. McKinley, I will tell you that EPA is certainly not oblivious to the economic challenges that we are all facing. If you look at the rules and the way in which we are evaluating our rules, we are doing a better job every rule to try to understand the economics—

Mr. MCKINLEY. What does he do in that boardroom?

Ms. MCCARTHY [continuing]. To try to understand the jobs.

Mr. MCKINLEY. Ms. McCarthy, you have to make a decision because you are breathing down his neck.

Ms. MCCARTHY. We have successfully through the 40-year history of the Clean Air Act found a way to grow the economy with significant—

Mr. MCKINLEY. Oh, you all said that. You said that before. You came in here and you said yourself that the EPA has actually created jobs and you said it here again today, and I am still waiting. I asked you then back in February if you could provide that information of how the EPA regulations create jobs, and I still don't have it. This is now September and I still haven't received that report of how your regulations create jobs. You said it here today. You said you are expecting job growth if the EPA standards were put into effect.

Ms. MCCARTHY. That is correct.

Mr. MCKINLEY. What are we talking about? Construction jobs that last for 6 months but then put the 600 people out of work in my district? That doesn't work. I don't understand where you are going but you haven't still answered my initial—if you were in the boardroom, what would you do? Put your company under or would you let the people go?

Ms. MCCARTHY. I firmly believe that we need to meet our economic challenges in a way that continues to grow the economy. That is my belief and I think we have done it and I think we can continue to do that.

Mr. WHITFIELD. The gentleman from California, Mr. Bilbray, is recognized for 5 minutes.

Mr. BILBRAY. Thank you.

Ms. McCarthy, how many years have you served at the local level administering the Clean Air Act?

Ms. MCCARTHY. I served—well, I don't know whether I could say I administered the Clean Air Act but I worked at the local level for 11 years.

Mr. BILBRAY. OK. You know, I was one of the few people on this side of the aisle to support Mr. Markey's position on the light bulb issue but let me tell you something, after 16 years as a local administrator with the best scientists in the world in California, which you would admit that California—

Ms. MCCARTHY. They are good, but I came from Massachusetts.

Mr. BILBRAY. That is why you adopt our fuel standards and supported our action to eliminate the ethanol-methanol mandate.

Ms. MCCARTHY. Fair point.

Mr. BILBRAY. But my point being, I was a little taken aback that somebody in your position did not take the opportunity to point out to Mr. Markey that to compare ambient air and indoor air exposures is really inappropriate, especially with the challenges we have seen. And can we clarify the fact that there are major challenges in indoor air and we shouldn't be mixing those two up and giving the impression that somehow from the health risk point of view it is all the same?

Ms. MCCARTHY. They are very different exposures.

Mr. BILBRAY. Thank you. I am very concerned about that because of science.

Now, my biggest concern, as I look at things like the solid waste emissions regs where a company has to address the emissions for that day, but if you take the same waste and you put it off and bury it, those emissions have to be mitigated per day for the next 60 to 70 years, but there is no penalty for the fact that you are basically sending the emissions off to your grandchildren. It is almost like the regulations encourage people to do the environmentally irresponsible thing because on paper it looks good for that 24-hour period but in fact, in a lifecycle, you are actually having a cumulative impact and those emissions are going to be pollutant. It is that kind of regulation as an air regulator that I am just outraged that we are not brave enough to stand up and talk about and the environmental community activists and regulatory have walked away from it.

I would ask you, what State has been more aggressive at moving regulatory oversight and mandates than the State of California when it has come to clean air?

Ms. MCCARTHY. I would say that California has been very aggressive. It's air pollution challenges have been quite extreme.

Mr. BILBRAY. OK. And I will say this as somebody who had the privilege of doing that. I think people on my side of the aisle are in denial of the health challenges of environmental risk, but I have got to tell you something, when you stand up and give us the same line that California has been using for decades, that this will be great for business, we have gone from being the powerhouse in this country and the world, the California economy, to a 12 percent un-

employment to the fact that you do not manufacture almost anything in California anymore, when we have gotten to the point where our scientists who are developing green fuel technology have to leave the State because they cannot get the permits or the ability financially to be able to produce it in the State. I just think that we are really in denial if you really think that California is wealthier, more prosperous and that the green technology is penciled out so much that it is now an example of the huge benefits of regulatory mandates actually helping the economy in the long run, and I just ask you to consider the fact that for those of us that don't have the cement manufacturing in my district—I don't. We are importing it from Mexico, the components for concrete. We don't talk about the mobile sources. And my question to you is this. Is there a consideration of the increased mobile sources if these plants break down? Because why not produce it in Kampichi and ship the cement up the river into these areas?

Ms. MCCARTHY. There has not been a full lifecycle assessment of this, no.

Mr. BILBRAY. I bring up, we found out that by not doing a full lifecycle on things like ethanol, we realized we grossly underestimated the environmental impact because we did not do the full cycle. Don't you agree that there was a mistake made there?

Ms. MCCARTHY. The only thing I would point out to you is that I think the comparison with California, looking at its National Ambient Air Quality challenges, and compare that to technology-based solutions that will drive toxic pollution down is not exactly an equal comparison.

Mr. BILBRAY. The equal comparison is the fact, though, that the projections of an economic boon from the enforcement of environmental regs was grossly overstated in California and historically has been overstated in the United States, and I will bring it up again: the great selling point of fuel additives that have been told by scientists in the 1990s that the Federal Government is making a mistake about, we continue to this day to follow that failed policy with the environmental damage and the economic damage caused by it, and we don't reverse it. My concern is not that we try new things or we make mistakes but when we try new things and make mistakes, we don't go back and correct it. It has been how many years since we put a clean fuel mandate out that everybody knows was a failure.

Ms. MCCARTHY. We are moving forward with these rules because the Clean Air Act requires it. We are long delayed. There are significant public health benefits but we clearly look at the economy and ensure that we are doing it as cost-effectively as we can and to assess the impacts.

Mr. BILBRAY. And I think you are denying the economic impact as much as you damn the other side for denying the environmental impact.

Mr. WHITFIELD. At this time the chair recognizes the gentleman from Colorado, Mr. Gardner, for 5 minutes.

Mr. GARDNER. Thank you, Mr. Chairman, and thank you, Madam Administrator for being here today.

A couple of questions. I appreciate your support that you give in your testimony for meeting deadlines and the importance of dead-

lines in the Clean Air Act, but I am concerned that not all deadlines are equal in the eyes of the EPA. The Clean Air Act has an express 1-year deadline for taking final agency action on PSD permits. However, when you look at drilling in offshore Alaska, some of these permits continue to languish for 5 years. They have prevented us from accessing billions of barrels of oil that could make a long-term dent in gasoline prices in the United States. Why does the EPA pick and choose statutory deadlines that it feels to abide by?

Ms. MCCARTHY. We actually try very hard to meet the statutory deadlines, and the 1-year deadline is one that we are doing everything we can to achieve. There are certainly challenges with ensuring that we get complete information so that the application can be assessed and we can move that forward. We work very hard with applicants to expedite permitting as much as possible.

Mr. GARDNER. Do you think some deadlines have more importance than other deadlines?

Ms. MCCARTHY. I think that the law treats them all equally and I think we are equally obligated to do them.

Mr. GARDNER. But the EPA hasn't followed the law.

Ms. MCCARTHY. We do our best to do that, to meet every deadline in the statute. Do we always succeed? Absolutely not.

Mr. GARDNER. Two months prior to announcing the boiler MACT rules, the EPA sought a 15-month extension to re-propose three of the rules. Do you believe it is accurate to assume that the EPA needed an extension because the rules needed more work?

Ms. MCCARTHY. The rules actually changed significantly from proposal to final. We felt that they were legally vulnerable without entertaining more public comment and process associated with those changes.

Mr. GARDNER. So it needed more work?

Ms. MCCARTHY. Say it again.

Mr. GARDNER. So it needed more work?

Ms. MCCARTHY. It needed more public comment.

Mr. GARDNER. But just public comment, not more—oK.

Ms. MCCARTHY. We are certainly opening up to more work because we solicited additional comment, and with more data, we will take a look at it.

Mr. GARDNER. In your statement, you stated in your statement that it is terrifically misleading to say that enforcement of the Clean Air Act costs jobs. Have you ever had a manufacturing facility tell you personally that it simply cannot comply with all the regulations coming out of the EPA?

Ms. MCCARTHY. Many times.

Mr. GARDNER. Your testimony says that for every \$1 million spent in environmental spending to comply with environmental rules, it creates 1.5 jobs. According to the forest products industry, \$7 billion it will cost to comply with the boiler MACT rule. Are you then saying that that will create 10,500 jobs?

Ms. MCCARTHY. No, I am not, and I am also not indicating that—

Mr. GARDNER. Why would you—

Ms. MCCARTHY [continuing]. I agree—I was actually quoting a study that looked at specific industry sectors, and that—

Mr. GARDNER. But you must agree with it if you put it in the statement.

Ms. MCCARTHY. I agree that that literature has been peer-reviewed and it is sound science, yes.

Mr. GARDNER. So then for every \$1 million in spending, the—

Ms. MCCARTHY. In those four sectors is what that—

Mr. GARDNER. And the paper and pulp industry, I believe, is one of the four sectors so you are saying that \$7 billion—

Ms. MCCARTHY. I am not indicating at all that I believe the numbers that industry has indicated it associated with the cost of these rules. These major source boilers will in no way be estimated using scientific peer-reviewed methods to cost anywhere near that figure.

Mr. GARDNER. Do you believe that these regulations altogether will put a number of operations out of business?

Ms. MCCARTHY. I believe that there will be choices made by industry on how they will comply.

Mr. GARDNER. Including whether they stay in business or not?

Ms. MCCARTHY. That is going to be their choice looking at a variety of factors, perhaps least of which is compliance with these regulations.

Mr. GARDNER. So the EPA's own number on boiler cost was \$5 billion, so that is just a little bit less than—

Ms. MCCARTHY. No, actually the boiler cost was a little less than \$2 billion.

Mr. GARDNER. That is the information I have was \$5 billion from the EPA.

Ms. MCCARTHY. That was actually the proposal. We have cut that in half using flexibilities under the law and looking at new data.

Mr. GARDNER. So later we are going to hear the president and CEO of Lehigh Hanson talking about a loss of 4,000 jobs. Do you believe that business owners are being disingenuous when they tell us that it is going to cost them 4,000 jobs?

Ms. MCCARTHY. I don't want to attribute motive to anything. All I can tell you is under the history of the Clean Air Act, industry has significantly overstated anticipated costs and they have not come to be.

Mr. GARDNER. In your testimony, I counted the number of times where you say things like "in contrast to doomsday predictions, history has shown again and again that we can clean up pollution, create jobs and grow the economy. Economic analysis suggests the economy is billions of dollars larger today." Let us see. "Some would have us believe that job killing describes EPA's regulations. It is terrifically misleading. Investments in labor-intensive upgrades that can put current unemployed or underemployed Americans back to work as a result of environmental regulations. Jobs also come from building and installing pollution control equipment." Let us see. "Contrary to claims that EPA's agenda will have negative economic consequences, regulations yield important economic benefits." Let us see. It goes on. You say, "Moreover, the standards will provide these benefits without imposing hardship on America's economy or jeopardizing American job creation."

Late last month, President Obama withdrew the ozone standards. He said, "I have continued to underscore the importance of

reducing regulatory burdens and regulatory uncertainty, particularly as our economy continues to recover.” Mr. Sunstein’s letter to your agency said, “The President has directed me to continue to work closely with executive agencies to minimize regulatory costs and burdens.” Is he wrong then? Your testimony talks about creating jobs through environmental regulations. Was the President wrong in making that—

Mr. RUSH. Regular order, Mr. Chairman.

Mr. WHITFIELD. The gentleman’s time has expired. Did you want to respond?

Ms. MCCARTHY. No, the President made a sound decision and the agency is following it.

Mr. GARDNER. A sound decision? He made a sound decision?

Mr. WHITFIELD. At this time we will conclude the questions for the first panel, and Ms. McCarthy, we appreciate your being here today. As you remember, many of the members had questions and further comments that they would ask the EPA to respond to, so we look forward to your getting back to us with that information and our staffs will be working with you all to make sure that all of that is taken care of. So thank you very much.

Ms. MCCARTHY. Thank you very much, Mr. Chairman.

Mr. WHITFIELD. At this time I would like to call up the second panel. On the second panel today, we have Mr. Daniel Harrington, who is the President and CEO of Lehigh Hanson Incorporated. We have Mr. James Rubright, who is the Chairman and CEO of RockTenn Company. We have Dr. Paul Gilman, who is the Chief Sustainability Officer and Senior Vice President, Covanta Energy Corporation. We have Mr. John Walke, who is the Clean Air Director and Senior Attorney for the Natural Resources Defense Council. We have Mr. Eric Schaeffer, who is the Executive Director for the Environmental Integrity Project. We have Dr. Peter Valberg, who is the Principal in Environmental Health at Gradient Corporation, and we have Mr. Todd Elliott, General Manager, Acetate Celanese Corporation.

So thank all of you for being here today. We appreciate your patience, and we look forward to your testimony. Each one of you will be given 5 minutes for an opening statement, and then we will have our questions at that point.

So Mr. Harrington, we will call on you for your 5-minute opening statement. Thank you.

STATEMENTS OF DANIEL M. HARRINGTON, PRESIDENT AND CEO, LEHIGH HANSON, INC.; JAMES A. RUBRIGHT, CEO, ROCK-TENN COMPANY; PAUL GILMAN, PH.D., CHIEF SUSTAINABILITY OFFICER, COVANTA ENERGY CORPORATION; JOHN D. WALKE, CLEAN AIR DIRECTOR AND SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL; ERIC SCHAEFFER, DIRECTOR, ENVIRONMENTAL INTEGRITY PROJECT; PETER A. VALBERG, PH.D., PRINCIPAL, GRADIENT CORPORATION; AND TODD ELLIOTT, GENERAL MANAGER, ACETATE, CELANESE CORPORATION

STATEMENT OF DANIEL M. HARRINGTON

Mr. HARRINGTON. Thank you, Mr. Chairman. I am Dan Harrington. I am the President and CEO for Lehigh Hanson, and we are one of the United States' largest suppliers of heavy building materials to the construction industry. Our products include cement, brick precast pipe, ready-mixed concrete, sand and gravel, stone, and many other building materials. We have 500 operations in 34 States and we employ about 10,000 people in the United States. Also, I am presently the Chairman of the Government Affairs Council of the Portland Cement Association, and our association represents 97 percent of the U.S. cement manufacturing capacity. We have nearly 100 plants in 36 States and distribution facilities in all 50 States. We also employ approximately 13,000 employees. I am here today to express strong support for H.R. 2681, the Cement Sector Regulatory Relief Act of 2011.

The current recession has been too long and too deep, and it has left the cement industry in its weakest economic conditions since the 1930s. Domestic demand for cement has dropped by more than 35 percent in the past 4 years, and we have shed over 4,000 jobs in the United States. Although 13,000 well-paying cement manufacturing jobs remain, and their average compensation of \$75,000 a year, there are three EPA rules in particular which could force the loss of an additional 4,000 jobs, as you heard a second ago. Specifically, the National Emission Standards for Hazardous Air Pollutants rule, or NESHAP, for the Portland cement industry, the commercial and industrial solid waste incinerator, CISWI, rule, and finally, the agency's change in the definition of solid waste.

In the face of all the economic uncertainty that faces our great Nation, the industry welcomes the introduction of H.R. 2681. It will mitigate regulatory uncertainty and place these rules on a more reasonable schedule. Second, it will enable our industry to continue to make capital investments in the United States that will preserve jobs. It will also give us time to resolve the differences with the EPA on individual compliance levels which will result in regulations that are fair, balanced and, most importantly, achievable. Moreover, it will provide the time necessary for the economy to recover to a point where the industry is able to invest in plant upgrades and cost reductions again.

Earlier this year, the Portland Cement Association completed an analysis of the economic and environmental impacts of several final and proposed EPA rules, including those addressed by H.R. 2681. The study concluded that one rule alone would impose a \$3.4 billion capital investment on an industry that generated \$6.5 billion

in revenues in 2010. Now, the EPA did its own cost analysis, and their statistics show that it would require a \$2.2 billion capital investment. So whether it is \$2.2 billion or \$3.4 billion, it is significant capital investment, and no one has addressed operating cost increases due to the new equipment, which will be plus 5 to 10 percent over our current cost structure just to operate our plants in the future.

Also as you have heard, 18 of our plants could close, and although the EPA downplays the consequence of job loss, these job losses, the realities are that these jobs will not be readily absorbed in the communities where most plants are located. Therefore, the multiplier effect takes place in our communities where contractors, service employers, raw material suppliers who feed our cement plants with goods and services and consultants no longer will have employment either to support the towns and villages where our cement plants are located. The agency also does not account for the impact of these closures outside the cement sector. Disruptions to the availability of supplies will have adverse impacts on our construction sector, which, as you know, has an unemployment rate of nearly 20 percent. If the economy rebounds, a decrease in domestic production will require an increase in imported cement, probably up to as high as 50 percent by the year 2025. All of that cement will be coming in from offshore sites from around the world.

Two other rules, the so-called CISWI and related definition of solid waste, would force an additional four plant closures and add another \$2 billion in compliance costs by 2015. Ironically, these also actually undermine the rulemaking that is in place for NESHAP and cause conflict in the two standards for us to choose which way to go or how to invest.

The basic elements of the Cement Regulatory Relief Act, a re-proposal of the rules followed by an extension of the compliance deadline, provide a win-win opportunity for American workers and for the environment. This bipartisan bill is also consistent with the President's Executive Order issued earlier this year calling for reasonable regulations.

I thank you for this opportunity to testify, and I welcome any questions as we go through the day. Thank you.

[The prepared statement of Mr. Harrington follows:]

U.S. House of Representatives, Committee on Energy and Commerce,

On H.R. 2681, the Cement Sector Regulatory Relief Act of 2011

Testimony of Dan Harrington, President and CEO, Lehigh Hanson, Inc.

September 8, 2011

Thank you Mr. Chairman, my name is Dan Harrington. I serve as President and CEO of Lehigh Hanson, Inc., one of North America's largest suppliers of heavy building materials to the construction industry. Our products include cement; aggregates in the form of sand, stone and gravel; ready-mixed concrete; precast pipe and concrete; and asphalt. We have over 500 operations in 34 states and approximately 10,000 employees in the US. I presently chair the Government Affairs Council of the Portland Cement Association (PCA). The association represents more than 97 percent of US cement manufacturing capacity with nearly 100 plants in 36 states and distribution facilities in all 50. I am here today to express strong support for H.R. 2681, the "Cement Sector Regulatory Relief Act of 2011."

The current recession has been far too long and far too deep, and it has left the cement industry in its weakest economic conditions since the 1930s. Domestic demand for cement has dropped by more than 35 percent in the past four years, causing the cement industry to shed over four thousand high-wage jobs. Although 13,000 well-paying cement manufacturing jobs remain – with an average compensation of \$75,000 – there are three EPA rules in particular which could force the loss of an additional 4,000 jobs. I'm talking specifically about the National Emission Standards for Hazardous Air Pollutants rule, or NESHAP, for the Portland cement industry, the commercial and industrial solid waste incinerator (CISWI) rule, and the Agency's change in the definition of "solid waste." In addition to the regulatory uncertainties posed by these EPA rules, the broader state of the economy now presents new challenges that were not foreseeable earlier this year. These new hurdles include: volatility in the stock market and the recent downgrade of America's nearly century-old AAA credit rating.

In the face of all this economic uncertainty, the industry welcomes the introduction of H.R. 2681. This much-needed legislation will mitigate regulatory uncertainty and place these rules on a more reasonable schedule. This bill will enable the industry to continue to make capital investments in the U.S. market that will preserve jobs that serve as the anchor of dozens of American communities. It will also give industry the time to resolve its differences with EPA on rulemaking details that hopefully will result in regulations that are fair, balanced and, importantly, achievable. Moreover, it will provide the time necessary for the economy to recover to a point where the industry is able to invest in plant upgrades once again.

Earlier this year, PCA completed an analysis of the economic and environmental impacts of several final and proposed EPA rules, including those addressed by H.R. 2681. The study concluded that one rule alone, the Portland Cement NESHAP, would impose a \$3.4 billion price tag on an industry that generated only \$6.5 billion in revenues 2010. It is interesting to note that EPA did its own cost analysis, and it was also in the billions--\$2.2 billion to be exact. Unfortunately, they were wrong by a significant margin. Simply put, the multi-billion dollar investment that must be made before the compliance date of September 2013 represents more than 50 percent of the industry's total 2010 revenues.

One other important consequence of this rule is that NESHAP, as currently crafted, could force the closure of 18 out of the nearly 100 U.S. cement plants. EPA downplays the consequence of these job losses, but the realities are that these jobs will not be readily absorbed in the communities where most plants are located. The Agency also does not account for the impact of these closures outside the cement sector. Disruptions to the availability of domestic supplies will have adverse impacts on the nation's beleaguered construction sector, which is currently suffering from an unemployment rate of nearly 20 percent. As the economy hopefully rebounds, a decrease in domestic production will require an increase in imported cement to meet demand. The result will be increased costs in revitalizing the

nation's waterways, bridges, highways and tunnels which, in turn, will only place more burdens on the nation's already stressed state and municipal budgets.

Two other rules, the so-called "CISWI" and related definition of solid waste, would force an additional four plant closures and add another \$2 billion in compliance costs by 2015. Ironically, the CISWI and solid waste rules actually undermine environmental quality by creating barriers to the combustion and reuse of 12 million tons of other industries' byproducts in cement kilns, byproducts which would otherwise be land-filled. This includes the re-use of millions of used tires as a non-hazardous and high-BTU fuel—which is in direct contrast to the many years of Agency support and encouragement of the beneficial use of scrap tires as a fuel in cement kilns.

In addition to creating perverse disincentives to recycle, the EPA rules would actually worsen the global environment. By exporting emissions along with high wage jobs, the U.S. will be dependent on imports of foreign cement, as much as 56 percent of domestic needs by 2025. By shifting supply needs to countries with limited environmental protections, the U.S. will actually experience a degradation of the air quality gains provided by the Clean Air Act through transport of emissions of key pollutants. EPA knows this, but apparently and ironically ignores the significance of it.

Fortunately, a bipartisan group of lawmakers is demonstrating leadership on this vital jobs and environment issue by drafting legislation that forces EPA to redo these rules. This will create the opportunity for the issuance of reasonable and balanced regulations, and impose a five-year moratorium on compliance, thereby giving the domestic industry time to get back on its feet financially. These basic elements of the Cement Sector Regulatory Relief Act – a re-proposal of the rules, followed by an extension of the compliance deadline – provide a win-win opportunity for American workers and the nation's environment. This bipartisan bill is also consistent with the President's executive order issued earlier this year calling for reasonable regulations.

PCA views H.R. 2681 as an acknowledgement that members of Congress can work with the Administration in a collaborative manner to craft policies that balance environmental protection and economic growth. We strongly support this legislation and plan to work closely with Congress and the Administration to ensure its passage.

Thank you for this opportunity to testify. I would be happy to answer your questions.

Mr. WHITFIELD. Thank you, Mr. Harrington.
Mr. Rubright, you are recognized for 5 minutes.

STATEMENT OF JAMES A. RUBRIGHT

Mr. RUBRIGHT. Thank you, Chairman Whitfield, Ranking Member Rush and members of the subcommittee. My name is Jim Rubright and I am the CEO of RockTenn, and I am testifying today on behalf of the American Forest and Paper Association and RockTenn. RockTenn is one of America's largest manufacturers of corrugated and paperboard packaging and recycling solutions. We operate 245 manufacturing facilities and we employ 26,000 people, well over 22,000 of whom are in the United States. I am here today to express support of RockTenn and the other AF&PA member companies for H.R. 2250.

We need the additional time and certainty provided by the bill for many reasons. The EPA needs the time provided in this bill to write a boiler MACT rule that is achievable, affordable and based on sound science. Our companies need the time to develop compliance strategies which don't exist today in full and to implement the massive capital expenditure programs that will be required to comply with the rule and to do so once and to do so with certainty. Our country needs and deserves this bill in order to mitigate the adverse impact of boiler MACT and the related rulemakings on job growth and economic recovery.

Please let me explain. First, a jobs study produced by the AF&PA by Fisher International finds that the boiler MACT regulations will result in significant job losses within the forest products industry. Specifically, the Fisher study concludes that the boiler MACT rules impose on top of the other pending regulations that will impact the forest products industry will put over 20,000 direct jobs only in the pulp and paper sector at risk. That is about 18 percent of the pulp and paper industry's total workforce. Adding the impact on suppliers and downstream spending manufacturing income puts the total number of jobs at risk at 87,000 jobs. When the boiler MACT rules are combined with other pending Air Act rules, and I have included an exhibit that shows 20 rules that we face over the next few years, the jobs at risk rise to 38,000 direct pulp and paper jobs and 161,000 total jobs.

The economic consequences of these rules will be felt most keenly in communities that cannot afford further job losses. Most of our mills are located in rural communities where there are few alternatives for employees who see their mills close, and since 1990, in answer to one of the questions that was asked earlier, 221 mills have closed in the United States, costing 150,000 jobs. We need Congress's help to avoid this outcome.

I would also ask you to bear in mind that RockTenn and its predecessors through mergers has already wasted \$80 million trying to comply with the 2004 boiler MACT rule that was eventually vacated by the courts just 3 months before the compliance deadline.

Let me cite the positive things that the bill does to help our companies. This bill will go a long way to see that the EPA has adequate additional time to promulgate a boiler MACT rule that is based on sound science. Earlier this year, as you know, the EPA was driven by court-imposed deadlines to issue a final boiler rule

it knew was flawed. By giving the EPA time it needs to properly address this complex scientific and technological issues associated with boiler MACT to free us from the risk of litigation imposing an earlier effective date of that act, H.R. 2250 will actually help avoid further delays, reduce the uncertainty which is going to follow from the certain litigation that will follow the adoption of the final rule and therefore reduce the risk to us of further wasted capital expenditures.

The EPA's non-hazardous secondary material rules, which is a companion to the boiler MACT rule, will make biomass and other alternative fuels commonly used for energy in the pulp and paper industry subject to regulation as a solid waste. Please remember, our virgin mills generate about 70 percent of their total energy requirements from biomass recovered in our paper making. Classifying a part of this biomass as waste will dramatically increase the cost of compliance with these unnecessary burdens, likely resulting in the closure of many mills and causing many others to switch from biofuels to fossil fuels. The 3-year compliance period is too short and will again force our member companies to make substantial capital expenditures inefficiently and based on our current best guesses of what the final rules will provide. We estimate the boiler MACT will cost our industry \$7 billion in capital, 200 for RockTenn alone, and our annual operating costs will increase by \$31 million. Based on the rule the EPA is considering, our suppliers can't even assure us that this or any amount of capital will make us fully compliant. We don't have the excess capital lying around to have a replay of the 2004 boiler MACT rule fiasco. We need this bill to avoid this terrible result.

Finally, we need this bill to make sure that the EPA's stay of the boiler MACT rule remains intact and is not reversed prematurely through court actions.

Mr. Chairman and members of the subcommittee, I thank you for offering this bill.

[The prepared statement of Mr. Rubright follows:]

**Statement of James A. Rubright
Chief Executive Officer, Rock-Tenn Company
House Subcommittee on Energy and Power Hearing on
EPA Regulatory Relief Act September 8, 2011**

Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee, my name is Jim Rubright, and I am the Chief Executive Officer of the Rock-Tenn Company. Thank you for the opportunity to testify on EPA's Boiler MACT rules¹ and the EPA Regulatory Relief Act (HR 2250), which is critical legislation for the forest products industry and U.S. manufacturers in general.

RockTenn is one of North America's leading producers of corrugated and consumer packaging and recycling solutions, with annualized net sales of approximately \$10 billion. Based in Norcross, Georgia, we employ approximately 26,000 people and operate in more than 245 facilities in 38 States, Canada, Mexico, Chile, Argentina and China.

We strongly endorse quick action and passage of HR 2250 into law. The great regulatory and litigation uncertainty of the Boiler MACT rules requires a legislative solution. Congress should stay the rules for 15 months so EPA can get them right, reset the date for defining new sources, allow facilities more time to comply, clarify that renewable and recyclable materials are traditional fuels, and ensure the rules are achievable and less burdensome. H.R. 2250 ably addresses these needs. EPA has the statutory discretion to answer the call from hundreds of elected officials to produce rules that are achievable and affordable while protecting jobs and public health.

We applaud this subcommittee for your leadership on this important legislation and for your commitment to ensuring that laws are implemented in a reasonable and fair manner. The forest products manufacturing industry is proud of its environmental stewardship and will adapt to regulations that are achievable and affordable.

But we cannot respond to regulations in a vacuum. Businesses in our sector must consider the global competitive environment in which they operate. They must compete for capital globally and have the time needed to build new regulatory requirements into capital planning. They also must be able to rely on the government so that once a regulation is in place, it will not be selectively enforced or changed within a short timeframe.

Of course, the Boiler MACT rules are not the only challenge facing the forest products industry. Under the Clean Air Act alone, we are facing over twenty regulations,

¹ On March 21, EPA published the Boiler MACT rule and three related rules -- the Commercial and Industrial Solid Waste Incinerator (CISWI) rule (setting emissions limits for non-hazardous solid waste incinerators); the definition of Non-Hazardous Secondary Materials (a Resource Conservation Recovery Act rule determining which materials are wastes and thus covered under the CISWI rule when burned); and Boiler GACT (Generally Achievable Control Technology for boilers at smaller sites). These four rules often are collectively referred to as the "Boiler MACT rules."

including the Boiler MACT rules, which could have a dramatic impact on the long term viability of our industry. Attached to this testimony is a diagram of Clean Air Act regulations in the pipeline that will affect forest products industry manufacturing facilities. I should note that there are many others of concern in addition to these, including EPA regulations on waste, greenhouse gases, water, OSHA regulations, chemical security standards, and others.

In most cases, significant capital investment will be required for equipment needed to meet the regulation that would otherwise go to growth in manufacturing capacity and the attendant production of jobs. The suite of potential clean air regulations could prevent new expansion or upgrade of existing forest products industry facilities in the U.S.

State of the Industry

The U.S. forest products industry – both paper and wood products-- has been facing trying economic times for more than a decade. Since early 2006, the forest products industry has lost about 32% of its workforce – 415,000 jobs. In total, these losses included 79,000 jobs at pulp and paper mills and converting plants, 243,000 jobs at lumber and wood panel mills, 76,000 jobs at wood cabinet plants, and 18,000 logging jobs. Excluding converting operations, primary pulp and paper mills alone lost 26,000 jobs, or 19% of their workforce since early 2006. According to a research paper by the Economic Policy Institute, for every 100 paper industry jobs, an additional 325 jobs are sustained in other industries resulting from the purchase of supplies and the re-spending of worker incomes.²

U.S. production of paper and paperboard declined 10% between 2007 and 2010. While we experienced some rebound in 2010, production has been on the decline again this year. The setbacks reflect the still-weak economy, competition from digital media, and cost pressures, including government regulations. As a result, the paper industry has earned its cost of capital in only two of the past ten years, and has been forced to restructure to meet global competitive pressures.

The Impact of the Boiler MACT Rules

Flawed government regulations that are not cost-effective can exacerbate what is already a bad situation. As now drafted, the final Boiler MACT rules would be unsustainable for the forest products industry and many others.

According to URS, a respected consulting firm, the capital cost estimate of the final Boiler MACT rules is about \$7 billion for the forest products industry. This is even higher than the \$6.8 billion capital cost of the proposed rules for our industry. By comparison, forest product industry pre-tax profits averaged \$3.6 billion from 2008-2010.

According to a recent study conducted for AF&PA by Fisher International, that degree of expense at this time would place at risk 36 mills and over 20,000 jobs in the pulp and paper sector alone, about 18% of its workforce.

² Economic Policy Institute, "Updated Employment Multipliers for the US Economy" (2003).

If impacts on jobs in pulp and paper industry suppliers and surrounding communities also are factored in, the 20,000 direct jobs at risk soar to over 87,000 jobs -- largely in small, rural communities that can least afford to lose them. Since many paper and wood products mills are located in rural areas where high-paying jobs are scarce, the effect of these job losses on local communities can be devastating. The closure of a mill in a small town has an enormous ripple effect when that mill is the largest employer and a major contributor to local taxes and community civic programs.

The annual capital spending by pulp and paper mills and by wood products facilities averaged \$5.1 billion a year, according to data from the U.S. Census Bureau for the 2008-2009 period. The \$7 billion capital cost of the Boiler MACT rules exceeds that entire annual capital outlay of the industry. Thus, the Boiler MACT spending will likely crowd out other forms of capital spending and undermine the competitiveness of the U.S. forest products industry.

In addition to the economic impacts, these regulations would create unintended consequences for the environment. EPA's final rule on the definition of non-hazardous secondary materials classifies many alternative fuels, including carbon-neutral biomass residuals from wood and paper production, as wastes instead of fuels, leading to regulation under extremely costly and stigmatizing incinerator standards. As a result, some mills would not be economically viable, and millions of tons of valuable alternative fuels will be diverted to landfills and replaced with fossil fuels -- a bad result for both the environment and jobs.

Job losses due to regulations also can have long-term impacts on workers' lives. For example, economist Jacob Kirkegaard of the Peterson Institute for International Economics observed that workers' skills atrophy as a result of unemployment because they are less able to keep up with developments in their field. And if the worker is able to shift to a new field, the human capital associated with the former occupation may wind up being of little or no use.³

Conclusion

We know that the current wave of regulations is unsustainable. Living with such an uncertain regulatory environment not only costs current jobs, but also prevents new jobs from being created.

Companies frequently find themselves tangled in a web of rules that result in the decision to simply not make an investment because of the uncertainty of the regulatory process -- or they decide to invest overseas. Others roll the dice, hoping that the rule they are making decisions under today will still be in place when their project is completed. When regulations such as the Boiler MACT rules create such uncertainty and are not affordable or achievable, investing in an energy efficiency project, modernization programs, or a new biomass boiler can be very risky, preventing investment and job creation in rural communities that desperately need it.

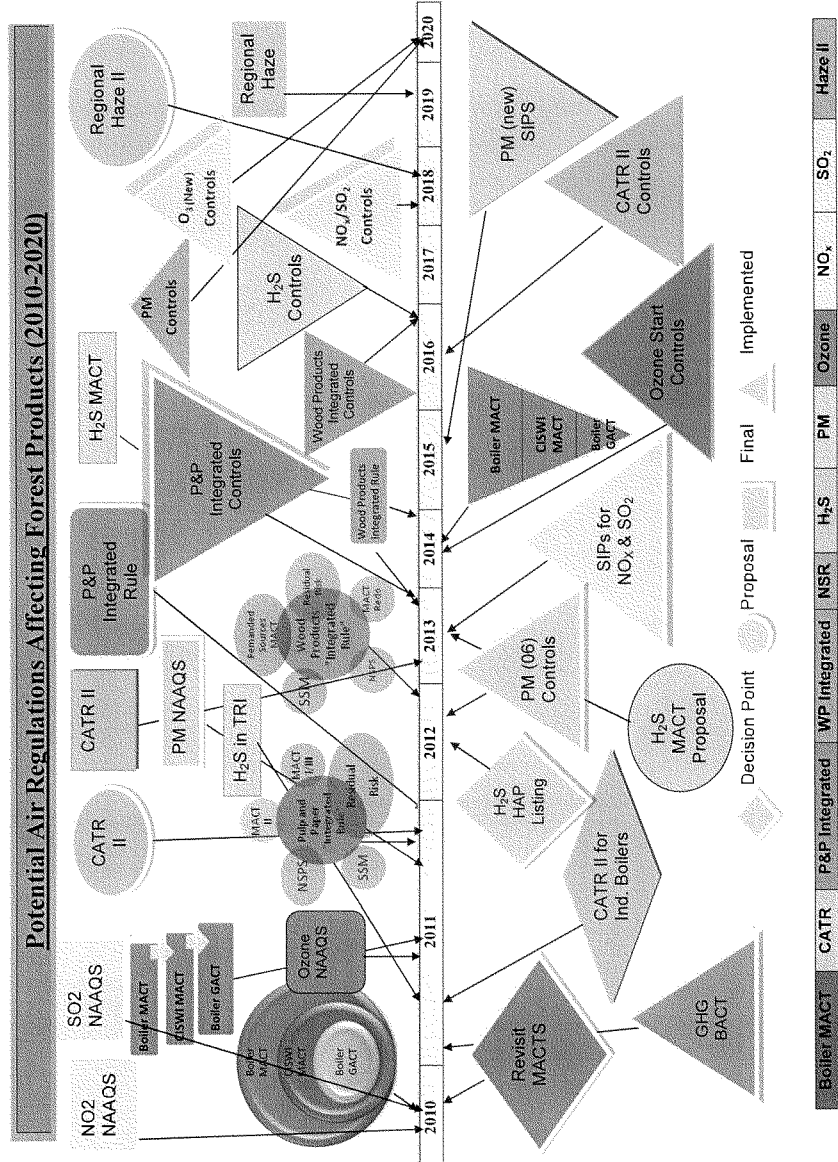
³ (See "Economists Suggest Long-Term Unemployment Holds Hidden Dangers," 11/19/2010) www.job.com/career-advice/employment-news/economists-suggest-long-term-unemployment-holds-hidden-dangers.html

Unfortunately, it is easier to see the jobs that are lost after the fact. But the greatest damage may be unknowable -- the projects never built, the products never made, the jobs never created, or the entrepreneurial ideas drowned in the sea of red tape.

All of these concerns -- about the future global competitiveness of the United States, the need to not only create new jobs but also to keep existing jobs, and the risks to economic recovery -- must be considered against the backdrop where environmental quality in the United States is the best it has been in decades, and it continues to improve. This is due in part to existing regulatory programs that are in full force today and still creating gains in environmental quality without further regulatory actions. This is also due in no small part to the fact many companies including RockTenn recognize that being a responsible global citizen, satisfying our customers, and caring for the communities in which we operate is simply good business. It is about creating a business that is sustainable.

In conclusion, we urge Congress to enact the EPA Regulatory Relief Act as soon as possible. Thank you for taking the time to listen to some of the many regulatory challenges facing the forest products industry, and thank you for your leadership to maintain the global competitiveness of U.S. manufacturers.

Attachment



Mr. WHITFIELD. Thank you.
Dr. Gilman, you are recognized for 5 minutes.

STATEMENT OF PAUL GILMAN

Mr. GILMAN. Thank you, Mr. Chairman and members of the committee. Thank you for the opportunity to be here. I speak to you today as an employee of Covanta Energy, which is one of the Nation's largest biomass-to-electricity producers. I also speak to you as a former Assistant Administrator of the EPA for Research and Science Advisor for the agency.

We currently operate biomass facilities that will be affected by these MACTs. The fuel is largely agricultural and forestry residue, making us one of the more sustainable uses of biomass. Currently, we are walking an economic tightrope for those facilities. Two are in standby mode because we are having to balance high fuel prices with low power revenues. One of our facilities has been operating on an intermittent basis this year.

As a company that operates under the Clean Air Act, we believe it is key to our being viewed as a good neighbor in our community, so we support it and we support its goals, but we do believe the EPA had a right to ask the courts for more time. We think the EPA had it right when they asked for more information, more data for the boiler and CISWI MACT rules. Not only did the paucity of data lead to some illogical outcomes in the regulatory process, it also meant that natural variation from boiler to boiler wasn't properly considered, and even sort of the breakdown of different technologies for comparison purposes wasn't done. Not only those things, but the method used by the agency to derive the emissions standard is seriously flawed. What they did was take pollutants on an individual basis and look at them across the various facilities, find the best emissions achievement and set that as a standard and then repeat the process. So the emissions standards were set really on a pollutant-by-pollutant basis as opposed to a facility-by-facility basis. This answers the question that Mr. Markey had as to why is it that achievable, currently existing technologies can't be used. It is because this pollutant-by-pollutant process has been undertaken as opposed to the plant-by-plant. It is like asking the Olympic decathlon champion to not only win the championship but then beat each of the individual athletes in the 10 individual contests to be beaten as well by that decathlete.

The agency also applied some statistical treatment for the data that is really detrimental to our being able to achieve compliance under the standards. So for example, in evaluating the data, it set its emission levels what we call 99 percent cutoff point. What that does for commercial industry solid waste incinerator is mean that a typical one with two units is likely in every single year to have a 20 percent probability that they are going to fail one of the emission standards. Now, I can just tell you, that is not the way to be a good neighbor and that is not a way for me to keep my job if that is how I perform for my company. So it truly is achievable and it is not something that I think the agency would be pleased in the final outcome of.

There are a set of issues that this bill would address in the question of the definitions of waste. One of the elements that is not

under reconsideration by the agency and therefore can't be addressed in this process, Mr. Green and the gentleman from Oregon also spoke to these questions, we have facilities, biomass facilities in the Central Valley of California that will be made into incinerators by the rules because traditional fuels like stumps from orchards and construction and demolition debris would be reclassified as waste. What will be the outcome of that? We will send those C&D wastes off to landfills. It is actually something I was talking with the senior NRDC staffer about doing the exact opposite of just a week ago and we will leave the stumps in the fields for the farmers to burn. That is why the California Air Resources Board actually opined to the agency that it thought it was on the wrong track for these MACT rules, and I will submit their comments for your record and my statement at that point, Mr. Chairman.

[The prepared statement of Mr. Gilman follows:]

Statement by Paul Gilman, Ph.D.

Chief Sustainability Officer, Covanta Energy

To the House Committee on Energy and Commerce Subcommittee on Energy and Power

September 8, 2011

Good morning Mr. Chairman and Members of the Subcommittee. Thank you for this opportunity to testify. I speak to you today as an employee of Covanta Energy, one of the largest biomass to electricity energy producers in the United States. I also speak to you as a former Assistant Administrator of the EPA for Research and as EPA's Science Advisor.

Our Biomass-to-energy facilities which generate and sell electricity from several types of biomass fuels are regulated by the proposed MACTs. Their fuel is largely agricultural and forest residues that are left from timber and agricultural activities. As such, it is one of the most sustainable uses of biomass. These operations are on an economic tight rope. We are balancing low power prices and high fuel prices. In fact, of our eight facilities, two are in standby mode and one has been operating intermittently this year due to economic constraints.

As a company we know that operating in a clean and safe manner is key to being a good member of our communities. That is why we are supporters of the Clean Air Act. But we believe the EPA had it right when it requested the courts to give it more time for the promulgation of the Boiler and Commercial and Industrial Solid Waste Incinerator (CISWI) MACTs. We agree with their decision to seek more data and other information. Not only did the paucity of data lead EPA's standard setting process to illogical outcomes, insufficient consideration of natural variations in performance from one boiler unit to the next, and insufficient consideration of different boiler technologies -- but the methodology for considering these data was also flawed.

The methodology applied was not only different than that contemplated at the time of the passage of the CAA Amendments of 1990 but is illogical from an engineering perspective. Emission standards for each pollutant were set by finding the lowest emissions from all the different units in a category, not the best overall units. This “pollutant-by-pollutant” approach rather than “plant-by-plant” is analogous to asking that the decathlon champion at the Olympics be able to win not only the overall decathlon, but all of the 10 gold individual events as well. People don’t work that way and neither do machines. The legislation before you addresses the plant-by-plant issue.

EPA conducted a statistical analysis of existing units’ emission data to predict the variability of emissions and set the MACT emission floors. Now statistics can be useful in these types of efforts, but has limitations. Specifically, one needs an adequate amount of representative emission data on which to perform statistics. EPA’s data are inadequate. In most cases EPA has relied on only a single 3-run test typically covering three hours of operating time or 0.04% of a given unit’s operating year. These data cannot adequately describe emissions under all operating conditions and foreseeable circumstances and are therefore not representative for conducting statistical analysis. Furthermore, EPA sets the standards based on a 99% probability, leaving a 1% chance, per pollutant, that the emission standard would not be met. For a CISWI facility with two units this correlates to nearly 20% likelihood that the facility would fail a performance test each and every year. We are encouraged that EPA is reconsidering certain aspects of the rules and hope that it will recognize its emission data inadequacies and err on the side of achievability when setting MACT floors. Otherwise it risks setting standards which have not been achieved in practice, contrary to the law. EPA has two additional vehicles under the law – the beyond-the-

floor analysis and the 5-year review – with which it can ultimately set more stringent standards, if justified.

The Agency's strict implementation of a flawed method with insufficient data leads to some illogical outcomes. For example, in the final rule the emission level for particulate matter allowed for CISWI units is eight times higher than that for boilers. We now know a great deal about how particulate matter can affect human health. I can see no basis for different treatment of CISWI and Boiler MACTs from a health perspective but that is the result of the Agency's method.

One problem that the Agency has not addressed and will not in the Reconsideration process is the change they have made to the definition of waste. Their changes have meant that some traditional fuels for our biomass plants are now classified as wastes and so our boilers for electricity production would become, in a regulatory sense, Commercial and Industrial Solid Waste Incinerators. Tree stumps from old orchards that we have traditionally used might place us in a different and more costly regulatory regime because they are now a waste. These plants have also traditionally used construction and demolition (C&D) debris from urban centers to supplement the biomass residue. These traditional fuels would also place our units in the CISWI category. What will the outcome be? We will allow the C&D to go to landfills where it will generate methane gas that is, as a climate change inducer, 25 times more potent than carbon dioxide. What about the stumps? We'll leave them to the farmers to burn them in their open fields. That prospect, and the prospect that costly retrofits to our facilities might lead to their closure, is why the California Air Resources Board (CARB) submitted comments questioning the Agency's approach to this MACT proposal. In fact, CARB questioned why the EPA was pursuing these changes to their technology based standard when CARB regulates the facilities

looking at the risks they pose to human health and the environment and CARB has set standards such that these facilities don't pose a risk. I will include their comments along with two other California Agencies that were critical of the EPA's approach for the record. There are other illogical aspects to the definition of wastes where in one case something is a traditional fuel and therefore falls under Boiler MACT and in others it would make the facility converting it to electricity a CISWI unit. I commend the sponsors of the legislation for addressing these issues.

I have one last suggestion for the Subcommittee to consider. There are other MACTs yet to be promulgated. Application of EPA's same flawed methods could be problematic for the affected sectors. In addition to Biomass my company converts municipal solid waste to electricity. That sector could supply more reliable, baseload electricity for the nation. Constructing one of our facilities infuses about \$1 billion into the local community, providing not only significant construction jobs, but also long term, well paid skilled labor employment opportunities. If the Agency's approach to the CISWI, Boiler, and Cement MACTs was flawed and is deserving of your attention I submit that sectors such as our own, aluminum recycling, fertilizer production and others in the cue deserve your attention, also.



GOVERNOR ARNOLD SCHWARZENEGGER

August 19, 2010

Ms. Lisa Jackson
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Mail Code: 1101A
Washington, DC 20460

RE: Docket Number EPA-HQ-OAR-2002-0058 (Industrial, Commercial, and Institutional Boilers and Process Heaters located at major sources).

Docket Number EPA-HQ-OAR-2006-0790 (Industrial, Commercial, and Institutional Boilers located at area sources).

Docket Number EPA-HQ-OAR-2003-0119 (Commercial and Industrial Solid Waste Incineration Units).

Dear Administrator Jackson,

California has adopted some of the nation's most ambitious renewable energy and greenhouse gas reductions goals and I am concerned that rule changes being considered by your agency will undermine the progress we are making.

While I understand the need to update standards to reflect new technologies, U.S. EPA must carefully consider the trade-offs that must be made in meeting California's ozone reduction and greenhouse gas reduction goals. The attached comments by our energy and environmental agencies outline major concerns about how your proposed boiler standards may cause California's existing biomass-to-energy facilities to close.

California's 40 biomass plants provide approximately 800 megawatts of electricity generation capacity that last year produced 5,700 gigawatt-hours of electricity, representing about three percent of California's total in-state power generation. In addition, these facilities employ 750 people on-site and support 1,200 to 1,500 jobs in the fuel supply infrastructure. I know the Obama Administration is working as hard as we are to increase, not eliminate, green jobs.



Ms. Lisa Jackson
August 19, 2010
Page two

While I support your efforts to adopt national regulations to reduce hazardous air pollutants, I have significant concerns that these proposed standards would have adverse impacts on California's environment and economy. Therefore, I strongly urge you to reconsider the proposed standards for existing biomass-to-energy facilities.

Sincerely,



Arnold Schwarzenegger

Enclosures (3)

**Attachment
July 2010**

**California Agency Comments on U.S. Environmental Protection Agency's Proposed
National Emission Standards for Hazardous Air Pollutants¹**

This document provides detailed comments on the U.S. EPA's Proposed National Emission Standards for Hazardous Air Pollutants for Area Sources; Industrial, Commercial, and Institutional Boilers and the National Emission Standards for Hazardous Air Pollutants for Major Sources for the Industrial, Commercial, and Institutional Boilers and Process Heaters; and Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units (MACT Standard). The document is organized by the agency that prepared the comments.

**Comments Prepared by the
California Air Resources Board**

The California Air Resources Board's (ARB) mission is to promote and protect public health, welfare, and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the State. The major goals of ARB include: providing safe, clean air to all Californians; protecting the public from exposure to toxic air contaminants; reducing California's emission of greenhouse gases; providing leadership in implementing and enforcing air pollution control rules and regulations; providing innovative approaches for complying with air pollution rules and regulations; basing decisions on the best possible scientific and economic information; and providing quality customer service to all ARB clients. ARB's comments are as follows:

1. In California, BTE boilers are tuned to reduce oxides of nitrogen (NO_x) emissions at the expense of some increased carbon monoxide (CO) emissions (an attainment pollutant) because of California's ozone nonattainment problem. Modifying a biomass boiler to meet the CO emissions requirements used as a surrogate for non-dioxin organic hazardous air pollutants (HAP) will result in higher emissions of NO_x that may trigger New Source Review (NSR) requirements for best available control technology and offsets. ARB believes U.S. EPA needs to re-evaluate the increased NO_x emissions of this proposed standard and the impacts on states, such as California, in meeting the National Ambient Air Quality Standards for ozone.
2. The proposed MACT Standard does not acknowledge the technological differences and does not establish separate requirements for the different combustion type

¹ U.S. EPA's proposed National Emission Standards for Hazardous Air Pollutants for Area Sources; Industrial, Commercial, and Institutional Boilers and the National Emission Standards for Hazardous Air Pollutants for Major Sources for the Industrial, Commercial, and Institutional Boilers and Process Heaters; and Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units (MACT Standards) published in the Federal Register on June 4, 2010.

categories for BTE facilities such as those that were delineated in the Major Source MACT Standard (stoker, fluidized bed, fuel cell oven, and suspension burner/Dutch oven). U.S. EPA staff acknowledged they did not have the information on the combustion types used for the Area Source Standard for biomass. It appears that the Area Source CO Standard may have been developed relative to what fluidized bed combustors can achieve. The analysis did not take into account that there are significant technological differences among biomass combustor designs and the associated emissions. Most BTE facilities in California utilize a stoker, Dutch oven or fuel cell oven design. Any proposed standard should be based on the ability of a particular combustion technology to reasonably meet the limits established by regulation.

3. The proposed MACT Standards did not take into account the technological and economic feasibility for some of the existing BTE facilities to meet the proposed emission limits. The supporting documentation to the MACT Standards stated that boilers with CO emission levels between 400 parts per million (ppm) and 1,000 ppm (at 3 percent O₂) could install a Linkageless Burner Management Systems (LBMS) for under \$20,000 dollars. However, there is no documentation that these systems can or have been successfully retrofitted to existing BTE facilities using stoker or fuel cell oven combustion to achieve the proposed levels. For units burning biomass, the draft regulatory analysis estimated that 72 percent of the units are exceeding the MACT floor emission limits, and that these units would need to install an LBMS. Based on ARB staff conversations with several stoker burner manufacturers, we could find no stoker units that have been retrofitted with these systems. Further, these manufacturers stated that a successful retrofit to meet the proposed standards was doubtful based on the inherent leakage of air in these types of facilities. In consulting with several LBMS manufacturers, none of these manufacturers were aware of any retrofits of stoker type boilers with a LBMS system. ARB recommends U.S. EPA conduct a more thorough analysis of the feasibility and costs for existing biomass facilities utilizing stoker or fuel cell/Dutch oven combustors to be retrofitted with a LBMS system.
4. BTE facilities required to install an oxidation catalyst to meet the proposed CO emission limit may have space limitations or other engineering constraints which would prevent the installation of the additional control equipment. For example, the temperature regimes at the catalyst placement site may not be high enough for the catalyst to function properly. In this case, additional heat (by co-firing) will be needed to get the exhaust temperature within the required temperature range. This co-firing will result in an increase of NO_x and other pollutants and may also trigger NSR in California. ARB recommends U.S. EPA perform a more thorough analysis on the feasibility of existing facilities to meet the proposed standards.
5. The proposed MACT Standards did not take into account California's long history of comprehensive toxics control programs. ARB's statewide air toxics program was established in the 1983 under the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner) which created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987) supplemented the AB 1807 program, by requiring a statewide air toxics inventory as well as notification of people exposed to a significant health risk. Facilities that are

found to pose a significant health risk to the community are required to reduce their risk below the level of significance through a risk management plan. All HAPs identified by U.S. EPA are included in California's list of toxic air contaminants (TAC) and additional chemicals have also been added to the list by ARB, based on toxicity and potential exposure. Over 600 substances have been listed under the Act.

In addition, districts include a TAC review during the permitting process for new and modified facilities. Sources emitting TACs must comply with district requirements regarding risk assessment and risk management of TAC emissions. Screening analyses and health risk assessments are performed as part of the permitting process. In the case of unacceptable health risks, districts require mitigation to reduce the risk.

Since the goal of U.S. EPA in developing any MACT standard is to reduce public exposure to hazardous air pollutants, any analysis conducted should include consideration of existing state programs that accomplish or contribute to the same goal.

**Comments Prepared by the
California Bioenergy Interagency Working Group**

The California Bioenergy Interagency Working Group consists of state agencies which have a role in bioenergy, including the California Environmental Protection Agency and Resources Agency, and various commissions, departments and boards such as the California Energy Commission and Public Utilities Commission, which are responsible for energy policy, financing and electricity rate setting; California Air Resources Board and Water Resources Control Board, which deal with environmental permitting; and the California Department of Resource Recycle and Recovery (CalRecycle), Department of Forestry and Fire Protection (CalFire), and Department of Food and Agriculture, which are responsible for resource management and related waste disposal. The Working Group's comments are as follows:

1. If implemented as proposed, the MACT regulations will have a significant impact on the ability of biomass-to-energy facilities to continue to operate in the State and the State's ability to meet its 33 percent renewable energy goals by 2020.
2. Development of biomass as an energy source is very important to the State of California. The State, through Governor Schwarzenegger's Executive Order S-06-06, establishes a 20 percent target for biomass within its established State goals for renewable generation for 2010 and 2020. Currently, generation from biopower resources provides about 20 percent of California's renewable energy or an estimated 2.8 percent of California's total in-state power generation.
3. In order to support biomass facilities and other renewable energy resources, California imposes a public goods charge to provide incentives and financial support to make them economically viable. More than 70 percent of California's biopower generation from solid-fuel biomass facilities in the State receives funding from this program.
4. Despite State subsidies, the total generating capacity from solid fuel biomass has decreased from 994 megawatts (MW) in the 1990s to 667 MW today, despite a potential to generate 3,421 MW from biomass resources. Only one new facility has been developed since 2000.
5. The power plants also have existing power purchase agreements and would not be able to pass the cost of the retrofit on to utility ratepayers. The Energy Commission's analysis indicates that the existing biomass power plants would not be able to fund the retrofit needed to meet the MACT Rule and would discontinue operation.
6. The California Air Resources Board indicates that the proposed rule will not necessarily improve the air quality, and we agree that it will have unintended consequences. Specifically, the Bioenergy Interagency Working Group believes the proposed rule will have negative environmental impacts by increasing the amount of opening burning of agricultural and forest waste, there will be higher risks of wildfires, and more greenhouse gas from landfills.

7. Continued operation of the biomass-to-energy facilities supports state and federal healthy forest initiatives, helps our agricultural sector, assists solid waste disposal, and enables utilities to meet renewable energy mandates.

Comments Prepared by the
California Department of Resource Recycle and Recovery (CalRecycle)

Identification of
Non-Hazardous Secondary Materials That Are Solid Waste
Docket ID No. EPA-HQ-RCRA-2008-0329

CalRecycle is responsible for establishing California solid waste diversion goals; overseeing all waste management activities, including solid waste and tire facilities; promoting better resource management by increasing waste prevention, reuse, composting, and recycling; promoting methods to reduce greenhouse gases waste including landfill gas emission reduction and bioenergy/biofuels production; implementing programs to assess and help develop secondary materials markets; and, preventing illegal or inappropriate disposal of solid waste and mitigating any resulting hazards. The hierarchy for solid waste management in California is waste prevention, reuse, recycling, and composting; with combustion as a lower priority but preferred over landfilling. CalRecycle has been successful in increasing the diversion rate and promoting reuse of solid waste through a non-regulatory approach. Our approach relies on a collaborative effort involving the generators, local communities and industry; and less reliance on regulatory incentives such as determinations of beneficial reuse. CalRecycle's comments are as follows:

CalRecycle supports the efforts of U.S. EPA to promote the safe and effective use of non-hazardous secondary materials as fuels or ingredients in the industrial processes involving combustion. CalRecycle supports the prevention of sham recycling and speculative accumulation as these improper activities have resulted in significant hazards to public health and the environment. However, while we understand that U.S. EPA needs to be consistent with past legal determinations regarding discard and the definition of solid waste, **we urge U.S. EPA to use its discretion to amend the proposed rule to recognize the benefits of using certain secondary materials as fuel or ingredient.** We believe such action is justified from both an air quality perspective, and a resource perspective to preserve our nation's lands and meet our energy needs.

Review of the proposed rule has revealed that there may be unintended consequences that have potentially adverse affects on California's efforts to increase diversion of solid waste from landfills and to promote the recovery of low carbon fuels and energy from solid wastes. The rule as drafted adversely impacts our efforts to promote the use of conversion technologies to produce fuel or electricity from solid wastes and our waste tire diversion program. U.S. EPA can mitigate these adverse impacts by amending the proposed rule as suggested below.

1. The Scope of the Rule Impacts Small Business' Ability to Reuse Wastes

The proposed regulatory approach requires that the secondary material is under the control of the generator and complies with the legitimacy criteria to ensure that the material is not handled as a waste and is a truly beneficial fuel or ingredient product. CalRecycle staff agrees that this approach may work well for waste generated by large companies, but

using only this approach eliminates similar legitimate uses for wastes generated by residences and small businesses since they are unable to maintain control of their wastes. We would support development of a regulatory approach that addresses wastes generated by residences and small businesses and that promotes legitimate and environmental protective reuse of wastes.

2. Landfill Gas/Biogas/Biofuels

On Page 31856, U.S. EPA is asking for comments on whether landfill gas and biogas should be considered a 'traditional fuel'. CalRecycle agrees with U.S. EPA's finding that the composition of these gases is similar to natural gas. On Page 31855, U.S. EPA states that biofuels are viewed as legitimate fuel products. We believe the basis for the determination that biofuels are considered a traditional fuel is also applicable for landfill gas and biogas. The consequence of not considering these as a traditional fuel would be adverse effects on the marketability for these gases as fuel. This would reduce the demand for these fuels, which will result in increased flaring of landfill gases and thus waste a valuable resource. The proposed rule places the responsibility on the end user of the gas to establish that landfill gas or biogas meets the definition of a traditional fuel based on its chemical composition. Lastly, the consideration of landfill gas or biogas as a solid waste appears to be inconsistent with the hazardous waste regulations where uncontained gases are not regulated.

CalRecycle supports the identification of landfill gas and biogas as a traditional fuel in the final rule or as a finding in the final preamble.

3. Waste Tires

Approximately 40 million tires are generated annually in California. Approximately 75 percent of these waste tires are diverted from land disposal and are re-used in construction projects (e.g., rubberized asphalt concrete paving and tire derived aggregate (TDA) light weight backfill), landfill application (e.g., TDA in aggregate landfill gas collection systems and, as alternative daily cover), and as fuel. About nine million tires annually are used as fuel (primarily in cement kilns).

Although the use of waste tires as a fuel is not CalRecycle's preferred alternative for the reuse of waste tires, the use of waste tires as fuel and "ingredient" in cement kilns constitutes a beneficial use of these waste tires and accounts for a significant portion of the diversion rate. However, the proposed rule poses significant problems by requiring the processing of waste tires so that the steel belts are removed, in order for waste tires to be considered a legitimate fuel. The three cement plants now burning tires as a fuel in California would be treated as solid waste incinerators under the proposed rule, and because processing costs would increase, may elect to not burn waste tires. If the three plants were to stop taking the tires, the diversion rate in California for tires may be reduced significantly from about 75 percent to about 55 percent, resulting in more landfill disposal, and the potential for stockpiling or illegal disposal of tires. U.S. EPA is proposing this rule change even though the preamble for the rule recognized that cement kiln emissions are lower when burning tires as fuel instead of coal, that the metal in the steel belt is needed to make quality cement, and life cycle analysis indicates that lower greenhouse gas

emissions result from burning tires when compared to coal. It appears that the proposed regulatory approach does not consider the situation when a secondary material has a dual benefit as an ingredient and a fuel.

In response to the question on Page 31878, **CalRecycle recommends that the final rule contain a provision for waste tires used as fuel in a cement kiln to not be considered a solid waste and supports any effort by U.S. EPA to adopt an additional definition for processing that would not require the metal belts to be removed from tires or the tire be shredded when the waste tire is used in a cement kiln.**

4. Ability to Petition for a Non-Waste Determination

The proposed rule allows a petition to the U.S. EPA Regional Administrator for a non waste determination. CalRecycle supports the ability to seek a case-by-case non-waste determination due to the unknown number of situations that may be affected by the adoption of the proposed rule. On Page 31880, U.S. EPA asks for comments on allowing states to handle the petition determination process. States are more knowledgeable about solid waste activities within their respective state, have programs in place to promote safe and effective management of solid wastes in lieu of land disposal, and have the resources for regulating solid waste facilities and landfills. CalRecycle supports allowing states to handle the petition determination process for non-waste determinations.

5. How Long Should Fuels be Held Before Use

CalRecycle does not believe there is a single answer to the question on Page 31881, of how long fuels are generally held before they are used. Fuel storage varies by industry and in some cases State requirements. For example, in the case of waste tires at cement plants, California statutes provide for a maximum of a one-month supply of waste tires at a cement plant (based on the monthly consumption during the previous year). If the facility stores more tires than this limit it must obtain a waste tire storage permit and be subject to regular inspections.

6. The Proposed Rule is Unclear on How On-Going Activities Will be Addressed

The proposed rule does not address if an on-going activity that would be subject to the new rule would need to be stopped while a petition is filed and processed. Activities should not have to cease if they are meeting all existing State and Federal requirements while U.S. EPA acts on a petition that is filed within a reasonable time. The rule should include a provision for U.S. EPA (or states if delegated the authority) to accept and act on petitions within a reasonable time frame. In addition, CalRecycle staff recommends that the rule be amended to provide for a type of 'interim status' until the U.S. EPA Regional Administrator or State acts on a petition.



3379 Somis Road PO Box 8 Somis, California 93066 (805) 386-4343

May 17, 2010

Lisa Jackson, Administrator
United States Environmental Protection Agency Headquarters
Ariel Rios Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 1101A
Washington, DC 20460

RE: Comments on Boiler MACT Rule

The California Biomass Energy Alliance (“CBEA”) is a trade association of California’s 33 solid fuel biomass power plants. Every one of our facilities uses exclusively chipped wood residues and by-products from sources throughout the state to generate electric energy that serves the California grid. We have recently become aware of the proposed regulation, Boiler MACT Rule, NESHAP 40 CFR 63 Subpart DDDDD (signed 4/29/2010), that appears to incorporate renewable biomass power generating facilities into categories of fossil-fueled and waste-incineration boilers with specified emissions limitations that are far beyond the capabilities of existing technology at our facilities.

You may not be aware, but the California biomass power industry has a combined generating capacity of over 600 MW of renewable baseload power, a clean alternative to fossil fuel plants. Unlike other renewable technologies, biomass is able to provide a steady flow of power that can be counted on and scheduled regardless of external conditions. Biomass power constitutes approximately 1½ percent of the overall power generated in the State, and 17½ percent of all the renewable electric power generated in the state. The existing biomass power industry provides California with significant economic and environmental benefits:

- Diverting over 6 million tons of unmarketable wood annually for fuel, preventing the alternate, much more environmentally harmful, and greenhouse gas (GHG) generating, disposal of this material, such as landfilling, open-burning, or biodegrading or burning in the forest (via wildfire or prescribed burn).
- Providing a reduction of over 3.75 million tons per year (MTPY) of GHG emissions (Pacific Institute, May 2008) by diverting the unmarketable wood from alternate disposal methods. Further, an additional 3 MTPY of avoided GHG emissions result from the California biomass industry's displacement of fossil-fueled generation.

- Reducing emissions of criteria pollutants by preventing open-field burning of 1.5 million tons of agricultural residues (e.g. orchard prunings and removals) each year; the California biomass industry's use of these materials as fuel, reduces emissions of criteria pollutants by approximately 97%, including particulate matter, carbon monoxide, and oxides of nitrogen. Indeed, many of the California biomass plants are required by permit to collect agricultural residues that would otherwise be open-burned.
- Providing an effective means of disposal of forest thinning material. Biomass material removed from the forests reduces the risk of wild fires, protects life and property through the expansion of urban-wildland interface areas and promotes forest health and watershed management.
- Creating of over 750 direct jobs on-site at the facilities and 1,200 to 1,500 dedicated indirect jobs in the fuel supply infrastructure. These are green jobs mostly in rural areas of the State.

Today, not only do these facilities help meet California renewable energy mandates (AB 1078, Sher) they are an integral part of local governments' ability to meet their landfill diversion requirements (AB 939, Sher). As a carbon neutral technology, biomass is playing a growing role helping California meet its greenhouse gas reductions targets (AB 32, Pavley).

The proposal distributed by EPA calling for a biomass plant emission standard for CO of 160 ppm is unmanageable. Such a limitation would have devastating impacts on the biomass industry. The technology incorporated in converting unmarketable wood material into renewable energy does not currently lend itself to any known retrofits or modifications that would allow for such a standard to be obtained. All of the California biomass power plants are currently regulated by the Air Pollution Control District or Air Quality Management District of jurisdiction, and all the biomass plants utilize Best Available Control Technology (BACT) for emission control, under California's typically strict air quality regulatory structure. To the extent that EPA continues on its course to drastically reduce the permitted levels of CO allowed, biomass plants will be shuttered. Agricultural residue burning will increase in the Central, Coachella and Imperial Valleys and in-forest thinning operations throughout the State. Workers will be unemployed. Ultimately, California air quality will degrade.

We are doubtful that the removal of this essential California industry that complies with its environmental laws is what the US EPA intended when drafting this regulation.

CBEA urges EPA to not put in jeopardy the progress California is making on these environmental programs. Renewable biomass power should be exempted from the Boiler MACT regulation.

Ms. Lisa Jackson
Re: Comments on Boiler MACT Rule
May 17, 2010
Page 3

Thank you for your consideration.

Sincerely,



W. Phillip Reese, Chairman
California Biomass Energy Alliance

cc: The Honorable Arnold Schwarzenegger, Governor, State of California
The Honorable Diane Feinstein, United States Senate
The Honorable Barbara Boxer, United State Senate
California Congressional Delegation
The Honorable Lester Snow, Secretary, California Natural Resources Agency
The Honorable Linda Adams, Secretary, California Environmental Protection Agency
The Honorable Karen Douglas, Chair, California Energy Commission
The Honorable James Boyd, Commissioner, Renewables Committee Chair, California
Energy Commission
The Honorable Mary Nichols, Chair, California Air Resources Board
Gina McCarthy, Assistant Administrator, USEPA Office of Air and Radiation

Mr. WHITFIELD. Thank you very much, Dr. Gilman.
Mr. Walke, you are recognized for 5 minutes.

STATEMENT OF JOHN D. WALKE

Mr. WALKE. Thank you, Mr. Chairman and members of the subcommittee for the opportunity to testify today. My name is John Walke and I am Clean Air Director and Senior Attorney for the Natural Resources Defense Council.

The two bills that are the subject of today's hearing weaken the Clean Air Act drastically to authorize the indefinite delay of toxic air pollution standards for incinerators, industrial boilers and cement plants. Worse, these bills rewrite the Clean Air Act and overturn multiple Federal court decisions to eviscerate strong toxic pollution standards that under current law must be applied to control dangerous toxic emissions from these facilities. Industrial boilers and cement plants are some of the largest emitters of mercury and scores of other toxic pollutions that are still failing to comply with basic Clean Air Act requirements for toxic pollution over 2 decades after adoption of the 1990 Amendments. That is not responsible public policy.

Were these standards to be delayed by even a single year by these two bills, the potential magnitude of extreme health consequences would be as follows: up to 9,000 premature deaths, 5,500 nonfatal heart attacks, 58,000 asthma attacks and 440,000 days when people must miss work or school due to respiratory illness. Yet H.R. 2250 blocks mercury and air toxic standards for a minimum of 3.5 years, causing an additional 22,750 premature deaths, 14,000 nonfatal heart attacks and 143,000 asthma attacks beyond what current law will prevent.

By the same token, H.R. 2681 blocks mercury and air toxic safeguards for a minimum of nearly 5 years, causing an additional 11,250 premature deaths, 6,750 nonfatal heart attacks and 76,500 asthma attacks beyond what current law will prevent. EPA estimates that the value of the health benefits associated with the boiler standards and incinerators are between \$22 billion to \$54 billion compared with industry compliance costs estimated at only \$1.4 billion. EPA has found the benefits of the cements standards to be as high as \$18 billion annually with benefits significantly outweighing costs by a margin of up to 19 to 1. Let me emphasize in the strongest possible terms that these bills are not mere "15-month delays of the rules as EPA itself has requested" as some have cast this legislation.

First, the bills embody the complete evisceration of the substantive statutory standards for achieving reductions in toxic air pollution. The final sections of both bills eliminate the most protective legal standard for reducing toxic air pollution that has been in the Clean Air Act for nearly 21 years. The two bills replace this with the absolute least protective measure even mentioned in the law. It is not defensible policy and represents overreaching beyond the representations of the bills' timing features. This single provision in both bills would have the effect of exempting incinerators, industrial boilers and cement plants from maximum reductions in toxic air pollution emissions in contrast to almost every other major industrial source of toxic air pollution in the Nation. Second,

the bill eliminates any statutory deadlines for EPA to reissue standards to protect Americans. Both steps are unprecedented in this committee or in any other legislation introduced in Congress, to my knowledge.

I hope you will not vote for these bills, but if members have already decided to do so, I respectfully appeal to your sense of honesty and decency to do at least this: please explain clearly to your constituents, to the church congregations in your districts, to all Americans, why you are voting to actively eliminate protections for children and the unborn against industrial mercury pollution and brain poisoning. Especially those among you that are on record for protecting children and the unborn in other contexts, please explain why there is a double standard where it is acceptable to actively dismantle existing protections for children and the unborn against industrial mercury pollution.

In closing, I urge you not to weaken the Clean Air Act so profoundly and cause so much preventable premature deaths, asthma attacks and mercury poisoning. I welcome any questions about my testimony, especially regarding any disagreements about factual or legal characterizations concerning the two bills. Thank you.

[The prepared statement of Mr. Walke follows:]

Summary of Testimony by John D. Walke

H.R. 2250 and H.R. 2681 together weaken the Clean Air Act dramatically to authorize the indefinite delay of toxic air pollution standards for industrial boilers, incinerators, and cement plants. Worse, these bills rewrite the Clean Air Act and overturn multiple federal court decisions to eviscerate strong toxic air pollution standards that now must be applied to control dangerous dioxin, acid gas, and lead and mercury pollution from these facilities.

Industrial boilers and cement plants are some of the largest emitters of mercury and scores of other toxic air pollutants that still are failing to comply with basic Clean Air Act requirements for toxic pollution over two decades after adoption of the 1990 amendments to this landmark statute. This situation is due to unlawful delays and standards by the prior administration that have resulted in the obligation by the present EPA to re-propose and re-issue lawful air toxics standards to protect the public. EPA's mercury and air toxics standards for these two industrial sectors will deliver enormous public health benefits. Were these standards to be delayed by even a single year, the potential magnitude of extreme health consequences would be as follows:

- 9,000 premature deaths;
- 5,500 non-fatal heart attacks;
- 58,000 asthma attacks;
- 5,950 cases of acute or chronic bronchitis;
- 110,000 cases of upper or lower respiratory symptoms;
- 6,040 hospital admissions and emergency room visits;
- 440,000 days when people must miss work or school; and
- 2,650,000 days when people must restrict their activities.

It would be irresponsible to deny these health benefits to the American people. Toxic air pollution standards for these industries will protect all Americans from the serious health consequences that uncontrolled and poorly controlled toxic air pollution from these plants otherwise would cause.

TESTIMONY OF JOHN D. WALKE

CLEAN AIR DIRECTOR

NATURAL RESOURCES DEFENSE COUNCIL

LEGISLATIVE HEARING ON "H.R. 2250, THE EPA REGULATORY RELIEF ACT OF 2011

AND H.R. 2681, THE CEMENT SECTOR REGULATORY RELIEF ACT OF 2011"

BEFORE THE SUBCOMMITTEE ON ENERGY AND POWER,

COMMITTEE ON ENERGY AND COMMERCE

U.S. HOUSE OF REPRESENTATIVES

SEPTEMBER 8, 2011

Thank you, Mr. Chairman and members of the Subcommittee, for the opportunity to testify today. My name is John Walke, and I am clean air director and senior attorney for the Natural Resources Defense Council (NRDC). NRDC is a nonprofit organization of scientists, lawyers, and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 1.2 million members and online activists nationwide, served from offices in New York, Washington, Los Angeles, San Francisco, Chicago, and Beijing. I have worked at NRDC since 2000, and before that I was a Clean Air Act attorney in the Office of General Counsel for the U.S. Environmental Protection Agency. Over the last decade, I represented NRDC in many of the rulemakings and lawsuits concerning mercury and air toxics standards discussed in my testimony.

Toxic Air Pollution Standards for Industrial Boilers, Incinerators, and Cement Plants

Today's hearing addresses mercury and air toxics standards from two of the three largest sources of industrial mercury pollution in the United States – industrial boilers and incinerators and cement plants. None of these industrial sources of mercury pollution today meets Clean Air

Act requirements to reduce toxic pollution, over two decades after the adoption of the 1990 amendments to the Act.

Since the 1990 amendments, over one hundred air toxics standards have been adopted covering many hundreds of industrial source categories, including chemical plants, oil refineries, manufacturers, steel plants and others. But with respect to cement plants and industrial boilers and incinerators, this period has only meant inexcusable delay and unlawful standards, all resulting in a failure to achieve legally required reductions in these facilities' toxic air pollution. The final and proposed health safeguards for these industrial categories will deliver enormous health benefits to the American people every year.

In sharp contrast, H.R. 2250 and H.R. 2681, two bills aimed at exempting industrial boilers and incinerators, and cement plants, respectively, from toxic air pollution standards, would substitute the Clean Air Act's strongest health protections under the law for the weakest and worst possible alternatives under the Act. These bills set the stage for indefinite and permanent delays of toxic air pollution standards for industrial boilers, incinerators and cement plants. The legislation shockingly substitutes so-called "work practice standards," oftentimes mere tune-ups, for actual emissions standards that would require these two industries, like hundreds before them, to reduce their toxic air pollution at all, much less by the maximum reduction standard that the Clean Air Act has required for the past twenty-one years.

Industrial boilers and incinerators and Portland cement manufacturers are some of the largest industrial emitters of mercury pollution in the U.S. Exempting these facilities from meeting the law's longstanding protective measures for reducing toxic air pollution, following decades of delay, would have enormous and deadly consequences for the American people. Let me emphasize in the strongest possible terms that these bills are not mere "15 month delays of

the rules as EPA itself has requested,” as some have misrepresented the legislation. Instead the bills reflect the complete evisceration of the substantive standards for achieving reductions in toxic air pollution, coupled with the elimination of any statutory deadlines for EPA to re-issue standards to protect Americans. Both steps are unprecedented in this Committee or any other legislation introduced in Congress to my knowledge.

The 1990 amendments to the Clean Air Act requiring maximum reductions in deadly neurotoxins, carcinogens and other air toxins were passed by overwhelming bi-partisan majorities of 401 to 21 in the House and 89 to 11 in the Senate. Members voting for the law that remain in Congress today include Congressmen Barton, Upton, Stearns and Waxman of this committee, Senator McConnell, and other conservative Democrats and Republicans.

No one has made the case at this hearing or an earlier hearing how or where EPA is issuing air toxic standards inconsistent with the statute or governing caselaw. No one has demonstrated or even claimed that mercury or arsenic or lead are less dangerous than was believed in 1990. No one has explained why these industrial sectors -- the second and third worst mercury polluters -- should be controlled less protectively than the one hundred plus industrial standards adopted by Republican and Democratic administrations alike in the past 20 years without economic harm.

There are 3 obvious differences about the circumstances surrounding these rules: first, the last administration issued illegal and unprotective rules that need to be fixed to follow the law.¹ Second, the corrected standards were issued by a Democratic president. And third, this happened following a change in political parties controlling this chamber during the last election. None of those differences provides a sound policy basis for refusing to achieve protective reductions in mercury and carcinogens from these industrial sectors.

¹ See generally http://switchboard.nrdc.org/blogs/jwalke/out-of-control_criticism_of_ep.html.

Health Benefits

Cement plants: EPA's final mercury and air toxics standards for cement plants are estimated to save as many as 2,500 lives every year by 2013.² The standards also will prevent up to 17,000 cases of aggravated asthma, 1,500 heart attacks, 32,000 cases of upper and lower respiratory symptoms, and 130,000 days of lost work annually by the year 2013.

The safeguards will reduce annual emissions of cement plants' mercury by 16,600 pounds (a 92% cut), acid gases by 5,800 tons (97% cut), soot pollution by 11,500 tons (92% cut) and sulfur dioxide pollution by 110,000 (78% cut).³

These standards will produce benefits of \$6.7 billion to \$18 billion annually, yielding benefits that outweigh costs by a factor of up to 20 to 1.

Boilers and process heaters: EPA's March 2011 final mercury and air toxics standards for industrial, commercial and institutional boilers and process heaters are estimated to save as many as 6,500 lives every year by 2014.⁴ The safeguards also will prevent up to 41,000 cases of aggravated asthma, 4,000 heart attacks, 1,600 cases of chronic bronchitis, 3,700 cases of acute bronchitis, 4,300 hospital and emergency room visits, 78,000 cases of respiratory symptoms, and 310,000 lost work or school days every year starting in 2014.

EPA estimates that the value of the health benefits associated with the standards are between \$22 billion to \$54 billion starting in 2014, compared with industry compliance costs estimated at only \$1.4 billion.

² See generally U.S. EPA, Fact Sheet, Final Amendments to National Air Toxics Emission Standards and New Source Performance Standards for Portland Cement Manufacturing available at http://www.epa.gov/ttn/atw/pcem/pcem_fs_080910.pdf (last visited Sept. 6, 2011) ("Portland Cement Fact Sheet").

³ *Id.*

⁴ See generally Fact Sheet, Final Air Toxics Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Source Facilities available at <http://www.epa.gov/airquality/combustion/docs/20110221mboilersfs.pdf> (last visited Sept. 6, 2011) (Boilers Fact sheet).

Legislative Analysis

H.R. 2250 Indefinitely Delays Toxic Air Pollution Safeguards for Industrial Boilers and Incinerators, and Repeals Critical Clean Air Act Provisions.

H.R. 2250, the “EPA Regulatory Relief Act of 2011,” severely weakens and delays Clean Air Act safeguards to reduce mercury, toxic metals, acid gases and other hazardous air pollution from industrial boilers and incinerators.

The legislation fundamentally weakens the Clean Air Act by:

- 1) Setting the stage to delay industry compliance deadlines *indefinitely*, and by at least a *minimum* of 3.5 years -- resulting in:
 - Over 100,000 tons of additional unregulated toxic air pollution, including mercury, toxic metals, dioxins and acid gases;
 - 1.54 million tons of sulfur dioxide pollution;
 - Up to 22,750 premature deaths;
 - 14,000 non-fatal heart attacks; 143,000 asthma attacks; and
 - Over one million days when people miss work or school.⁵
- 2) Rewriting the Clean Air Act to entirely remove the law's longstanding obligation to achieve maximum reductions in hazardous air pollution based on the best performers in an industrial sector, substituting instead ineffectual work practices that need not achieve *any* emissions reductions;
- 3) Overturning federal court decisions enforcing the Clean Air Act; and
- 4) Deleting provisions in the Clean Air Act that courts have upheld as unambiguously clear and protective.

⁵ *Id.*

H.R. 2250 – Section-by Section-Analysis

Section 2: This provision voids EPA’s current toxic air pollution rules for industrial boilers and incinerators and prevent EPA from re-adopting new protections for a *minimum* of 15 months following enactment of the bill, while setting the stage for *indefinite delay*.

Analysis: This section of the bill requires EPA to redo its entire rulemaking process and does not allow EPA to finalize any regulations relating to these facilities until *at least* 15 months after enactment of H.R. 2250.

Toxic air pollution standards for industrial boilers and incinerators are already nearly a decade overdue under the Clean Air Act. On September 13, 2004, EPA promulgated national emission standards for hazardous air pollutants (“NESHAPs”) for new and existing industrial boilers and incinerators. In 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the 2004 standards. Pursuant to the Court’s opinion, and in order to comply with the court’s remand order, EPA re-proposed toxic air pollution standards for these facilities in June of 2010. The agency finalized the standards pursuant to a court order on March 21, 2011. On that same day, EPA announced that the Agency would reconsider portions of the standards. In a June 2011 press release, EPA announced a timeline that requires final rules by April 2012. The agency stated that this timeline “is the best approach to put in place technically and legally sound standards that will bring significant health benefits to the American public.”⁶ Assuming EPA proceeds on this timetable, by the time toxic air

⁶ See EPA Press Release, “EPA Announces Timeline for Reconsideration of Air Toxics Standards for Boilers and Certain Incinerators, Open and transparent process will strengthen the basis for the protective, cost-effective and achievable standards,” available at <http://yosemite.epa.gov/opa/admpress.nsf/6424ac1caa800aab85257359003f5337/5530a05d25ddd683852578b900533312!OpenDocument> (last visited Sept. 6, 2011)

pollution standards for these facilities are finalized, they will already be almost a decade overdue.

H.R. 2250 sets the stage to delay these rules permanently, by providing in section (2)(A)(2) the Administrator *must* delay toxic air pollution standards for industrial boilers and incinerators by at least 15 months, and deletes any statutory deadline for EPA ever to re-promulgate standards. Instead of longstanding, mandatory deadlines, the legislation substitutes a mere instruction that EPA may finalize future standards “on such later date as may be determined by the Administrator.” This puts critical safeguards against toxic air pollution for all Americans at the whim of political winds in future administrations, something Congress never has previously allowed.

Finally, this section deletes two longstanding federalism provisions of the Clean Air Act that Congress adopted to grant state and local officials backstop authority to reduce toxic air pollution when EPA standards were unduly delayed, Clean Air Act sections 112(g)(2) and 112(j).

Section 3: These provisions further delay the law’s health protections by a number of years and weaken the rigorous legal standards for reducing toxic air pollution from incinerators and other industrial polluters.

Analysis: Section 3(a)(1) eliminates the Clean Air Act’s deadline requiring industry compliance no later than 3 years after final standards are issued, and prohibits EPA from setting compliance deadlines any earlier than 5 years after the effective date of the standards. Coupled with the minimum 15 month delay described above, H.R. 2250 would push back the earliest possible compliance date for these facilities *until early 2018, rather than the 2014 deadline that current standards establish.*

Again, the bill is worded so that this extension is only the *minimum* amount of delay. Specifically, the bill requires only that compliance deadlines not be *earlier* than 5 years after the effective date of the standards. This means compliance deadlines could be set 10, 15, or even 20 years after the effective date of the regulations, drastically exceeding the current Clean Air Act's outside compliance deadline of 3 years.

Section 3(a)(2) requires the Administrator to take into consideration a list of additional factors in setting the extended compliance deadlines. This reflects a list of factors that the federal appellate court for the D.C. Circuit ruled in 2001 may *not* be considered in setting emissions standards for toxic air pollution under the Clean Air Act.⁷ H.R. 2250 thus overturns court precedent to authorize indefinitely delayed standards based on factors that courts have ruled to be unlawful in setting toxic air pollution standards.

Section 4: These provisions overturn a 2007 D.C. Circuit court decision and adopt a definition of "solid waste" that has the practical effect of exempting virtually all toxic waste-burning facilities from the protective standards that apply to incinerators under the Clean Air Act.⁸ The bill defines "solid waste incineration unit" to exclude any unit that recovers energy from burning waste and has the effect of exempting thousands of these facilities from any meaningful obligation to control or measure their toxic air emissions.

Analysis: The D.C. Circuit court forcefully rejected the very same definition of solid waste that H.R. 2250 sec. 4(1) seeks to adopt.⁹ The court held that the definition was "inconsistent with the plain language" of the Clean Air Act and sent the rule back to EPA to follow the law. Section 4 of H.R. 2250 has the effect of rewriting section 129 of the Clean Air

⁷ *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855 (D.C. Cir. 2001).

⁸ *NRDC v. EPA*, 489 F. 3d 1250 (D.C. Cir. 2007).

⁹ *Id.*

Act, an important section that courts already have found to be unambiguously clear, and that requires EPA to set protective incinerator standards for any unit that burns any solid waste. From a practical standpoint, section 4 of the bill has enormous implications. The definition dictated by this section would make it legal for industrial facilities in communities across America to burn numerous toxic materials for energy without controlling, monitoring or reporting the pollution that results. This would allow facilities to burn things like used chemicals and solvents and plastic for energy without cleaning up or reporting the toxic air pollution. Burning these same materials as trash would require pollution controls. There is no coherent explanation to the American people why they should be compelled to breathe uncontrolled emissions of carcinogens and neurotoxins from smokestacks that are recovering energy from that combustion process, while facilities that recognize these identical substances to be toxic waste combusted with no energy recovery must control those emissions.

Section 5: These provisions turn the current Clean Air Act's safeguards for toxic air pollution from these facilities on their head. The bill would replace emissions standards based upon the best performing boilers and incinerators with toxic air pollution practices dictated by the lowest common denominator of industrial polluters. Most troubling, the bill entirely repeals Maximum Achievable Control Technology standards ("MACT" standards) as applied to these facilities. MACT standards are the cornerstone of the Clean Air Act's toxic air pollution provisions, and the bill would entirely exempt industrial boilers and incinerators from having to meet these standards.

Analysis: A long line of D.C. Circuit cases has soundly rejected the weaker pollution approach put forth in the legislation.¹⁰ The court repeatedly has affirmed that the Clean Air Act

¹⁰ See, e.g., *Sierra Club v. EPA*, 479 F.3d 875 (D.C. Cir. 2007).

requires toxic air pollution standards to be “based on the emission level actually achieved by the best performers (those with the lowest emission levels).” In sharp contrast, section 5(a) of the bill would weaken the Clean Air Act by compelling EPA to set pollution standards based on the emissions of the dirtiest boilers in operation. The court expressly held that identifying the “worst-performing source” and setting the standards “at the emission level of that source” was an “impermissible reading of the statute’s unambiguous language.”¹¹

Industry representatives have decried the longstanding practice of achieving maximum reductions in hazardous air pollutants on a “pollutant-by-pollutant” basis, rather than some other vague aggregate basis that these representatives never fully describe or reconcile with the statute. It is important to recognize that EPA *always* has set Maximum Achievable Control Technology standards on this very same pollutant-by-pollutant basis for the over one hundred MACT standards it has set, under each administration since adoption of the 1990 amendments. Despite filing an unsuccessful lawsuit over this practice only recently, industry groups have *never* managed to identify a single MACT standard that has been based upon industry’s incoherent and unprotective approach. Finally, *no* court decision has ever sided with industry or ruled that the statute compels, or even allows, this approach.

The plain language and structure of Clean Air Act sections 112 and 129 require EPA to set not one lowest common denominator standard for all hazardous air pollutants, but individual numeric emission standards for specific pollutants. CAA §112; §129. For example, section 129(a)(4) requires EPA to set not one “MACT standard,” but individual numeric emission standards for specific pollutants. 42 U.S.C. § 7429(a)(4). Section 129(a)(2) provides that these standards must meet specific stringency requirements. 42 U.S.C. § 7429(a)(2). Together, these sections require EPA to set an individual standard for each pollutant that requires the maximum

¹¹ *Id.*

“achievable” degree of reduction. Thus, EPA must calculate a floor for each pollutant reflecting the emission level that the relevant best sources actually “achieved.”

Since 1997, the courts have consistently repeated that EPA must set section 112 MACT emission standards based on the best-performing source for *each* pollutant. *See, e.g., Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855 at 858 (D.C. Cir. 2001)(“[T]he Agency first sets emission floors for each pollutant and source category....”). Further, industry critics of EPA’s pollutant-by-pollutant approach cannot cite to a single case or decision that did not follow EPA’s pollutant-by-pollutant approach to sections 112 or 129. In fact, of the over 100 MACT standards for myriad other industrial categories that have been promulgated to date, industry’s preferred substitute approach has never been used.

Industry groups would argue that MACT floors should be set based on plants that are “best” with respect to *all* pollutants at one time. This would have the illogical and unprotective result of basing emissions limitations on a source that is not the best-performing source for *any* single covered pollutant. This would mean that for some pollutants, emissions standards would be set based on the *worst*-performing unit, rather than the *best*-performing unit, as compelled by the statute. Industry has conceded in legal briefs that their “single plant” approach would mean that the best performers for some pollutants are the worst performers for others. The practical impact of this industry-preferred standard would be disastrous to public health. As such, EPA has never adopted this approach, under Republican or Democratic administration. The plain language of the Clean Air Act compels EPA’s pollutant-by-pollutant approach, and industry’s contorted arguments that have not succeeded in court or appeals to different administrations should not be embraced by Congress to produce dramatically weaker emissions standards. The pollutant-by-pollutant approach used by EPA in over one hundred MACT standards to date has

achieved meaningful reductions in toxic air pollution, and we should support EPA in protecting the American public while achieving these enormous reductions.

Perhaps the most radical provision of all of H.R. 2250 is found in Section 5(b), which mandates that EPA set “the least burdensome” standard, “including work practice standards,” when setting toxic air pollution standards for industrial boilers and incinerators. This means least burdensome to polluters and most burdensome to people. Work practice standards, by their very definition, run counter to mandated emissions standards required by §112(d) of the Clean Air Act. Work practice standards, found in §112(h), are to be promulgated expressly when “it is *not feasible*” for the Administrator to promulgate emissions standards under §112(d) of the Act that *actually reduce emissions*. In such a case mere work practice standards may be issued “in lieu of” these standards. §112(h)(emphasis added). This sleight-of-hand substitution of the most protective standard for reducing toxic air pollution with the least protective measure mentioned in the law represents gross over-reaching. It is not defensible public policy. This single provision of H.R. 2250 would have the effect of exempting industrial boilers and incinerators from maximum reductions in toxic air pollution emissions, in contrast to almost every other major industrial source of toxic air pollution in the nation. This section also eviscerates the existing Clean Air Act section §112(h) itself, in that it would eliminate the requisite finding of infeasibility mandated by the section before EPA may resort to ineffectual work practice standards. These changes would radically distort the Clean Air Act’s twenty-year approach to controlling toxic air pollution and would have enormous health impacts.

H.R. 2681 Indefinitely Delays Toxic Air Pollution Safeguards for Cement Plants, and Repeals Critical Clean Air Act Provisions

H.R. 2681 indefinitely delays clean-up of toxic air pollution from cement plants and gives cement plants a free pass from controlling emissions that lead to the creation of smog and

soot pollution. According to EPA, Portland cement manufacturing is the third-largest source of mercury air emissions in the U.S.¹² Toxic air pollution standards for cement plants went into effect in September 2010.¹³ These standards are already 13 years overdue, and H.R. 2681 would further delay standards by a minimum of 4.5 years, while eliminating any deadline for EPA to act and setting the stage for *indefinite* delay.

Just as H.R. 2250 would give incinerators and industrial boilers a free pass from cleaning up their toxic air pollution, this bill purports to give EPA “more time” to complete standards for cement plants, ignoring the fact that EPA already has completed standards for these facilities. The bill also distorts the Clean Air Act by basing toxic air pollution standards for cement plants on the dirtiest plants, rather than the cleanest currently in operation, and weakens the law to allow indefinite delay of these fundamentally weakened standards.

Toxic air pollution standards for cement plants are already 13 years overdue. H.R. 2681 further delays these already adopted standards by *a minimum of 4.5 years*. Blocking these standards would result in the following harms *every year* they are delayed:

- up to 2,500 premature deaths;
- 1,500 heart attacks;
- 1,500 emergency room visits; and
- over 100,000 missed work days.¹⁴
- The standards are also expected to reduce the amount of mercury that deposits on land and water by as much as 30% in some areas of the country, especially in those areas located nearest to cement kilns.

EPA has found that the benefits of these health standards will be as high as \$18 billion annually starting in 2013, with benefits significantly outweighing the costs by a margin of up to 19:1.

¹² See Fact Sheet, Portland Cement available at http://www.epa.gov/ttn/atw/pcem/pcem_fs_080910.pdf

¹³ See generally

<http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/ef62ba1cb3c8079b8525777a005af9a5!OpenDocument>

¹⁴ See *supra*, Fact Sheet, Portland Cement

Moreover, EPA analyzed various studies and concluded the standards could create up to 1,300 jobs.

H.R. 2681 – Section – by – Section Analysis

Section 2: Within Section 2 alone, H.R. 2681 has the immediate effect of setting toxic air pollution standards for cement plants back by at least two years.

Analysis: First, Section 2(a) requires EPA to re-propose both already finalized toxic air pollution standards (MACT standards) and already finalized New Source Performance Standards (“NSPS”) for Portland cement plants at least 15 months after the bill is enacted. Further, the section requires that the Administrator specify what constitutes non-hazardous or hazardous waste as applied to this sector on the same open-ended timeline.

In addition to this delay, section 2(b) blocks EPA’s already-finalized MACT standards and NSPS for Portland cement plants. Since these rules went into effect a year ago, this provision has the effect of immediately building in an over two year delay at the very outset of the bill. Section 2(b) also stays NSPS for Commercial and Industrial Solid Waste Incineration Units, and, like H.R. 2250, also targets and blocks EPA’s recently finalized definition of non-hazardous solid waste.

Again, like H.R. 2250, this provision causes a minimum two-year delay, but in actual fact sets the stage for indefinite delay by allowing standards for these facilities to be set *at least 27* months after EPA’s September 2010 final standards, or “on such later date as may be determined by the Administrator.” As such, H.R. 2681 also deletes any statutory deadline for EPA ever to re-promulgate standards. For longstanding, mandatory deadlines, the legislation substitutes a mere instruction that EPA may finalize future standards “on such later date as may be determined by the Administrator.” The puts critical safeguards against toxic air pollution for all

Americans at the whim of political winds in future administrations, something Congress never has previously allowed.

Sections 3, 4, and 5: These sections are substantively identical to H.R. 2250's, the implications of which are described at length above in the section-by-section analysis to that bill.

Analysis: As applied to Portland cement plants, these provisions rewrite and weaken the Clean Air Act to extend industry compliance periods from 3 to 5 years, overturn D.C. Circuit legal precedents, and eliminate the requirement that cement plants achieve longstanding requirements for maximum reductions in toxic air pollution. Taken together, these provisions would create an oversized loophole exempting cement plants from almost all requirements to control their toxic air pollution. Cement plants, like industrial boilers, are some of the nation's largest industrial sources of toxic air pollution such as cancer-causing dioxins, acid gases, and mercury. Exempting this industrial group from meaningful toxic air pollution standards will have enormous and deadly consequences to the American public.

In particular, Section 5(b) of the bill is particularly destructive. Like H.R. 2250, this section mandates that EPA set "the least burdensome" standard, "including work practice standards," when setting toxic air pollution standards for cement plants. This means least burdensome to polluters and most burdensome to people. Work practice standards, by their very definition, run counter to mandated emissions standards required by §112(d) of the Clean Air Act. Work practice standards, found in §112(h), are to be promulgated expressly when "it is *not feasible*" for the Administrator to promulgate emissions standards under §112(d) of the Act that *actually reduce emissions*. In such a case mere work practice standards may be issued "in lieu of" these standards. §112(h)(emphasis added). This sleight-of-hand substitution of the most

protective standard for reducing toxic air pollution with the least protective measure mentioned in the law represents gross over-reaching. It is not defensible public policy.

This single provision of H.R. 2681 would have the effect of exempting industrial boilers and incinerators from maximum reductions in toxic air pollution emissions, in contrast to almost every other major industrial source of toxic air pollution in the nation. This section even eviscerates the existing Clean Air Act section §112(h) itself, in that it would eliminate the requisite finding of infeasibility mandated by the section before EPA may resort to ineffectual work practice standards. These changes would radically distort the Clean Air Act's twenty-year approach to controlling toxic air pollution and would have enormous health impacts.

EPA first issued standards for the Portland cement industry in 1999. The Court of Appeals for the D.C. Circuit struck down portions of these standards in 2000, and remanded these illegal portions back to the agency. EPA amended parts of those standards in 2006, but intervening D.C. Circuit court decisions made clear those 2006 standards were unlawful as well. Not until September of 2010, after taking those court decisions into account, did the Agency finalize amended standards for the industry. Should EPA proceed with its finalized standards, existing Portland cement plants will not have to come into compliance until 2013, at which point the industry will have had almost *15 years* of notice that EPA was proceeding with toxic air pollution standards for cement plants, to say nothing of the congressional mandate to regulate toxic pollution first adopted in the 1990 Clean Air Act.

Health Impacts

Health impacts of mercury

Mercury is a highly neurotoxic contaminant that is pervasive throughout watersheds where it accumulates in fish, other wildlife, and ultimately in humans.¹⁵ Mercury contamination of fish stocks is widespread in the United States, with nearly every state (48 out of 50) posting health advisories for mercury in fish.¹⁶ A recent study of mercury levels in fish in streams across the United States found toxic methyl-mercury levels exceeding the level for human health concern at nearly 30% of the sites sampled.¹⁷ For example, there are 1,039 advisories for mercury contamination in fish in Minnesota alone; 120 advisories for mercury contamination in Michigan waterways; 113 such advisories in Ohio; and 11 in Kentucky.¹⁸

Newly deposited mercury has been shown to be more bioavailable and more rapidly converted to methylmercury and represents a greater fraction of the methylmercury that is incorporated into food chains and ultimately fish.¹⁹ Local sources have been implicated in elevated levels of mercury measured in ambient air,²⁰ precipitation,²¹ soils,²² and methylmercury

¹⁵ US EPA 2009. Human Exposure to Methylmercury. <http://www.epa.gov/mercury/exposure.htm>.

¹⁶ USGS. 2009. Recent findings from the National Water-Quality Assessment (NAWQA) and Toxic Substances Hydrology Programs (as presented to the NAWQA National Liaison Committee, August 21, 2009). US EPA 2007. National Listing of Fish Advisories Technical Fact Sheet: 2005/06 National Listing Fact Sheet; EPA-823-F-07-003; July 2007.

US Department of Health and Human Services and Environmental Protection Agency. 2009. What You Need to Know About Mercury in Fish and Shellfish. Available at <http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/Seafood/FoodbornePathogensContaminants/Methylmercury/ucm115662.htm>.

¹⁷ USGS. 2009. Mercury in Fish, Bed Sediment, and Water from Streams Across the United States, 1998-2005. http://water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories/advisories_index.cfm.

¹⁸ http://water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories/advisories_index.cfm.
¹⁹ USGS. 2009. Mercury in Fish, Bed Sediment, and Water from Streams Across the United States, 1998-2005. Hintelmann H, Harris R, Heyes A, Hurley JP, Kelly CA, Krabbenhoft DP, et al. Reactivity and mobility of new and old mercury deposition in a boreal forest ecosystem during the first year of the METAALICUS study. *Environ. Sci. Technol.* 36(23):5034-40, 2002.

²⁰ Manolopoulos H, Snyder DC, Schauer JJ, Hill JS, Turner JT, Olson ML, et al. Sources of speciated atmospheric mercury at a residential neighborhood impacted by industrial sources. *Environ. Sci. Technol.* 41(16):5626-33, 2007.

²¹ Dvonch JT, Graney JR, Keeler GJ, Stevens RK. Use of elemental tracers to source apportion mercury in south Florida precipitation. *Environ. Sci. Technol.* 33(24):4522-27, 1999.

White EM, Keeler GJ, Landis MS. Spatial variability of mercury wet deposition in eastern Ohio: summertime meteorological case study analysis of local source influences. *Environ. Sci. Technol.* 43(13):4946-53, 2009.

levels in biota including fish.²³ Reductions in local mercury emissions levels have been tied to decreasing levels measured in the environment and biota.²⁴

Therefore, in order to achieve the National Academy of Sciences public health goal to reduce mercury concentration in fish,²⁵ current mercury emissions must be ratcheted down to decrease the amount of mercury cycling through aquatic systems and reduce contamination of fish and people. Industrial boilers and cement plants contribute large percentages of all the mercury air emissions in the United States.

A significant fraction of the U.S. population already has elevated levels of mercury in their bodies, with an estimated 8% of women having mercury levels considered unsafe.²⁶ Further, *more than 300,000 newborns each year in the U.S. may have been over-exposed to mercury in utero, increasing their risk of neuro-developmental effects.*²⁷ Asians, Pacific Islanders, and Native Americans are all more likely to have elevated blood mercury levels, as are women living in the Northeast and other coastal areas, or consuming a lot of fish.²⁸ Researchers have estimated that in the U.S. methyl mercury toxicity is associated with between 115 and 2,675 excess cases per year of a level of cognitive impairment that would be considered mental

²² Biester H, Müller G, Schöter HF. Estimating distribution and retention of mercury in three different soils contaminated by emissions from chlor-alkali plants: part I. *Sci. of the Tot. Environ.* 284:177-89, 2002.

²³ Evers DC, Han Y, Driscoll CT, Kamman NC, Goodale MW, Lambert KT, et al. Biological mercury hotspots in the northeastern United States and southwestern Canada. *Biosci.* 57(1):29-43, 2007.

²⁴ Frederick PC, Hylton B, Heath JA, Spalding MA. A historical records of mercury contamination in southern Florida (USA) as inferred from avian feather tissue. *Environ. Toxicol. and Chem.* 23(6):1474-78, 2004. Driscoll CT, Han Y, Chen CY, Evers DC, Lambert KF, Holsen TM, et al. Mercury contamination in forest and freshwater ecosystems in the northeastern United States. *Biosci.* 57(1):17-28, 2007. USGS. 2009. Mercury in Fish, Bed Sediment, and Water from Streams Across the United States, 1998-2005.

²⁵ National Research Council. 2000. *Toxicological Effects of Methylmercury.* National Academy Press. Washington DC.

²⁶ Schober SE, Sinks TH, Jones RL, Bolger PM, McDowell M, Osterloh J, et al. Blood mercury levels in US children and women of childbearing age, 1999-2000. *JAMA.* 289(13):1667-74, 2003.

²⁷ Mahaffey KR, Clickner RP, Bodurow CC. Blood organic mercury and dietary mercury intake: National Health and Nutrition Examination Survey, 1999 and 2000. *Environ Health Perspect.* 112(5):562-70, 2004.

²⁸ Hightower JM, O'Hare A, Hernandez GT. Blood mercury reporting in NHANES: identifying Asian, Pacific Islander, Native American, and multiracial groups. *Environ Health Perspect.* 114(2):173-5, 2006. Mahaffey KR, Clickner RP, Jeffries RA. Adult women's blood mercury concentrations vary regionally in the United States: association with patterns of fish consumption (NHANES 1999-2004). *Environ. Health Perspect.* 117(1):47-53, 2009.

retardation.²⁹ The cost of caring for these children has been estimated at between \$28 million and \$3.3 billion, a cost the researchers point out is accrued annually until mercury emissions are reduced.³⁰

Methyl-mercury readily crosses the placenta and the blood brain barrier and is known to be neurotoxic, especially to the developing brain.³¹ Several very large studies have shown solid associations between intrauterine methylmercury exposure and impaired neurobehavioral performance.³² Neurological effects in children can also occur from early life exposures to mercury at low doses resulting in diminished visual recognition memory (VRM)³³ and other neurological impairments such as decreased visual motor development and receptive vocabulary.³⁴ Postnatal mercury exposure is also associated with ADHD as well as impacts to motor functions and IQ.³⁵ Some neurobehavioral deficits related to mercury exposure may take many years to manifest.³⁶

²⁹ Trasande, Leonardo, Schecter, Clyde, Haynes, Karla A., and Landrigan Phillip. Mental Retardation and Prenatal Methylmercury Toxicity. 2006 *Am Journal of Industrial Medicine*. 49:153-158.

³⁰ Trasande, Leonardo, Schecter, Clyde, Haynes, Karla A., and Landrigan Phillip. 2006. Applying Cost Analyses to Drive Policy that Protects Children Mercury as a Case Study. *Ann. N.Y. Acad.Sci.* 1076:911-923.

³¹ Myers GJ, Davidson PW. Prenatal mercury exposure and children: Neurologic, developmental, and behavioral research. *Environ Health Perspect* 106(Suppl 3): 841-847, 1998.

³² Grandjean P, White RF, Weihe P, Jorgensen PJ. Neurotoxic risk caused by stable and variable exposure to methylmercury from seafood. *Ambul Pediatr*. 3(1):18-23, 2003.

Debes F, Budtz-Jørgensen E, Weihe P, White RF, Grandjean P. Impact of prenatal methylmercury exposure on neurobehavioral function at age 14 years. *Neurotoxicol Teratol*. 28(5):536-47, 2006.

³³ Oken E, Wright RO, Kleinman KP, Bellinger D, Amarasiriwardena CJ, Hu H, Rich-Edwards JW, Gillman MW. Maternal fish consumption, hair mercury, and infant cognition in a U.S. Cohort. *Environ Health Perspect*. 113(10):1376-80, 2005.

³⁴ Oken E, Radesky JS, Wright RO, Bellinger DC, Amarasiriwardena CJ, Kleinman KP, Hu H, Gillman MW. Maternal fish intake during pregnancy, blood mercury levels, and child cognition at age 3 years in a US cohort. *Am J Epidemiol*. 167(10):1171-81, 2008.

Davidson PW, Myers GJ, Weiss B. Mercury exposure and child development outcomes. *Pediatrics*. 113(4 Suppl):1023-9, 2004. Oken E, Bellinger DC. Fish consumption, methylmercury and child neurodevelopment. *Curr Opin Pediatr*. 20(2):178-83, 2008.

³⁵ Myers GJ, Thurston SW, Pearson AT, Davidson PW, Cox C, Shamlaye CF, Cemichiari E, Clarkson TW. Postnatal exposure to methyl mercury from fish consumption: a review and new data from the Seychelles Child Development Study. *Neurotoxicol*. 30(3):338-49, 2009.

³⁶ Yoshida M, Shimizu N, Suzuki M, Watanabe C, Satoh M, Mori K, Yasutake A. Emergence of delayed methylmercury toxicity after perinatal exposure in metallothionein-null and wild-type C57BL mice. *Environ Health Perspect*. 116(6):746-51, 2008.

Recent research has revealed that elevated levels of mercury in adults can trigger neurological deficits impacting fine motor speed, dexterity, concentration, verbal learning, and memory.³⁷ Cardiovascular effects have also been reported in adults at environmentally-relevant exposure levels, indicating increased risks of myocardial infarction (e.g. heart attacks), increased blood pressure, and thickening of the carotid artery (a measurement of atherosclerosis) associated with elevated mercury levels.³⁸

Health impacts of other toxic heavy metals³⁹

Clean up standards for boilers and cement plants not only would make substantial reductions in mercury pollution, but also reduce other toxic heavy metals, including antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel and selenium. Due to the low volatility of these metals, the majority of emissions occur as particles. The public is exposed through direct inhalation of metal containing particles and soil contamination resulting from aerial deposition of metals.

Hexavalent chromium, for example, is a known human carcinogen, primarily affecting the lungs, but tumors in the stomach and intestinal tract have also been reported.⁴⁰ Exposure to hexavalent chromium is also associated with respiratory effects (e.g., nasal and lung irritation,

³⁷ Yokoo EM, Valente JG, Grattan L, Schmidt SL, Platt I, Silbergeld EK. Low level methylmercury exposure affects neuropsychological function in adults. *Environ Health*. 2(1):8, 2003.

³⁸ Guallar E, Sanz-Gallardo MI, van't Veer P, Bode P, Aro A, Gomez-Aracena J, et al. Mercury, fish oils, and the risk of myocardial infarction. *N Engl J Med*. 347(22):1747-54, 2002.

Salonen JT, Seppanen K, Nyyssonen K, Korpela H, Kauhanen J, Kantola M, et al. Intake of mercury from fish, lipid peroxidation, and the risk of myocardial infarction and coronary, cardiovascular, and any death in eastern Finnish men. *Circulation* 91(3):645-55, 1995.

Choi AL, Weihe P, Budtz-Jørgensen E, Jørgensen PJ, Salonen JT, Tuomainen TP, Murata K, Nielsen HP, Petersen MS, Askham J, Grandjean P. Methylmercury exposure and adverse cardiovascular effects in Faroese whaling men. *Environ. Health Perspect*. 117(3):367-72, 2009.

Jacob-Ferreira AL, Passos CJ, Jordão AA, Fillion M, Mergler D, Lemire M, Gerlach RF, Barbosa Jr F, Tanus-Santos JE. Mercury Exposure Increases Circulating Net Matrix Metalloproteinase (MMP)-2 and MMP-9 Activities. *Basic Clin. Pharmacol. Toxicol*. 1-8, 2009 [Epub ahead of print] PMID: 19594729.

³⁹ 70 Fed. Reg. 59402, 59406-08 (Oct. 12, 2005), Agency for toxic substances and Disease Registry, Public Health Statements, <http://www.atsdr.cdc.gov/>.

⁴⁰ US DHHS, ATSDR. 2008. Draft Toxicological Profile For Chromium.

altered pulmonary function), gastrointestinal effects (*e.g.*, irritation, ulceration and non-neoplastic lesions of the stomach and small intestine), hematological effects (*e.g.*, microcytic, hypochromic anemia), and reproductive effects (*e.g.*, effects on male reproductive organs, including decreased sperm count and histopathological change to the epididymis). Bronchitis, decreases in pulmonary function, pneumonia, and other respiratory effects have been noted from chronic high dose exposure of hexavalent chromium in occupational settings. Hexavalent chromium inhalation exposure may be associated with complications during pregnancy and childbirth.

Another notoriously toxic heavy metal, lead, exerts “a broad array of deleterious effects on multiple organ systems via widely diverse mechanisms of action,” including effects on heme biosynthesis and related functions; neurological development and function; reproduction and physical development; kidney function; cardiovascular function; and immune function.⁴¹ In particular, lead is associated with neurological, hematological, and immune effects on children, and hematological, cardiovascular and renal effects on adults. Children are particularly sensitive to the effects of lead. Functional manifestations of lead neurotoxicity during childhood include sensory, motor, cognitive and behavioral impacts. Cognitive effects of special concern include decrements in IQ scores and academic achievement, as well as attention deficit problems. Children in poverty and black, non-Hispanic children face higher exposures to lead and are consequently more susceptible to lead’s health impacts. Reproductive effects, such as decreased sperm count in men and spontaneous abortions in women, have been associated with lead exposure. There is also some evidence of lead carcinogenicity, primarily from animal studies, together with limited human evidence of suggestive associations. EPA has classified lead as a probable human carcinogen.

⁴¹ National Ambient Air Quality Standards for Lead, 73 Fed. Reg. 66964, 66975-76 (Nov. 12, 2008).

Health impacts of acid gases⁴²

Hydrogen chloride (HCl) is irritating and corrosive to any tissue it contacts. Brief exposure to low levels causes throat irritation. Long-term exposure to low levels can cause respiratory problems, eye and skin irritation, and discoloration of the teeth. Exposure to higher levels can result in rapid breathing, narrowing of the bronchioles, blue coloring of the skin, severe burns of the eyes and skin, accumulation of fluid in the lungs, and even death. Some people may develop reactive airways dysfunction syndrome (RADS), a type of asthma caused by some irritating or corrosive substances. Children may be more vulnerable than adults to corrosive agents, such as HCl, because of their relatively narrower airways, relatively greater exposure due to greater breathing volume per pound of body weight and relatively longer potential exposure durations. Hydrogen fluoride or Hydrofluoric acid (HF) is a serious systemic poison that is highly corrosive; exposure to it can be fatal.

Health impacts of organic chemicals⁴³

Organic compounds emitted by coal boilers include but are not limited to acetaldehyde, benzene, formaldehyde, dioxin and furan, polycyclic aromatic hydrocarbons (PAHs), toluene, and xylenes. Each of these organic compounds is associated with a range of potential health effects. Several of the health effects from short-term inhalation exposure to these pollutants are similar: they include irritation of the eyes, skin, and respiratory tract in humans; central nervous system effects (e.g., drowsiness, dizziness, headaches, depression, nausea, irregular heartbeat); reproductive and developmental effects; and, neurological effects. Exposure to benzene at extremely high concentrations may lead to respiratory paralysis, coma, or death. Long-term

⁴² Agency of Toxic Substances and Disease Registry, ToxFAQs, <http://www.atsdr.cdc.gov/toxfaqs/TF.asp?id=759&tid=147>, ATSDR, Medical Management Guidelines for Hydrogen Fluoride, <http://www.atsdr.cdc.gov/MMG/MMG.asp?id=1142&tid=250>

⁴³ ATSDR, Public Health Statements, <http://www.atsdr.cdc.gov/>.

inhalation exposure in humans produces health effects that range from mild to serious. Mild symptoms may include nausea, headache, weakness, insomnia, intestinal pain, and burning eyes. Long-term exposure also has effects on the central nervous system, can be toxic to the immune system, and can produce disorders of the blood, lead to reproductive disorders in women (*e.g.*, increased risk of spontaneous abortion), and is associated with developmental effects, gastrointestinal irritation, liver injury, and muscular effects. In addition, some of the organic HAPs are either known human carcinogens, such as benzene, or probable carcinogens, such as formaldehyde and dioxins.

Polycyclic aromatic hydrocarbons (PAHs) are known human mutagens, carcinogens, and/or developmental toxicants.⁴⁴ Infants and children are *especially* sensitive and susceptible to the hazards of PAHs. Greater lifetime cancer risks result from early exposure to carcinogens (*i.e.*, at a young age), and many carcinogens can have a long latency period. These substances are known to cross the placenta to harm the unborn fetus; in addition to contributing to fetal mortality they have been shown to increase the cancer risk, and produce tumors as well as birth defects in offspring.⁴⁵ There is also evidence that exposure of children to PAHs at ambient levels in polluted areas can adversely affect IQ.⁴⁶ Further evidence suggests that prenatal exposure to PAHs may be a risk factor for the early development of asthma-related symptoms and can adversely affect children's cognitive development, with implications for diminished

⁴⁴ Salmon A.G. and Meehan T. Potential Impact of Environmental Exposures to Polycyclic Organic Material (POM) on Children's Health, California Office of Environmental Health Hazard Assessment (OEHHA). http://www.oehha.ca.gov/public_info/public/kids/pdf/PAHs%20on%20Children's%20Health.pdf
Agency for Toxic Substances and Disease Registry, Public Health Statement for Polycyclic Aromatic Hydrocarbons (PAHs). August 1995. <http://www.atsdr.cdc.gov/PHS/PHS.asp?id=120&tid=25>

⁴⁵ Perera FP. DNA Damage from Polycyclic Aromatic Hydrocarbons Measured by Benzo[a]pyrene-DNA Adducts in Mothers and Newborns from Northern Manhattan, The World Trade Center Area, Poland, and China, *Cancer Epidemiol Biomarkers Prev* 2005;14(3):709–14.

⁴⁶ Perera, FP et. al. Prenatal Airborne Polycyclic Aromatic Hydrocarbon Exposure and Child IQ at Age 5 Years. *Pediatrics* 2009;124:e195–e202.

school performance.⁴⁷ Thus the adverse health impacts of PAH exposure to infants and children are significantly greater.

Health impacts of particulate matter

In addition to the toxic constituents and associated health impacts above, these sources constitute a major public health hazard through fine particulate matter (PM) emissions. Numerous studies have documented a wide range of adverse health impacts from exposure to fine particulate matter, including increased risk for cardiovascular disease such as atherosclerosis, increased heart attacks, increased respiratory illness, increased emergency room visits for acute health events, birth defects, low birth weights, premature births, and increased rates of death.⁴⁸

The Clean Air Act Works and Enjoys Overwhelming Public Support

The Clean Air Act is one of our country's most successful public health and environmental laws in the past 40 years marking the modern environmental era. The EPA

⁴⁷ Perera FP, Rauh V, Tsai WY, Kinney P, Camann D, et al. (2003) Effects of transplacental exposure to environmental pollutants on birth outcomes in a multiethnic population. *Environ Health Perspect* 111: 201–205. Perera FP et al., Effect of Prenatal Exposure to Airborne Polycyclic Aromatic Hydrocarbons on Neurodevelopment in the First 3 Years of Life among Inner-City Children, *Environ Health Perspect* 114:1287–1292 (2006).

⁴⁸ Kuenzli N, Jerrett M, Mack WJ, Beckerman B, LaBree L, Gilliland F, Thomas D, Hodis HN. "Ambient Air Pollution and Atherosclerosis in Los Angeles," *Environ Health Perspect*, 2005 Feb;113(2):201-6. Miller KA, Siscovick DS, Sheppard L, Shepherd K, Sullivan JH, Anderson GL, Kaufman JD. "Long-term Exposure to Air Pollution and Incidence of Cardiovascular Events in Women." *N Engl J Med*, 2007 Feb 1;356(5):447-58. Hoffman B, Moebus S, Mohlenkamp S, Stang A, Lehman N, Dragano D, Schmermund A, Memmesheimer M, Mann K, Erbel R, Jockel K-H. "Residential Exposure to Traffic Is Associated With Coronary Atherosclerosis." *Circulation*, published online July 16, 2007, DOI:10.1161 / CIRCULATIONAHA.107693622.

Pope CA, Muhlestein JB, May HT, Renlund DG, Anderson JL, Horne BD. "Ischemic Heart Disease Events Triggered by Short-term Exposure to Fine Particulate Air Pollution." *Circulation* 2006 Dec 5;114(23):2443-8. Schwartz J, Slater D, Larson TV, Person WE, Koenig JQ. "Particulate Air Pollution and Hospital Emergency Room Visits for Asthma in Seattle." *Am Rev Respir Dis*, 1993 Apr; 147(4):826-31. Ritz B, Wilhelm M, Zhao Y. "Air Pollution and Infant Death in Southern California, 1989–2000." *Pediatrics*, 2000 Aug;118(2):493-502. Wilhelm M, Ritz B. "Residential Proximity to Traffic and Adverse Birth Outcomes in Los Angeles County, California, 1994–1996." *Environ Health Perspect*, 2003 Feb; 111(2):207-16. Wilhelm M, Ritz B. "Local Variations in CO and Particulate Air Pollution and Adverse Birth outcomes in Los Angeles County, California, USA." *Environ Health Perspect*, 2005 Sep;113(9):1212-21.

Jerrett M, Burnett RT, Ma R, Pope CA, Krewski D, Newbold KB, Thurston G, Shi Y, Finkelstein N, Calle EE, Thun MJ. "Spatial Analysis of Air Pollution and Mortality in Los Angeles." *Epidemiology*, 2005 Nov;16(6):727-36.

recently released a report on the health and economic health benefits of the 1990 Clean Air Act amendments, assessed from 1990 to 2020.⁴⁹ The agency found that the Clean Air Act has saved over 160,000 lives every year by the year 2010, and the law will save over 230,000 lives every year by the year 2020.

NRDC analyzed the EPA report beyond the two target years of 2010 and 2020 in order to arrive at a cumulative assessment of the lives saved by the 1990 Clean Air Act Amendments by the year 2020. As summarized by my colleague, Christina Angelides:

NRDC's own analysis of EPA's report shows that the 1990 amendments will have cumulatively saved **4.2 million lives** and avoided millions of cases of pollution-related illness by 2020 — including **43.8 million cases of asthma exacerbation, 3.3 million heart attacks, 2.1 million hospital admissions and 2.2 million emergency room visits, and 313 million lost work days**. For comparative purposes, 4.2 million is about the population of the city of Los Angeles.

A more detailed break-down of the avoided healthy impacts is presented in the following table (the blue portion is from the EPA report, while the green reflects NRDC's additional analysis)⁵⁰:

Avoided Health Impacts (PM2.5 & Ozone Only) [*]	Pollutants [*]	Year 2000 [*]	Year 2010 [*]	Year 2020 [*]	Estimated Cumulative Benefits 1990-2020 (NRDC) ^{**}
PM 2.5 Adult Mortality	PM	110,000	160,000	230,000	4,105,000
PM 2.5 Infant Mortality	PM	160	230	280	5,645
Ozone Mortality	Ozone	1,800	4,300	7,100	96,700
Chronic Bronchitis	PM	34,000	54,000	75,000	1,333,500
Acute Bronchitis	PM	96,000	130,000	180,000	3,377,000
Non-Fatal Myocardial Infarction	PM	79,000	130,000	200,000	3,301,000
Asthma Exacerbation	PM	1,200,000	1,700,000	2,400,000	43,750,000
Hospital Admissions	PM, Ozone	46,000	86,000	135,000	2,111,500
Emergency Room Visits	PM, Ozone	58,000	86,000	120,000	2,173,000
Restricted Activity Days	PM, Ozone	49,000,000	84,000,000	110,000,000	1,991,000,000
Lost School Days	Ozone	1,200,000	3,200,000	5,600,000	74,500,000
Lost Work Days	PM	8,000,000	13,000,000	17,000,000	313,000,000

^{*}Data from Table 5-6, Environmental Protection Agency, The Benefits and Costs of the Clean Air Act: 1990 to 2020, February 2011, p. 5-25.

^{**}To estimate the cumulative life savings and health benefits of the 1990 amendments from 1990 to 2020, NRDC assumed a roughly linear growth rate to interpolate benefit estimates for each year from 1995—when EPA's Acid Rain Program Phase I began to secure the first benefits under the amendments—through 2010, and benefit estimates for each year from 2010 to 2020. These annual benefit estimates were then aggregated across the entire period.

⁴⁹ See generally <http://www.epa.gov/air/sect812/prospective2.html>.

⁵⁰ See generally http://switchboard.nrdc.org/blogs/cangelides/the_1990_clean_air_act_will_sa.html.

The Clean Air Act – and its toxic air pollution measures in particular – continue to enjoy tremendous support from the American people, as well as our nation’s health and medical professionals. A nationwide poll conducted by Public Policy Polling and released by the NRDC reports how registered voters feel about U.S. House Members’ actions to block public health safeguards.

- 66% of Americans – including 54% of Republicans and 61% of Independents – support “requiring stricter limits on the amount of toxic chemicals such as mercury, lead, and arsenic that coal power plants and other industrial facilities release.”
- 64% favor “requiring stricter limits on the amount of smog that vehicles and industrial facilities release.”

In a recent CNN poll conducted by the Opinion Research Corporation from April 9-10, 71% of adult Americans polled responded that the federal government should continue to provide funding to the EPA to enforce regulations on greenhouse gases and other environmental issues. This included 80% of respondents from the Midwest and 71% from the South.

Recent Congressional Attacks on Clean Air Safeguards Are Failing the Public

Today's hearing *follows* a vote in which a majority of the House approved an amendment to H.R. 1’s budget bill to block implementation and enforcement of the mercury and air toxics standards for cement plants. That blocking vote occurred despite no legislative hearings, no expert witnesses, no factual record, and fewer than 40 minutes of debate by nine members of Congress. Today’s hearing rightly will be seen by the American people as an after-the-fact trial for clean air protections that already have been convicted by a majority of the House of Representatives.

The American people deserve better. The cement vote on H.R.1 marked the first time in the forty-year history of the Clean Air Act that a majority of the House of Representatives had voted to block EPA from implementing and enforcing standards to sharply reduce mercury and other toxic air emissions from a polluting industry. That legislative rider was dropped from the final budget agreement following opposition from the Senate, White House and hundreds of health, medical and other organizations. H.R. 2681 is merely another incarnation of this deadly vote.

The American people deserve better than to see these political favors for polluting interests renewed and extended to multiple mercury and air toxics standards that save lives, stop mercury poisoning and protect the public.

The Myth of EPA as “Rogue” Agency

Some critics of EPA regulations – such as the mercury and air toxics standards for cement plants and boilers – have charged EPA with being a “rogue” agency. This overheated rhetorical indictment should be dismissed simply because it is leveled invariably when there is a disagreement over the agency’s legal or policy decisions. But to examine the charge more fully, it’s fair to say that it has been based upon two other claims that bear examination in the context of today’s hearing: (1) that EPA is acting outside the scope of statutory authority conferred by Congress; and (2) that EPA is acting precipitously and the current administration is regulating at a much higher regulatory pace than prior administrations. Both of these claims are false.

First, EPA has acted within plain statutory authority in adopting final mercury and air toxics standards for cement plants and industrial boilers. Section 112 of the Clean Air Act confers clear authority to adopt such MACT standards for all hazardous air pollutants from listed stationary source categories, including the two identified industrial categories. Indeed, the EPA

is following the instructions and legal precedents in a series of D.C. Circuit court decisions that overturned a string of Bush administration EPA rulemakings for violating the plain language of the Clean Air Act.⁵¹

Industry attorneys have yet to identify any instances in which EPA's recent final or proposed mercury and air toxics standards are similarly violating the plain language of the Act. I invite Committee members to examine whether any of the other witnesses for today's hearing make such demonstrations of EPA unlawfulness in their testimony. But even if industry representatives believe the final or proposed standards to be unlawful in some respect, they have the same legal recourse as the state attorneys general and public health and conservation groups that successfully challenged a host of unlawful Bush EPA rules: (1) to file administrative comments criticizing EPA's proposed standards; and (2) to file lawsuits challenging final standards. If the industry challenges are meritorious, the courts will remand the standards to EPA for correction in order to deliver on the statutory promise of clean air to the public. If the industry challenges lack merit, the American people will enjoy the benefits of standards with enormous public health and environmental benefits.

EPA critics also have attacked mercury and air toxics standards and similar health safeguards by arguing that the current administration is regulating at a much faster, heavier regulatory pace than prior administrations. For example, a November 22, 2010 editorial in the Wall Street Journal charged that the Obama EPA's regulatory output has outpaced the entire first term of the Clinton Administration implementing the just-enacted 1990 Clean Air Act Amendments. This charge and similar ones are demonstrably false.

EPA Administrator Lisa Jackson has already specifically refuted such charges in an October 14, 2010 letter to Congressmen Barton and Burgess:

⁵¹ See generally http://switchboard.nrdc.org/blogs/jwalke/out-of-control_criticism_of_ep.html.

The pace of EPA's Clean Air Act regulatory work under this administration is actually not faster than the pace under either of the two previous administrations. In fact, EPA has finalized or proposed fewer Clean Air Act rules (87) over the past 21 months than in the first two years of either President George W. Bush's administration (146) or President Clinton's administration (115).

Indeed, as discussed above, even this slower regulatory pace under the current administration has been a function of re-proposing and re-issuing numerous air pollution standards by the prior administration that were found unlawful. Those earlier unlawful standards and illegal delays brought us to where we are today.

Mr. WHITFIELD. Thank you, Mr. Walke.

Mr. Schaeffer, you are recognized for 5 minutes for an opening statement.

STATEMENT OF ERIC SCHAEFFER

Mr. SCHAEFFER. Thank you, Mr. Chairman and members of the committee for the opportunity to testify. I am Eric Schaeffer, Director of the Environmental Integrity Project, an organization dedicated to improving enforcement of our environmental laws. I support the testimony of my colleague, John Walke, who has spent so many years fighting for the Clean Air Act.

My own comments can be summarized as follows. As has been explained I think a number of times, the proposed legislation would do much more than delay standards for 15 months. They would prohibit EPA from setting any standards in less than 5 years after enactment of the legislation. They would authorize EPA to delay those standards indefinitely as in never, virtually do eliminate the deadlines, and they also change the basis for setting the standards, and those changes use language that the industry hopes will give them softer standards. These were arguments made in court that were rejected. The bill would give industry a second bite of the apple and change the way standards themselves are set, so this is not a short-term extension to deal with an economic emergency, it is a fundamental change to the law. I do not question the right of Congress to do that. It is absolutely the prerogative of the legislature. I just think it is important to be clear about what the bills would do.

I also, to the extent—a suggestion has been made that the decisions reflect a rogue or runaway agency. I think that is unfair. The regulations that have been attacked in this hearing were generated by EPA after EPA first went to court to try to give industry in the last Administration much of what they wanted. Those earlier decisions were rejected by the D.C. Circuit Court of Appeals. They were rejected by judges appointed by President Reagan and by President George H.W. Bush, so this is not a sort of wild tear that EPA is on, this is an attempt to respond to decisions that have come down over the last decade made by pretty conservative jurists. Again, Congress has the right to respond to those by changing the law. I just think it is unfair to say that the EPA is somehow off the reservation by doing what the courts have in fact required them to do.

Perhaps most importantly, I want to call into question this idea that if we relax standards and allow, you know, mercury emissions to stay the same or even increase, allow toxic emissions to increase, somehow that will be a significant force in reviving manufacturing, creating jobs, keying the economic recovery and conversely if we don't do that we are going to hemorrhage jobs, you know, lose manufacturing competitiveness, see a flood of imports, threaten the economic recovery. I think the effects are much, much more complicated than that. There big, big macroeconomic forces at work. If you look at the cement kiln in particular using statistics from the U.S. Geological Service, who carries these numbers in their minerals yearbook and updates them every year, in the early 1990s we produced about 75,000 tons of cement with 18,000 workers. That production rose about 30 percent by 2006 to nearly 100,000 tons.

What happened to payroll? Ten percent of the employment in the industry was cut, the point being that the manufacturers did fine, employees not well. Jobs were cut at those plants.

Second, the industry has suggested that somehow these rules would drive the price of cement up and that will threaten the economic recovery. I just want to point out that the price rose about 50 percent at the beginning of the decade over a several-year period. It didn't seem to have any impact on the construction boon, so I would treat that claim skeptically. Clearly, manufacturing has declined at these plants and so has employment over the last few years but imports have declined even faster, so this idea that imports are going to come rushing in where production is constrained is not borne out by the facts. I am just trying to make the point that the bottom-line problem is lack of demand. Until the demand recovers, until the housing market recovers, this industry will not, and the rules have little to do with that.

I just want to close by saying that while this bill gives certainty to the industry that they won't have to do anything for at least 5 years and maybe never, it provides no certainty to people who live around these plants that something will be done about toxic emissions. I have not heard that concern expressed today at the hearing. I hope you will give it careful consideration.

[The prepared statement of Mr. Schaeffer follows:]

Testimony of Eric Schaeffer
Director, Environmental Integrity Project
Before the U.S. House Subcommittee on Energy and Power
September 8, 2011

Thank you, Mr. Chairman and Members of the Subcommittee, for the opportunity to share my views on proposed legislation to revise and delay Clean Air Act standards for cement kilns and large industrial, commercial and institutional boilers. My name is Eric Schaeffer, and I am director of the Environmental Integrity Project, an organization dedicated to improving enforcement of our environmental laws. I strongly support the testimony of my colleague, John Walke, who has spent many years fighting for the Clean Air Act, and my own remarks may be summarized as follows:

- The proposed bills would weaken current emission standards, and allow them to be postponed indefinitely;
- The EPA regulations under attack in this hearing follow court decisions handed down by judges appointed by Presidents Reagan and George H.W. Bush. The bills under consideration would reverse those decisions;
- Allowing companies like Lehigh, Celanese, or Rock-Tenn to maintain or even increase their toxic emissions until at least the end of this decade will do nothing to create the manufacturing jobs the U.S. economy needs;
- The only “regulatory certainty” this bill provides is that industry will be able to avoid doing anything at all about their emissions until 2018 or later. It will leave communities that live near U.S. plants in the dark about whether anything at all will be done after that.

The proposed bills could effectively eliminate air toxics standards for cement kilns

As Mr. Walke explains so well, H.R. 2250 and H.R. 2681 are not temporary, short-term postponements of toxic emission standards to get us through the worst months of the recession. The bills prohibit EPA from requiring compliance with any emission limit for at least five years after enactment, but authorize EPA to postpone these standards indefinitely, roll back standards that apply to new sources, and slip new language into the statute that is clearly designed to make any rules that are eventually adopted weaker than current law. In brief, the bills would give the industry's lawyers what the DC Circuit Court of Appeals said the Clean Air Act does not allow.

It is fashionable now to portray EPA as an "out of control" or "rogue" agency, because that is so much easier than explaining that Congress should repeal major sections of the Clean Air Act – which is what these bills would do. But let us at least be clear about one thing. The EPA tried in the last Administration to give the industry the relaxed standards for air toxics that they are advocating for today. Those efforts were rejected in two separate decisions by three-judge panels that included two judges appointed by President Reagan (the cement kiln rule) and two appointed by President George H.W. Bush. Of course, Congress has the right to reverse those decisions and weaken Clean Air Act standards if it so chooses. But that ought not to be done by suggesting that an "out of control" EPA has somehow acted outside the law, when the Agency in fact is only respecting decisions handed down by President Reagan's judicial appointees.

Air pollution is not the path to economic recovery

We are hemorrhaging manufacturing jobs, and that is a serious problem for the American economy and communities in the industrial heartland. But the argument that relaxing standards and increasing air pollution will bring those jobs back is unsupported by fact, and cynically

manipulates American anxiety about our economic future. For decades, U.S. companies have moved production to China and other low-wage countries to take advantage of cheap labor and get closer to raw materials and international markets. Those same companies have cut jobs in U.S. plants, relying on productivity gains to increase output and stay competitive. For example, according to the USGS Minerals Yearbook, in the early nineties U.S. cement kilns produced about 70,000 tons of clinker a year with 18,000 workers. By 2006, U.S. clinker output had grown to nearly 100,000 tons, while employment *declined* by about ten percent.

The industry has suggested that a surge in imports will follow any decline in U.S. cement production, but that has not happened. U.S. clinker output has dropped nearly fifty percent since 2006, but imports have declined more than 80%. The industry's problem is not the incremental cost of Clean Air Act regulation, but the collapse in demand for its product. Relaxing emission standards to make it easier to release mercury or particulate matter into the air is not going to solve that problem.

In fact, relaxing emission standards could actually give industries the incentive to run old plants into the ground instead of investing in new equipment or modernizing the plant. Even if both bills become law, new plants will still have to install the "best available" technologies to control their emissions, unless Congress also decides to repeal the "New Source Review" provisions of the Clean Air Act. For example, EPA's survey data shows that many old boilers emit particulate matter at rates ranging from 0.2 to 0.3 pounds per million btu of heat input, which is about ten times greater than the emission limits that new plants have to meet. H.R. 2250 and H.R. 2681 will increase the gap between what the Clean Air Act requires of new plants versus old ones, giving companies another reason to postpone capital investments and keep running older and dirtier plants instead.

Regulatory “certainty” for industry leaves communities in the dark

We will hear, of course, that industry needs “certainty,” one of Washington’s favorite buzzwords. As John Walke’s testimony makes clear, what the companies supporting these bills really want is the certainty that pollution controls that were supposed to be in place more than ten years ago will not have to be installed until the current decade is nearly over, and maybe never if the next President succeeds in abolishing EPA, as some Republican Presidential candidates are promising to do. If the EPA survives and manages to get some kind of rule out, there will be a litigation free-for-all over the bill’s new standards, e.g., requiring that emission limits be based on what is “achievable,” rather than what has already been “achieved.” That will result in much gainful employment for the \$800 an hour lawyers and lobbyists that big companies like to hire in Washington, but it won’t do much for American manufacturing.

Let me close by asking that we think for a moment about the communities that live near the plants affected by this legislation, and will be asked to inhale more pollution for a few more years, and maybe indefinitely. Aren’t they entitled to any “certainty” that the Clean Air Act will deliver the emission reductions that were promised more than twenty years ago? Under the cement kiln and boiler rules adopted by EPA, the public can count on a significant and predictable reduction in mercury from Lehigh’s cement kilns in California, or toxic air emission from Celanese or Rock-Tenn’s plants in Alabama and Tennessee. If H.R. 2250 and H.R. 2681 become law, what will you say to communities who ask whether toxic emissions that affect their health will be reduced and if so, by how much and when? Will the young children most affected by these pollutants be grown up and gone before anything is done to reduce their exposure these toxic contaminants? I hope Congress will try to answer that question before these bills get much further.

Mr. WHITFIELD. Dr. Valberg, you are recognized for 5 minutes for an opening statement.

STATEMENT OF PETER A. VALBERG

Mr. VALBERG. Thank you. Good afternoon, Mr. Chairman and members of the subcommittee. Thank you for inviting me to testify this morning. I am Peter Valberg, Principal at Gradient, an environmental consulting firm in Boston. I have worked for many years in public health and human health risk assessment. I have been a faculty member at the Harvard School of Public Health and I was a member of a National Academy of Sciences panel that worked on evaluating public health benefits of air pollution regulations.

At the outset, let us remind ourselves that by every public health measure from infant mortality to life expectancy, we are healthier today and exposed to fewer hazards than ever before. Our present-day air is much cleaner than it was years ago thanks to EPA, and our air quality is among the best in the world.

I am here today to address the method by which EPA uses in their projection of benefits from reductions in outdoor air particulate levels, called PM 2.5, or ambient PM 2.5. The dollar value of EPA's calculated benefits is dominated by promised reductions in deaths that EPA assumes to be caused by breathing PM in our ambient air. Asthma is also monetized by EPA as an ambient air concern.

In understanding health hazards, the solidity of our scientific knowledge like the solidity of a three-legged stool is supported by three legs of evidence. One leg is observational studies or epidemiology, another leg is experimental studies with lab animals, and the third leg is an understanding of biological mechanism. If any leg is weak or missing, the reliability of our knowledge is compromised.

EPA uses the observational studies that examine statistics on two factors which in small part seem to go up and down together. These studies correlate changes in mortality, either temporally on a day-by-day basis or geographically on a city-by-city basis with differences in ambient PM from day to day or from locale to locale. Statistical associations are indeed reported, and EPA assumes PM mortality associations are 100 percent caused by outdoor PM no matter what the PM levels you may breathe in your own home, car or workplace.

My points are, one, the mortality evidence doesn't add up; two, most of our PM exposure is not from outdoor air; three, the PM statistical studies cannot identify cause; and four, outdoor PM is recognized as a minor, not a major cause of asthma.

The evidence doesn't add up. Lab experiments have carefully examined both human volunteers and animals breathing airborne dust at PM levels hundreds of times greater than in outdoor air without evidence of sudden death or life-threatening effects. Moreover, we have studied the chemicals that constitute the particles in outdoor air, and no one has found a constituent that is lethal when breathed at levels we encounter outdoors. Remember that the basic science of poisons, toxicology, has shown that the dose makes the poison.

Where do people get exposed to airborne dust? The majority of our time is spent indoors. Homes, restaurants, malls have high levels of PM from cleaning, cooking, baking and frying. When you clean out your attic or basement, you are breathing much higher PM levels than outdoors. We are exposed to high levels of PM when mowing lawns, raking leaves, enjoying a fireplace. Yet in spite of these vastly larger PM exposures, we have no case reports of people who died because of the dust they inhaled while cleaning or barbecuing. We can identify who died from car accidents, food poisoning, firearms and infections, but out of the tens of thousands of deaths that EPA attributes to breathing PM outdoors, we can't pinpoint anyone who died from inhaling ambient PM.

The models require intricate statistical manipulations. The computer models require many assumptions and adjustments. The results you get depend on the model you use, how you set it up and how many different tests you run. You need to correct for many non-PM pollutants as well as non-pollutant factors that may confound those PM mortality associations. It is not clear that all confounders have been taken into account, and mere associations cannot establish causality. For example, increased heat stroke deaths are correlated with increased ice cream sales but none of us would suggest that ice cream sales cause heat stroke. In fact, there are many examples where spurious associations have been observed and dismissed.

Finally, on asthma, medical researchers recognize that respiratory infections, mildew, dust, dust mites, pet dander and stress each play a far greater role in asthma than pollutants in ambient air. Among urban neighborhoods sharing the same outdoor air, both childhood and adult asthma vary considerably by location, and doctors investigating these patterns point to risk factors such as obesity, ethnicity, age of housing stock, neighborhood violence. Most importantly, over past decades, asthma has gone up during the very same time period that levels of all air pollutants outdoors have markedly gone down. This is opposite to what you would expect if outdoor PM caused asthma.

Finally, taken together, there are major questions about EPA's calculations of lives saved by small PM reductions in our outdoor air. Most importantly, neither animal toxicology or human clinical data validate these statistical associations from the observational epidemiology. How can it be that lower levels of exposure to outdoor PM are killing large numbers of people when our everyday exposures to higher levels of PM are not?

Thank you. Thank you very much for this opportunity and I look forward to your questions.

[The prepared statement of Mr. Valberg follows:]

"Comments on US EPA's projections of mortality reductions achieved by reducing levels of particulate (PM-2.5) in our ambient (outdoor) air"

Peter A. Valberg, Ph.D., Gradient, 20 University Road, Cambridge, MA 02138
September 8, 2011



Good morning, Mr. Chairman and members of the subcommittee. Thank you for inviting me to testify this morning. I'm Peter Valberg, principal at Gradient, an environmental consulting firm near Boston. I've worked for many years in public health and human health risk assessment. I've been a faculty member at the Harvard School of Public Health and I was a member of a National Academy of Sciences panel that worked on evaluating public health benefits of air-pollution regulations.

At the outset, we should remind ourselves that, by every public health measure, from infant mortality to life expectancy, we are healthier today, and exposed to fewer hazards, than ever before. Our present-day air is much cleaner now than years ago, thanks to EPA, and our air quality is among the best in the world.

I'm here today to address the method used by EPA in their projections of benefits from reductions in outdoor air particulate levels, called "PM" or ambient PM_{2.5}. The dollar value of EPA's calculated benefits is dominated by promised reductions in deaths that EPA assumes to be caused by breathing PM in our ambient air. Asthma is also monetized by EPA as an ambient-air concern.

In understanding health hazards, the solidity of our scientific knowledge, like the solidity of a three-legged stool, is supported by three legs of evidence: one leg is observational studies, or, epidemiology, another leg is experimental studies with lab animals, and the third leg is understanding of biological mechanism. If any leg is weak or missing, the reliability of our knowledge is compromised.

EPA uses the observational studies that examine statistics on two factors, which, in small part, seem to go up and down together. These studies correlate changes in mortality (either temporally, say, on a day-by-day basis, or geographically, say, on a city-by-city basis) with differences in levels of ambient PM from day-to-day, or from locale-to-locale. Statistical associations are indeed reported, and, EPA assumes PM-mortality associations are 100% caused by outdoor PM, no matter what PM levels you may breathe in your own home, car, or workplace.

My key points are (1) the mortality evidence doesn't add up, (2) most of our PM exposure is not from outdoor air, (3) the PM statistical studies cannot identify cause, and (4) outdoor PM is recognized as a minor, not major, contributor to asthma.

(1) The evidence doesn't add up. Lab experiments have carefully examined both human volunteers and animals breathing airborne dust, at PM levels hundreds of times greater than in outdoor air, without evidence of sudden death or life-threatening effects. Moreover, we've studied the chemicals that constitute particles in outdoor air, and no one has found a constituent that is lethal when breathed at levels we encounter outdoors. Remember that the basic science of poisons, toxicology, has shown us that "the dose makes the poison."

(2) Where do people get exposed to airborne dust? The majority of our time is spent indoors. Homes, restaurants, and malls have high levels of PM from cleaning, cooking, baking, and frying. When you clean out your attic or basement, you are breathing much higher PM levels than outdoors. We're exposed to high levels of PM when mowing lawns, raking leaves, or enjoying a fireplace. Yet, in spite of these vastly larger PM exposures, we've no case reports of people who died because of the dust they inhaled while cleaning or barbecuing. We can identify who died from car accidents, food poisoning, firearms, and infections, but, out of the tens of thousands of deaths that EPA attributes to our breathing PM in outdoor air, we can't pinpoint anyone who died from inhaling ambient PM.

(3) Intricate statistical manipulations are required to demonstrate the PM-mortality correlations. The computer models require many assumptions and adjustments, and the results you get depend on the model you use, how you set it up, and how many different tests you run. You need to correct for many non-PM pollutants as well as non-pollution factors that may confound the PM-mortality associations. It's not clear that all confounders have been taken into account, and mere associations cannot establish causality. For example, increased heat-stroke deaths are correlated with increased ice-cream sales, but none of us would suggest that ice cream causes heat stroke. In fact, there are many other examples where spurious associations have been observed.

(4) Finally, on asthma, medical researchers recognize that respiratory infections, mildew, dust mites, pet dander, and stress each play a far greater role in asthma than pollutants in ambient air. Among urban neighborhoods sharing the same outdoor air, both childhood and adult asthma vary considerably by location, and doctors investigating these patterns point to risk factors such as obesity, ethnicity, age of housing stock, and neighborhood violence. Most importantly, over past decades, asthma has gone up during the very same time period that levels of all air pollutants outdoors have markedly gone down. This is opposite to what you would expect if outdoor PM caused asthma.

Taken together, there are major questions about EPA's calculations of "lives saved" by small PM reductions in our outdoor air. Most importantly, neither the animal toxicology nor the human clinical data validate the statistical associations from the observational epidemiology studies. How can it be that lower levels of exposure to outdoor PM are killing large numbers of people when our everyday exposures to higher levels of PM are not?

Thank you for the opportunity to testify today and I look forward to answering your questions.

Mr. WHITFIELD. Thank you, Dr. Valberg.
Mr. Elliott, you are recognized for 5 minutes.

STATEMENT OF TODD ELLIOTT

Mr. ELLIOTT. Thank you, Chairman Whitfield, Ranking Member Rush and members of the subcommittee for allowing me this opportunity to testify before the subcommittee on a topic of substantial importance to my company and to the manufacturing sector. Again, my name is Todd Elliott. I represent the Celanese Corporation, where I have worked in a variety of positions for over 23 years.

Celanese is a Dallas, Texas-based chemical company with a worldwide presence and a workforce of more than 7,250 employees. I am the General Manager of our global acetate business. Our acetate fibers plant in Narrows, Virginia, has been in operation since 1939 and is the largest employer in Giles County. The facility currently employs more than 550 skilled workers and an additional 400 contractors. The acetate facility in Narrows, Virginia, operates seven coal-fired boilers today and six boilers and furnaces that burn natural gas. The site is impacted by the cumulative and costly impacts of the boiler MACT and other State and Federal air quality regulations.

While we fully intend to comply with this regulation, it is very important for Congress and the EPA to understand that we compete in a global marketplace. If our costs become too high, we must look at other options, other alternatives, or otherwise we can no longer compete effectively in the marketplace.

A recent study conducted by the Council of Industrial Boiler Owners suggested that the boiler MACT regulation could impact almost a quarter-million jobs nationwide and cost our country more than \$14 billion. We respectfully encourage you to promote cost-effective regulations that help create a U.S. manufacturing renaissance that preserves jobs our Nation so badly needs.

My remarks today will focus on two key ways in which H.R. 2250 addresses industry's concern with the boiler MACT and directs EPA to develop requirements that are more reasonable but still will achieve the objectives of the rule. First, the compliance deadline of the boiler MACT should be extended to 5 years. The current rule essentially requires boilers and process heaters at major facilities to comply with stringent new air emissions standards for hazardous air pollutants within 3 years. Our engineering studies concluded that we will need to add emissions controls to our existing coal-fired boilers or convert those boilers to natural gas. Either alternative would require a very significant capital investment and time investment and could necessitate an extended plant outage while changes are implemented. The 3-year compliance window is too short a time to design, to install and commission the required controls or to convert to natural gas, particularly because the third-party resources with the necessary expertise will be in high demand as thousands of boilers would require modifications at the same time.

At present, our Virginia facility has an existing natural gas line. However, this is too small as designed to deliver enough gas to meet anticipated demand if we convert to natural gas. Prior to operating new natural gas boilers, we would need to secure new gas

sourcing, pipeline delivery contracts, design and permit and construct a new pipeline. This would be particularly difficult for a facility like ours which is located in a rural and mountainous area and would take at least 3 years to install. Once natural gas is available to the facility, it could take another year to transition from coal to gas and to avoid a complete facility shutdown and the associated lost production and revenue. Extending the boiler MACT compliance deadline from 3 to 5 years as proposed in H.R. 2250 would help ensure that Celanese and the manufacturing sector can achieve compliance.

Second, the emissions standards must be achievable in practice. The current rule does not consider whether multiple emissions standards are achievable realistically and concurrently nor does it adequately address the variability of fuel supply or the real-world challenges of compliance with multiple standards at the same time. Under current requirements, compliance with these standards becomes an either/or exercise as it is often impossible to source a fuel that enables a manufacturer to meet all emissions standards at once. For example, we have been able to identify coals that meet either the hydrochloric acid or mercury emissions standards but not both. In addition, variations in the constituents of coal from the same mine or the same seam can further undermine efforts to meet stringent and inflexible standards.

In summary, we support H.R. 2250 for the following reasons. It extends the compliance deadline to 5 years, which provides industry with enough time to identify and implement appropriate and economically viable compliance strategies and control operations, and it requires the EPA to take a more reasoned approach that emissions standards must be capable of being met in practice concurrently and on a variety of fuels before they are implemented.

So on behalf of Celanese and our Narrows, Virginia, facility, thank you for the opportunity to provide these comments.

[The prepared statement of Mr. Elliott follows:]

**Summary of Testimony of Todd Elliott
General Manager, Acetate
Celanese Corporation
“Legislative Hearing on H.R. 2250, the EPA Regulatory Relief Act of 2011”
Before the Subcommittee on Energy and Power of the Committee on Energy and Commerce**

September 8, 2011

Celanese Corporation, our Acetate business, and our Narrows, Virginia Acetate facility support H.R. 2250 for the following reasons:

- It extends the compliance deadline to five years, which provides industry with enough time to identify and implement appropriate and economically viable compliance strategies and control options.
- It requires EPA to establish coordinated and consistent emission standards that can be achieved by regulated entities.
- It provides greater certainty for regulated industries that burn materials for energy recovery.

In addition, although not specifically addressed in H.R. 2250, our Acetate business and all Celanese businesses encourage the inclusion of curtailment provisions in the Boiler MACT and Area Source rules. Such provisions would give industry flexibility to use alternate fuels during curtailment periods to avoid paying excessive fuel prices or restricting operations.

**Testimony of Todd Elliott
General Manager, Acetate
Celanese Corporation**
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Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee, thank you for allowing me this opportunity to testify before this Subcommittee on a topic of substantial importance to my company and the manufacturing sector. My name is Todd Elliott, and I represent Celanese Corporation. I am also here on behalf of the Industrial Energy Consumers of America, a non-partisan trade association with \$700 billion annual sales and more than 725,000 employees nationwide.

I am the general manager for our global Celanese Acetate business. Acetate is a fiber and filtration media made from acetic acid and wood pulp and used by consumer companies worldwide. I have worked for Celanese in a variety of capacities for more than 23 years.

Celanese Corporation is an American chemical company with a worldwide presence and workforce. We are a global technology leader in the production of specialty materials and chemical products used by most major industries and in consumer applications worldwide. Our products are essential to everyday living and are manufactured in all major regions of the world.

Celanese is based in Dallas, Texas, with more than 7,250 employees worldwide. Our Acetate fibers manufacturing plant in Narrows, Virginia has been in operation since 1939 and is the largest employer in Giles County. The facility currently employs more than 550 skilled workers and an additional 400 contractors.

The chemical industry is highly regulated and facilities are subject to myriad overlapping environmental regulations. The Narrows, Virginia Acetate facility operates seven coal-fired boilers and six other boilers and furnaces that burn natural gas. The site is impacted by the Boiler MACT and by the

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cumulative impacts of other state and federal regulations that, when combined, add significant costs.

While we fully intend to comply with this regulation, it is very important for the Congress and the EPA to understand that we compete in a global market place. If our costs become too high, we lose competitiveness and jobs. We encourage you to pursue cost-effective regulations and help create a US manufacturing renaissance and the jobs our nation so badly needs.

Over the past decade, the Boiler MACT has been through multiple iterations. Despite this, industry will have to make substantial business decisions about future compliance strategies without sufficient regulatory certainty about what would be required by the rule.

My remarks today will focus on ways in which H.R. 2250 addresses industry's concerns with the Boiler MACT and directs EPA to develop requirements that are more reasonable but still will achieve the objectives of the rule.

First: The Three-Year Compliance Deadline in the Boiler MACT is Unreasonable and Unachievable

The current rule essentially requires boilers and process heaters at major facilities to comply with stringent new air emission standards for hazardous air pollutants within three years. Celanese has undertaken complex and expensive engineering studies to identify the technical and economic impacts of various options for complying with the Boiler MACT. We believe that we will need either to add emissions controls to our existing coal-fired boilers or to convert those boilers to natural gas. These alternatives would require a significant investment of capital, time and personnel resources and could necessitate an expensive extended plant outage while changes are implemented. This uncertainty and the potential business disruption pose a significant financial burden on Celanese and to the entire industrial sector that are impacted by this regulation. It is for this reason that H.R. 2250 is needed. H.R. 2250 would provide greater flexibility and more time in which to come into compliance.

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The three-year compliance window is too short of a time period to install the required controls or convert to natural gas. We cannot design, install, and commission emission controls on our existing coal-fired boilers within three years. This is particularly true because third party resources with the expertise to design and install these controls will be in high demand as multiple boiler rules are being implemented in a short period of time by both the industrial and electric utility industries. Together, these industries have thousands of boilers that will require changes all at the same time.

With respect to conversion to natural gas, the facility's existing natural gas pipeline is too small to deliver enough natural gas to meet the anticipated demand. Prior to operating new natural gas boilers, we would need to secure new natural gas sourcing and pipeline delivery contracts. This is particularly difficult for a facility like ours which is located in a rural and mountainous area. Then, a new natural gas pipeline must be designed, permitted and constructed. This alone would take at least three years, particularly given that securing environmental permits, acquiring land and meeting construction schedules are often subject to forces beyond our control.

Once natural gas is available to the facility, it could take another year to transition from coal to natural gas to avoid a complete facility shutdown and the associated lost revenue. The Narrows facility operates seven coal-fired boilers. The coal-fired units would have to be decommissioned and the gas-fired boilers brought on line in a step-wise fashion to avoid significant loss of production capacity. As with the first option, we fear that the resources needed to safely and properly commission the new natural gas boilers on a compressed schedule will not be available.

Regardless of what option we choose, we cannot achieve compliance within three years. Extending the Boiler MACT compliance deadline to five years as proposed in H.R. 2250 would help ensure that Celanese and the manufacturing sector has adequate time to meet the new air quality standards without forced facility shutdowns or inadequate resources to ensure compliance.

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Second: The Emission Standards Must Be Achievable in Practice

The current rule does not consider whether multiple emissions standards are achievable realistically and concurrently, nor does it adequately address the variability of fuel supply or the real-world challenges of compliance with multiple standards at the same time. H.R. 2250 takes a more reasoned approach that emission standards must have been met in practice, concurrently, and on a variety of fuels, before they are implemented.

As an example, some of our boilers at the Narrows, Virginia facility were identified by the Environmental Protection Agency as top-performing units and were used to set the proposed regulatory standards for hydrochloric acid and mercury emissions. Not even these top-performing units, however, will meet the emissions standards for both mercury and hydrochloric acid simultaneously without installing costly emission controls. We have identified the type of coal that would meet the mercury standards, but it would not allow us to meet the hydrochloric acid standards. Other types of coal would meet the hydrochloric acid standards but not the mercury standards. Thus far, we have not been able to find a single type of coal that would reliably meet both standards at the same time. Moreover, if we do identify a coal that would meet both standards simultaneously, our dependence on that particular fuel supply would severely limit our ability to competitively purchase fuels.

The current rule presumes that all coals are the same, but they are not. For example, coal within the same mine and seam varies in constituents, which will have a direct correlation to air emissions. Furthermore, if a compliant coal is located, demand from many coal users will increase and drive prices to a point where it will no longer be a viable option.

For these reasons, Celanese supports the provisions in H.R. 2250 that require EPA to establish integrated and consistent emission standards that can be achieved concurrently and consistently on the same emissions unit.

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Third: Ensure Certainty Regarding Industry's Energy Recovery Practices

Energy recovery is vital to the petrochemical industry because it reduces operating costs, reduces emissions of air pollutants and conserves natural resources. Celanese operates boilers and process heaters to generate useful heat, energy and steam by utilizing many different types of fuels, including natural gas, and other materials from our processing units. At our Narrows, Virginia Acetate site, for example, we burn hydrocarbon based waste gases for energy rather than dispose of them.

EPA recently issued written guidance favoring combustion of waste gases as fuel. H.R. 2250, however, puts this policy into law. It gives industry greater certainty that boilers may continue to recover energy from process gases without being subject to burdensome and cost-prohibitive regulations that govern burning solid wastes.

Additionally: Curtailment Provisions in the Boiler MACT and Area Source Regulations Unreasonably Limit Industry's Ability to Operate during Periods of High Demand or Raw Material Shortages

Our industry is often required to meet production demands during periods of natural gas supply shortages that are primarily the result of limited regional pipeline capacity. In some parts of the country with colder weather, like Giles County, these shortages occur more frequently when the natural gas supply does not meet residential heating demand. During these periods, natural gas companies use severe financial penalties to encourage industry to curtail industrial natural gas use. During curtailment, industries typically use an alternative fuel, such as distillate oil. The current Boiler MACT and Area Source rules prevent industry from combusting alternate fuels during curtailment periods except on the rare occasions when the supply of natural gas is completely cut off for reasons beyond the control of the facility. By making it cost prohibitive to burn alternative fuels, the current rule would force industry either to pay excessive prices for natural gas or curtail production.

Although not specifically addressed in H.R. 2250, Celanese and the Industrial Energy Consumers of America encourage the modification of curtailment provisions in the Boiler MACT and Area Source

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rules to define curtailment as a period during which the use of natural gas at an affected facility is halted, restricted, or penalized for reasons beyond the control of the facility. Such modifications would give industry flexibility to use alternate fuels during curtailment periods to avoid paying excessive fuel prices or restricting operations. See the May 20, 2011 Council of Industrial Boiler Owners Petition for Reconsideration and American Chemistry Council Petition for Reconsideration for additional details for this issue and others (Docket No. EPA-HQ-OAR-2002-0058).

In Summary, we support H.R. 2250 for the following reasons:

- It extends the compliance deadline to five years, which provides industry with enough time to identify and implement appropriate and economically viable compliance strategies and control options.
- It requires EPA to establish coordinated and consistent emission standards that can be achieved by regulated entities.
- It provides greater certainty for regulated industries that burn materials for energy recovery.

In addition, we encourage EPA to allow regulated industry greater flexibility to utilize alternate fuel sources during periods of curtailment or supply shortage.

On behalf of Celanese and our Narrows, Virginia Acetate facility, I thank you for the opportunity to provide these comments. Thank you very much.

Mr. WHITFIELD. Thank you, Mr. Elliott, and thank all of you for your testimony. I will recognize myself for 5 minutes of questions.

All of you heard the testimony of Ms. McCarthy, and I would ask each one of you, is there anything in her testimony that you particularly would like to make some comment about? Dr. Valberg?

Mr. VALBERG. Yes. Well, I think that I want to just emphasize that I think EPA has done a very good job in cleaning up the air and so on and I am very much in favor of regulations that reduce air pollution. However, I think the problem is the monetization method. I mean, saying that these deaths are occurring as a consequence of small changes in outdoor air when in fact if you go to the medical community, we all have diseases that we get, all of us are going to die and so on, it is that monetization that I think is flawed and needs to include more of the scientific evidence besides just the statistical associations.

Mr. WHITFIELD. Have you ever made those arguments with EPA that you question the way they calculate these benefits?

Mr. VALBERG. Yes, I have. I have testified before EPA on some of the Clean Air Science Advisory Committee meetings that they have had together with EPA staff, and I think that they have become quite enamored of the statistical associations.

Mr. WHITFIELD. And how widespread is the concern about the community that you are involved with on the validity of the EPA studies?

Mr. VALBERG. Well, the statistical associations are just a correlation between numbers, so I don't know that there is necessarily a question about is the statistics being done wrong. I think if you look at the original studies by the authors themselves, you will see in the beginning that they say the hypothesis is that there is a causal effect between ambient particulate and mortality, and they all treat it in the original literature as a hypothesis that is being tested. I think what EPA has moved these associations to is into this regulatory arena where they are using them as reliable.

Mr. WHITFIELD. But if there is no causal connection, that would really invalidate their claims of benefits, wouldn't it?

Mr. VALBERG. Yes, it would

Mr. WHITFIELD. And that is a major issue, and I read your biography and you are a real expert in this area, and you have genuine concerns about that. Is that correct?

Mr. VALBERG. I think that the toxicology of the ambient air needs to be given more weight and that in fact our exposure to almost anything is dominated by other sources at school, at work, at home and so on, and ambient air needs to be as clean as possible. We in fact open the windows when we want to clean out the air in our offices or in our homes. But I think that attributing these hundreds of thousands of deaths to outdoor air is only supported by the statistical association.

Mr. WHITFIELD. Well, you know, I think that is a very important point because we have had many hearings on these environmental issues and every time the representatives of the EPA will immediately run to the health benefits that you are going to prevent this thousand deaths, you are going to prevent premature deaths, you are going to prevent this many cases of asthma, you are going to prevent all of these things and yet from your testimony the very

basis of a lack of causal effect would basically invalidate all the benefits that they are really depending upon.

Mr. VALBERG. Exactly, and in fact, there are some recent papers that refer to taking panels of people where you take them into the clinical setting, expose them to 100 or 200 micrograms per cubic meter, see if you see any kinds of effects, and then you also look at people in the ambient environment where the concentrations are 10 to 20 micrograms per cubic meter, you still see the associations in the ambient environment but it is an effect that is occurring for other reasons besides the particulate matter itself because those people in the laboratory did not show the effects.

Mr. WHITFIELD. You know, another concern that many of us have is that we have a very weak economy right now. We are trying to stimulate that economy, and while it is true that these boiler MACT and cement have not caused weakening of the economy, I have here a list of 13 new rules and regulations that EPA is coming out with, and the cumulative impact of that, it seems to me would definitely have an impact on our ability to create jobs. We are not arguing that it caused the loss of jobs but we are making the argument that at this particular time it creates obstacles in our ability to create new jobs. Would you agree with that, Mr. Harrington?

Mr. HARRINGTON. Yes, I certainly would. I definitely agree with that, that from my standpoint, back to your original question, there are two areas that we would disagree. First of all, MACT is not available across our sector. There are no proven engineering technical solutions to achieve the NESHAP standards. That is point one.

Point two is, there is absolutely not going to be job growth due to NESHAP or CISWI, absolutely not, not sustainable. There will be—there might be a short-term change to a bunch of consultants or a bunch of laboratories who will do some tests as we begin our permit and the process that we always follow to comply and to do better than we possibly can hope to do but at the end of all that transfer moving around, there will be less plants, period.

Mr. WHITFIELD. Mr. Rush, you are recognized for 5 minutes.

Mr. RUSH. Thank you, Mr. Chairman.

Mr. Walke and Mr. Schaeffer, Dr. Valberg made some pretty controversial conclusions there. What do you have to say, each one of you? How do you respond to some of his assertions?

Mr. WALKE. Mr. Rush, I would be happy after the hearing to submit numerous, dozens upon dozens of peer-reviewed statements showing effects, associations between particulate matter and premature mortality that contradict the testimony of Dr. Valberg. There are National Academy of Science studies that contradict it. The Clean Air Science Advisory Committee peer-review process and reports contradict those views. Those views are controversial because they are outlier views within the clean air scientific community. They were not accepted by the Bush Administration. They were not accepted by the Clean Air Science Advisory Council. They were not accepted by the Health Effects Institute reexamination of those associations. And I think it is important that that copious record of peer-reviewed studies be included in the record, and we

could also invite Dr. Valberg to include studies since there wasn't a single one cited in his testimony that I saw.

Mr. RUSH. Mr. Schaeffer?

Mr. SCHAEFFER. If I could briefly provide some context for the particulate matter decision-making at EPA. The science that EPA is proceeding from, again with an epidemiological study looking at particulate levels in 26 cities and comparing that to especially premature mortality and screening out the confounding factors that Dr. Valberg raised—diet, income, the other things that can step in and interfere with trying to establish a relationship between pollution and disease—the benefits in EPA's rulemaking you actually see in the hundreds of millions of dollars, those come from avoiding premature deaths. We can argue about what a life is worth, and I don't know if Dr. Valberg wants to go there, but those premature mortalities occur over a long period of time. You can't put somebody in a room and gas them with particulate matter in 15 minutes or even a day and draw any conclusions from that. The point is the long-term exposure.

Congress ordered EPA to get those epidemiological studies peer reviewed. The agency went to the Health Effects Institute at the end of the last decade, late 1990s. The Health Effects Institute did an exhaustive review of the PM science, concluded it was solid, that is, that the link between PM exposure, particulate exposure, mortality was very strong. The Bush Administration looked at the same issue in 2005, did an exhaustive review, reached the same conclusions.

So to suggest that this is something that is being done with a pocket calculator or the confounding factors aren't being considered or that you can, you know, put a balloon over somebody's head and fill it with particulate matter or that because nobody has, you know, died from sitting in front of a fireplace, that means fine particles aren't a problem, honestly, those are outlandish statements. They are completely inconsistent with decades of science, not just a recent decision. You know, I challenge the witnesses to produce peer-reviewed studies that show that, and we will certainly provide you with the data that EPA has gathered under three Administrations to establish that very strong connection between fine particles, not big chunky particles from barbecuing steak, fine particles, and death.

Mr. RUSH. I just want to really remind the committee that the Bush Administration did draft a report that was finalized by the Obama Administration, and it is called the Integrated Science Assessment for Particulate Matter, and this report evaluated the scientific literature on human health effects associated with exposure to particulate matter. It was based on dozens of peer-reviewed studies. It had more than 50 authors and contributors and literally scores of peer reviewers, and this report was also subject to extensive external review and commentary, and this scientific effort provides the basis for EPA's analysis of the effects of particulate matter. Were you referring to this report?

Mr. WALKE. Yes, Mr. Rush. It is dated 2009. I would be happy to submit it to the record, and it finds "there is a causal relationship between PM-2.5 and mortality both for short-term and long-term exposures." That is in an EPA report dated 2009, but as you

said, it reaffirms studies that were undertaken first under the Bush Administration.

Mr. RUSH. Thank you, Mr. Chairman. I yield back.

Mr. WHITFIELD. Mr. Sullivan, you are recognized for 5 minutes.

Mr. SULLIVAN. Thank you, Mr. Chairman. I was going to see if Dr. Valberg would like to comment on what was just said.

Mr. VALBERG. Yes, I would. I think the associations that are reported by the statistics are indeed out there but I think that there are a lot of problems with those associations even beyond the fact that they are not reflected in laboratory experiments and even in clinical experiments. I think that the actual associations are after all on a day-by-day basis. The so-called time series studies look at day-by-day changes in particulate levels and look at day-by-day changes in mortality so they are looking at short-term things, and when you try to take that hypothesis to the laboratory, you can't validate it.

The associations themselves have peculiar characteristics such as the steepness of the association. In other words, what kind of increment do you get with a given increment of particulate matter actually gets steeper as the air concentrations get cleaner. In other words, as particulate levels go down, this is reported time and time again in these associations, and this goes contrary to what you would expect on a toxicological basis. The association should in fact get stronger as the air gets dirtier and so that as you get the higher levels, then you are getting a larger effect because the dose makes the poison.

So I think I don't disagree that there are many associations out there and in fact the very reporting of such associations in such a variety of diverse circumstances where the actual chemical composition of the particulate is quite different in a way is also something that actually does more to undermine their plausibility than to support it.

Mr. SULLIVAN. Thank you.

And this next question is for Mr. Rubright, Dr. Gilman and Mr. Elliott. EPA has maintained that boiler MACT rules will result in a net gain of jobs. Do you agree with the EPA that the net effect of EPA's boiler MACT rules as written will be to gain jobs in the United States?

Mr. RUBRIGHT. Thank you for asking that question because we observe the jobs that will be created are temporary jobs associated with the installation and capital. The jobs that will be eliminated with the closure of facilities are permanent losses. So the net change is dramatically worse.

Mr. GILMAN. My observation would be, as they were promulgated, they won't have that effect. Our eight plants are sort of a microcosm of that. I would like to think that a dialog between yourselves and the agency would do, as has happened so many times in the Clean Air Act, result in a path forward that indeed could have least impact on jobs and provide for a cleaner environment as well.

Mr. SULLIVAN. Mr. Elliott?

Mr. ELLIOTT. We would agree and echo the comments of the other panelists that we think about capital investment in various categories. We think about EHSA, or environmental health and

safety capital, maintenance of business capital, revenue generation capital. We would categorize this capital as non-discretionary and it would be in a different league. So perhaps jobs on a temporary basis for engineering consultancy and potentially jobs outside of the United States.

Mr. SULLIVAN. Thank you.

Mr. Chairman, I would like to submit for the record an analysis referenced by Mr. Harrington, which was prepared by Portland Cement Association regarding the impacts of EPA's rules on the cement sector.

Mr. WHITFIELD. Without objection.

[The information follows:]



January 2011

Overview Impact of Existing and Proposed Regulatory Standards on Domestic Cement Capacity

Executive Summary

Already a heavily regulated industry, the U.S. cement industry is currently faced with seven different existing or proposed Environmental Protection Agency (EPA) regulatory standards:

- National Ambient Air Quality Standards (NAAQS)—Currently effective
- Greenhouse gas reporting—Currently effective
- New Source Performance Standards (NSPS)—Currently effective
- Clean Air Act's "Tailoring Rule"—Currently effective
- National Emission Standards for Hazardous Air Pollutants (NESHAP)—Currently effective, with compliance required in 2013
- New standards for Commercial and Industrial Solid Waste Incinerators (CISWI)—Proposed and compliance to be effective in 2015
- Fly Ash determination as a hazardous waste—Proposed and assumed to be effective in 2015

PCA examined the cumulative impact of these regulations on United States cement, concrete, and construction industries, especially potential impact on construction costs, employment, and the environment.

The EPA regulations will hinder the cement industry's ongoing modernization efforts to remain globally competitive. This is a subtle message to the industry to shut down plants and source cement from foreign sources — thereby exporting emissions along with the jobs associated with cement production.

Regulations will export jobs

EPA regulations could result in the direct loss of 3,000 to 4,000 jobs in the cement industry by 2015. Cement industry jobs are typically high-wage jobs. These industry job losses translate into \$200 million to \$260 million in lost wages annually. PCA estimates that 18 plants could be forced to close because of the inability to meet standards or because the compliance investment required may not be financially justifiable. The construction industry could lose another 12,000 to 19,000 jobs because of higher construction costs.

These direct job losses could be amplified if indirect impacts are considered. The indirect job and wage losses would be the result of less regional economic activity, mostly in areas concentrated near the plant shutdowns, and magnifying the potential distress in these communities. In total, more than 80,000 jobs could be lost due to EPA regulations targeting the cement industry. These job losses will stem from a combination of closed plants, reduced national construction due to increased costs, and amplified by downstream multiplier effects.

The combination of the industry's pre-existing financial commitment to provide a reliable and efficient supply of cement to the U.S. market, coupled with sustained harsh economic and financial realities may overwhelm the industry's financial capability to comply with the EPA standards. EPA's short three-year compliance period for NESHAP, which addresses mercury and three other pollutants, requires compliance investments to begin soon. PCA estimates 2009 cement industry *revenues* at approximately \$6.5 billion. For 2010-2012, total industry *revenues* are projected at \$19 billion. The \$3.4 billion in investment required to comply with NESHAP standards equates to more than 18 percent of industry *revenues* accumulated during the years preceding NESHAP compliance (2010-2012).

The study estimates that current and proposed EPA regulations could add \$2.4 to \$3.9 billion to annual construction costs. Increased cement /concrete construction costs would raise the concrete costs for a construction project 22 to 36 percent.

Moreover, as the country's largest consumer of cement/concrete, the public sector would be hardest hit. PCA calculates that EPA compliance costs could add as much as \$1.2 to \$2 billion annually to state and local governments' expenditures just to maintain existing roadways and bridges. The addition of *new* roads and bridges would increase the price tag even further.

The nation's current construction downturn has already caused low capacity utilization rates at cement plants and a slowdown in capital investment. An uncertain regulatory environment could reduce expected returns on investments in the United States and contribute to corporate decisions to wait-and-see before making further investments in the United States.

Regulations will export emissions

Lacking further investment in capacity expansion, the United States cement industry will become increasingly dependent on imports as a source of supply.

At the same time that many of these regulations require compliance, an anticipated increase in population will result in additional demand for housing, commercial buildings, public buildings and infrastructure – all boosting demand for cement consumption. Population in the United States is expected to grow by 35 million persons by 2020 and 48 million persons by 2025 compared to 2007 levels.

The cumulative impact of these regulations will force increased reliance on imports to meet expected future consumption. Assuming all of the EPA regulations are enacted, from approximate 2010 levels of 5.9 million metric tons, imports are expected to reach 82 million metric tons in 2025—or roughly 56 percent of the US consumption. Keep in mind, the industry currently operates roughly 125 import terminals with an estimated capacity of 45 million metric tons. Increased reliance on imports dramatically increases the probability of future material supply shortages in the U.S. construction industry.

Because a significant portion of the improvement in emissions due to EPA regulations comes from plant closures, the EPA standards effectively export our emissions and our jobs to other cement supplying countries, while at the same time, absent global cement plant emission standards, increasing overall global emissions.

For example, EPA's potential classification of fly ash as a hazardous waste, without an exemption for beneficial re-use, will virtually eliminate its use in concrete mixes, increasing net CO₂ and other emissions associated with cement manufacture, and reduce the performance characteristics of concrete in some cases.

If EPA designates fly ash as a hazardous waste under the proposed rule, it would reverse decades of progress in sustainability of building materials. Use of fly ash in concrete production is recognized worldwide as a practice that improves the performance and sustainability of concrete by adding decades to the life of construction projects, and greatly reducing carbon dioxide emissions and resource consumption in cement production.

Another regulation that will have a negative environmental impact is the new standards for Commercial and Industrial Solid Waste Incinerators (CISWI), which negates the incentive for cement plants to burn alternative fuels, like tire-derived fuel (TDF). The CISWI standard potentially reverses decades of environmental cleanup success and EPA support for using TDF as a fuel. A significant reduction in the use of TDF would materialize under potential CISWI standards and could lead to a seven-fold increase in scrapped tires that must be land filled by 2025 – creating a new environmental concern.

Overview

PCA's Market Intelligence Group is tasked to provide a rough estimate of the potential impact on domestic cement production resulting from seven different existing or proposed Environmental Protection Agency (EPA) regulatory standards. These standards are at different stages of potential enactment, ranging from in-place standards to the public comment stage. As a result, in some instances, PCA must make assumptions regarding the substance and timing of these potential regulations. The standards include:

- National Ambient Air Quality Standards (NAAQS) (Currently effective);
- Greenhouse gas reporting (Currently effective).
- New Source Performance Standards (NSPS) (Currently effective).
- Clean Air Act's "Tailoring Rule" (Currently effective).
- National Emission Standards for Hazardous Air Pollutants (NESHAP) (Compliance 2013).
- Potential new standards for Commercial and Industrial Solid Waste Incinerators (CISWI) (Proposed compliance to be effective 2015).
- Fly Ash determination as a hazardous waste (Assumed to be effective 2015).

PCA assesses the impacts of EPA regulatory standards by presenting a scenario representing an environment with no new EPA regulations (Baseline Scenario) and comparing those conclusions against a scenario that includes all EPA regulatory standards (Compliance Scenario). The difference between the two scenarios represents the aggregated impact of EPA regulations. While a myriad of impacts could also arise from the enforcement of more rigorous EPA standards, this report focuses on the impact on United States cement consumption, cement production, cement capacity, import volume and penetration, the cost to the cement industry attached to compliance, potential impacts on construction costs, and the potential impacts on employment.

EPA has been vague regarding the meshing of these standards into a coherent regulatory strategy directed at emitting industries, including those targeting cement producers. PCA, as a result, is forced to make assumptions regarding the coherency and consistency of EPA's regulatory policies targeting the cement industry. Actual form and substance of EPA regulations that characterize the compliance scenario may differ significantly from the regulations that eventually materialize. As a result, risk should be attached to PCA's impact estimates.

Key Findings

- The EPA's potential classification of fly ash as a hazardous waste, without an exemption for beneficial re-use, will virtually eliminate its use in concrete mixes leading to a 30 million metric ton increase in cement consumption by 2025, reduce domestic cement supply by roughly 2.0 million

metric tons, increase costs, net CO₂ and other emissions associated with cement manufacture, and reduce the performance characteristics of concrete in some cases.

- The NESHAP standards alone could force the closure of 18 cement plants representing 11 million metric tons of capacity. An additional 3 plants are at high risk of closure, representing an additional 2.5 million metric tons. These high risk plants are assumed to continue to operate.
- EPA's regulations that trigger "new source" designations under the NESHAP, CISWI or NSPS standards could hinder the cement industry's ongoing modernization efforts to remain world class competitive, and as a result, could eventually lead to an additional 4 plant closures representing another 3.4 million metric tons of capacity beyond NESHAP. Furthermore, this aspect of the EPA's standards is a subtle message to the industry to shut down plants and source cement from foreign sources – thereby exporting emissions along with jobs, associated with cement production.
- EPA regulations will result in a dependence on cement imports. Imports are expected to increase from roughly 5.9 million metric tons in 2010 to an estimated 36 million metric tons in 2015, 62 million metric tons by 2020, and 82 million metric tons by 2025. The industry currently operates roughly 125 import terminals with an estimated capacity of 45 million metric tons. Increased reliance on imports dramatically increases the probability of future material supply shortages in the U.S. construction industry.
- EPA regulations could potentially lead to higher overall concrete costs to the construction industry of at least \$2.5 to nearly \$4 billion annually.
- EPA regulations could result in the direct loss of 3,000 to 4,000 jobs in the cement industry and potentially another 12,000 to 19,000 direct jobs in the construction industry due to higher construction costs. These direct job losses could be amplified if up and downstream indirect impacts are considered. In total, more than 80,000 jobs could be lost due to EPA regulations.
- To meet NESHAP standards, PCA estimates that 90% of all cement plants will be forced to invest in bag houses to meet particulate matter standards. To comply with the combined Hg, THC, and HCl standards, PCA estimates that 9% of all plants will be required to invest in stand-alone wet scrubber systems, 75% of all plants will be required to invest in ACI systems, 20% of all plants will be required to invest in wet scrubber-ACI combination systems, and 65% of all plants will be required to invest in Regenerative Thermal Oxidizer (RTO) systems.
- To meet CISWI standards, PCA estimates that 87% of all alternative fuel burning cement plants, a subset of the total universe of plants, will be forced to invest in bag houses to meet particulate matter, lead and cadmium standards. This includes investments to existing bag houses and in some cases the construction of new bag houses. To comply with the combined Hg, SOx and HCl standards, PCA estimates that 22% of all plants will be required to invest in a stand-alone wet scrubber system, and 62% of all plants will be required to invest in wet scrubber-ACI systems. To comply with NOx, 22% of all plants will be required to invest in SNCR systems. To comply with carbon monoxide, 39% of plants will be required to invest in burner systems.
- To comply with NESHAP standards, the industry must invest at least \$3.4 billion. An additional \$2.0 billion must be invested to meet CISWI standards. This excludes potential spending by plants PCA estimates will close due to the inability to meet standards or due to the excessive financial burdens.
- The combination of the industry's pre-existing financial commitment to provide a reliable and efficient supply of cement to the U.S. market, coupled with sustained harsh economic and financial realities may overwhelm the industry's financial capability to comply with the NESHAP standards and proposed CISWI standards. NESHAP will be in force in three short years, which means that compliance investments must begin soon. PCA estimates total industry revenues during 2010-

2012 at \$19 billion. The \$3.4 billion in investment required to comply with NESHAP standards equates to more than 18% of industry revenues accumulated during the years preceding NESHAP compliance (2010-2012).

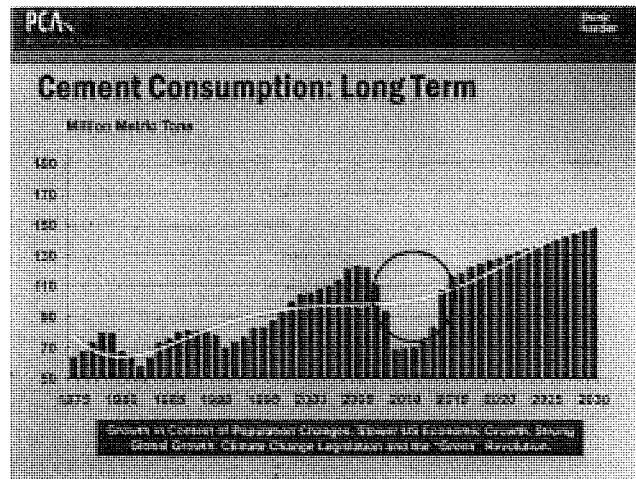
Baseline Scenario (No Emission Policy)

U.S. Cement Consumption Projections

Longer term cement consumption will be dictated by population gains, and this implies cement consumption will reach nearly 150 million metric tons by 2025.

U.S. cement consumption reached nearly 70 million metric tons in 2010, compared to near record levels of 128 million metric tons recorded in 2005. This decline reflects current economic adversities. With economic recovery, cement consumption is expected to reach 112 million metric tons in 2015, 131 million metric tons in 2020, and 147 million metric tons in 2025.

All market segments and regions recorded significant declines in cement consumption through 2009. This reflects a peak-to-trough decline in cement volumes of nearly 59 million metric tons – the worst in U.S. history. Tightened lending standards, weak labor markets and rising foreclosures continue to hamper an oversupplied residential construction market. Nonresidential construction is experiencing the brunt of the financial credit crisis as many projects have been delayed or canceled. This, coupled with rising vacancy rates and long project planning timelines, creates an expectation of a long recovery for commercial construction is expected. Public construction markets have demonstrated dramatic weakness as state governments struggle with soaring fiscal deficits from falling tax revenues. With public construction accounting for roughly 50% of cement consumption, this sector will play an important role in determining the industry's outlook. These underlying fundamentals suggest a recovery in cement consumption during 2010-2012 could be extremely modest.



Beyond 2012, volume gains in cement consumption are expected to become more robust. A new highway bill may materialize in 2013. In addition, substantive job gains during 2009-2012 will improve state fiscal conditions – leading to a revival in state construction spending. In the context of sustained economic growth, residential and nonresidential construction is also expected to record significant gains. By 2013, it is likely that all three construction sectors (public, residential and nonresidential) will record strong positive growth. Even with this, PCA believes the peak-to-peak recovery period (past peak 2005) will take eleven to twelve years.

Longer term, PCA expects the U.S. economic growth rate will underperform consensus projections of 3% annually. As the U.S. population ages, slower economic growth may materialize. The argument for slower, future long-term economic growth rates is anchored in future demographic changes and its likely impact on spending habits among age groups. The persistent and sustained aging of the population will slow consumer spending. This will be compounded by other issues. PCA calculates that the aging of America will result in a 50 basis point reduction in growth of consumer spending and overall economic activity by 2020. PCA's long-term cement consumption projections are based on 2.4% real GDP growth. Upside risks are contained in PCA projections.

PCA projects long-term cement consumption will reach 131 million metric tons by 2020 and 147 million metric tons by 2025 – reflecting growth of 32 million tons compared to 2007 levels and growing at a 1.0% compound annual rate. Roughly 78% of the growth in cement consumption is driven by growth in population. The remaining 19% is driven by gains in growth in per capita cement consumption¹. In comparison, during 1994-2007, cement consumption grew 29 million metric tons at a compound annual growth rate of 2.3%. During 1994-2007, 83% of the market growth was driven by population gains and 17% by gains in cement consumption per capita.

Long-term cement projections are calculated by combining Bureau of Census' (BOC) population projections with per capita cement consumption estimates to yield total cement consumption. Changes in per capita cement consumption are driven by projected economic activity at the state level and measured by real gross state product.

The anticipated increase in population will result in additional demand for housing, commercial buildings, public buildings and infrastructure – all boosting demand for cement consumption. Population in the United States is expected to grow by 35 million persons by 2020 and 48 million persons by 2025 compared to 2007 levels. According to the Bureau of Census (BOC) April 2005 forecast, U.S. 2007 population is estimated at almost 302 million persons and is expected to reach 344 million persons by 2020 and 348 million persons by 2025 – reflecting a 16% increase over 2007 levels.

PCA projections may be conservative. Nationally, per capita cement consumption is expected to reach 0.392 metric tons per capita by 2020, compared to 0.382 metric tons per capita recorded in 2007. This reflects an increase of slightly more than 3%. The projections fall well below those experienced during the previous 13 year period when per capita cement consumption grew by nearly 17.2%. Economic growth directly impacts growth in per capita cement consumption. Stronger economic activity leads to higher household formation, stronger fiscal conditions at the state level, and higher expected return on real investments, leading to higher levels of residential, public, and nonresidential construction activity. Stronger long-term economic growth will encourage greater construction activity and hence cement consumption per capita. According to PCA estimates, per capita cement consumption grows 0.5% for every one percent increase in real GDP growth.

¹ The projected per capita growth rate is exaggerated by the current depressed market, lowering the jump-off point.

Fly Ash Usage

Fly ash usage by the concrete/cement industry is expected to increase on a sustained basis – reducing CO₂ emissions as well as other emissions associated with the manufacture of cement and lowering costs to end users of concrete.

Since fly ash can be a substitute for cement in concrete mixes, its usage could directly impact cement consumption projections. The baseline scenario assumes continued gains in the use of fly ash in concrete mixes – at the expense of cement consumption growth. The use of fly ash in concrete mixes has been increasing steadily – constituting roughly 15 million metric tons, or 10.5% of total cementitious material consumption (cement, slag cement and fly ash in 2010). By 2030, PCA expects fly ash will account for 14%-15% of total cementitious material consumption. Given this increase and fly ash use as raw feed in cement kilns, PCA expects fly ash consumption will reach nearly 33 million tons by 2030. Not only will the use of this fly ash reduce construction costs and improve concrete's durability characteristics for some applications, but for every ton used, it directly replaces cement in the concrete mix. Since fly ash requires no calcination, it reduces CO₂ emissions and other emissions associated with the manufacture of cement.

U.S. Cement Capacity Projections

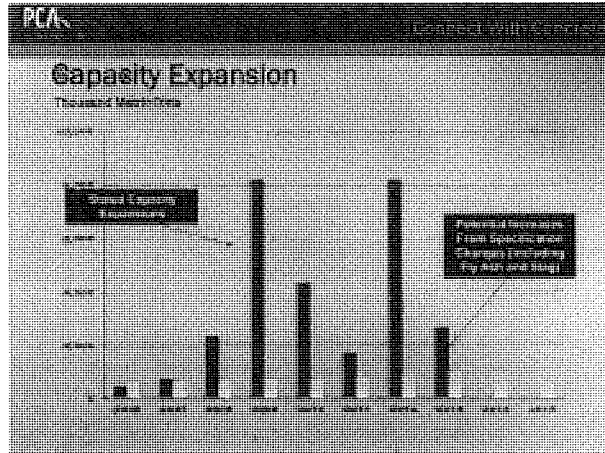
Increases in cement capacity and additives will likely be offset by the structural decline in wet kiln capacity.

The portland cement industry in the United States is currently comprised of more than 30 producers operating more than 167 kilns in 2008 with an estimated domestic *clinker* capacity of nearly 92 million metric tons. Gypsum is mixed with clinker to form portland cement. Gypsum/limestone currently accounts for 7.5% of the mix. Including gypsum and limestone additions, domestic *cement* capacity is currently estimated at 99 million metric tons.

Domestic cement capacity is expected to reach roughly 107 million metric tons in 2015 and beyond. These estimates reflect planned capacity expansions. Capacity estimates also include assumptions regarding the continued retirement of older wet kilns.

PCA assumes no new capacity is added beyond these announced plans. This assumption may have merit. Large multinational companies dominate ownership of the United States cement industry. Within a multinational company, each geographic region, such as the United States, competes against other global regions for scarce corporate investment dollars (keep in mind, expanding cement capacity is extremely expensive – a two million metric ton plant now costs upwards of \$575 million). The rate of return on new capacity investment in the United States is compared against returns in other countries. Current financial distress caused by low utilization rates and an uncertain regulatory environment could reduce expected returns on investments in the United States and contribute to corporate decisions to wait-and-see before making further investments in the United States. The bottom line is that investment in cement plants in the U.S. is now facing higher risk, because of difficulty to achieve environmental compliance, and lower returns due to increased environmental compliance cost. Higher risk and lower returns drives off investment.

In addition to clinker capacity expansions, changes in U.S. specifications allowing for increased use of limestone in portland cement could increase the potential domestic supply. Further changes in U.S. specifications occurred in 2010 allowing for increased use of inorganic cementitious materials such as fly ash and slag. How much these specification changes increase cement capacity depends on how plants



elect to exercise these options. Gypsum/limestone allowances currently add 7.5%. PCA expects that total additions will grow to 10% by 2025, adding more than 2.0 million metric tons to domestic cement supply.

Expansions in cement supply are expected to be largely offset by displacements of capacity. Economic stress and declining cement consumption have resulted in commissioning delays and slower planned ramp-ups for new plants. Two planned "greenfield" plants have been postponed indefinitely. Permanent or temporary shutdowns at 16 plants have been announced or are planned. Plant shutdowns since 2008 have reduced domestic clinker capacity by 9.7 million metric tons. Some, but not all, of these capacity displacements may be permanent. Of the closure announcements, seven plants are considered permanent, reflecting nearly 4 million metric tons. Of the remaining temporary closures, PCA assumes these plants will remain closed until stronger market conditions may dictate reopening. Plants that are idled for more than 2 years have an added risk of being considered as 'New Sources'. This designation would greatly reduce the probability of a kiln re-start and may result in downside risk to PCA capacity projections.

In addition to cyclical displacement of capacity, the cement industry has been gradually phasing out its wet kiln clinker capacity, reducing its clinker capacity by approximately one million metric tons annually during the past ten years. The wet kiln process is an older process and is typically less energy efficient². During the past two years, the phase-out of wet kilns has accelerated – reducing wet kiln clinker capacity by nearly 5.6 million metric tons. In the context of current economic distress, the potential for higher energy prices in the future, and impending federal GHG controls, the accelerated pace of wet kiln retirement is expected to continue. PCA assumes total wet kiln clinker capacity will decline to 2.7 million metric tons in 2020 and beyond compared to 12 million metric tons in 2007. This assumption suggests a 9.3 million ton reduction in existing wet-kiln clinker capacity by 2020-2025.

² Note: the last wet kiln was installed 35 years ago.

Combining estimates of capacity expansion, changes in specification standards, and the structural shut down of wet kilns, translates into domestic clinker capacity estimates at roughly 97 million metric tons in 2015 and 95 million metric tons in 2025. With gypsum and limestone additives, this translates into 107 million metric tons of cement capacity by 2015.

U.S. Baseline Imported Cement Projections

Lacking further investment in capacity expansion, the United States cement industry will become increasingly dependent on imports as a source of supply.

Aside from domestic supply, the cement industry operates roughly 125 import terminals with an estimated capacity of 45 million metric tons. The ability and willingness to import cement is determined by demand conditions, prevailing global shipping rates, and the availability of ships to carry cement. Imports are viewed as swing supply, with volume increasing and decreasing depending upon the shortfall between domestic capacity and total United States consumption.

Imports have declined since 2006 from 36 million metric tons to roughly 5.9 million metric tons in 2010. Weak demand is largely responsible for this decline. In the context of weak demand conditions and low domestic utilization rates, imports share declined to 9.3% market share in 2010, compared to a 28.2% market share in 2006. With a gradual economic recovery expected, higher domestic utilization rates will emerge slowly and import shares are expected to remain near 9% through 2012. In the context of sustained growth, a recovery in utilization rates is expected to materialize, prompting import market shares to increase. From expected 2010 levels of 5.9 million metric tons, imports are expected to reach 12 million metric tons by 2015 (11% market share), 32 million metric tons in 2020 (24%), and 48 million metric tons in 2025 (nearly 33%).

U.S. Baseline Clinker Production Projections

Longer term cement production will be capped by high utilization rates and a possible hiatus on further expansion initiatives.

Actual domestic clinker production declined from 90 million metric tons in 2006 to less than 60 million metric tons in 2010. With the economic recovery, cement production is expected to reach 90 million metric tons in 2015 and beyond. These projections reflect PCA's estimates regarding domestic capacity, cement consumption, import volume, exports, and probable inventory changes.

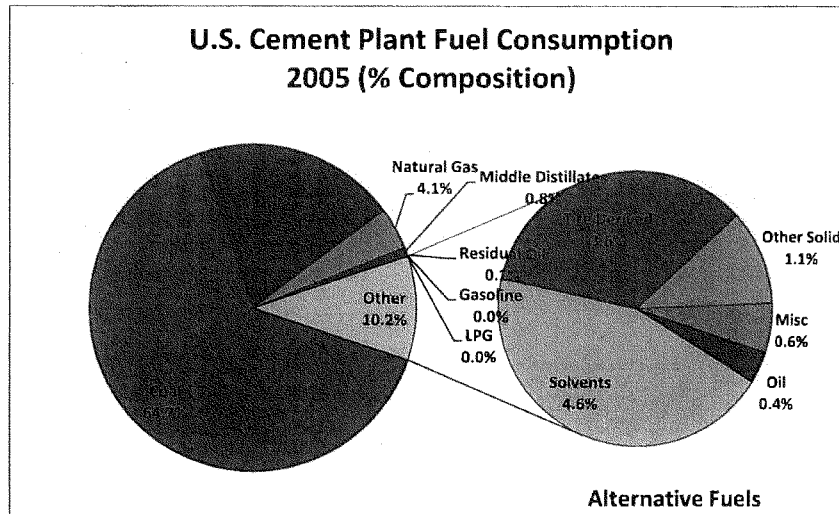
U.S. Kiln Fuel Composition Characteristics

While coal will continue to be the main source of kiln fuel, the industry will increase its reliance on alternative fuels.

The cement industry has made large strides in improving fuel efficiency over the past two decades. On average, the industry currently requires 4.1 million British Thermal Units (BTUs) of fuel per equivalent metric ton. This compares to roughly 4.5 million BTUs per equivalent metric ton in 2000, indicating an improvement in fuel efficiency of roughly 9% over the past decade.

During 2007-2009, an average of 12 percent of total fuel consumption in BTUs was composed of alternative fuel sources. Of these alternative fuel sources, approximately one-third were tire-derived, almost 40% were from solvents, 3% were from oil, and one quarter were from other solid wastes and miscellaneous

Baseline: No Emission Policy					
	2005	2010	2015	2020	2025
US Cement Industry					
US Cement Consumption (000 tons)	128,035	68,879	111,831	131,388	147,112
US Clinker Capacity (000 tons)	94,693	96,877	107,467	106,403	105,824
US Production (000 tons)	89,981	58,286	90,480	90,359	90,148
Imports (000 tons)	27,305	5,900	12,000	32,000	48,000
Total Fuel Consumption (billion BTU, bbtu)	341,999	233,144	361,919	361,436	360,593
Primary Fuel Consumption (bbtu)	307,009	207,123	321,828	318,163	310,957
Alternative Fuel Consumption (bbtu)	34,989	26,021	40,091	43,273	49,636
Alternative Fuel Plants (AFP)					
Capacity at AFP (000 tons)	48,209	49,923	55,370	54,941	54,941
Production at AFP (000 tons)	44,496	30,036	46,618	46,656	46,803
Total Fuel Consumption (bbtu)	177,984	120,146	186,471	186,625	187,213
Primary Fuel Consumption (bbtu)	142,995	94,125	146,380	143,353	137,577
Plant Alternative Fuel Consumption (bbtu)	34,989	26,021	40,091	43,273	49,636
Plant Tire Derived Fuel (bbtu)	12,143	8,587	13,230	14,280	16,380
Scrapped Tires Consumed (millions)	58	39	63	68	78
Scrapped Tire Stockpile (millions)	188	222	392	311	126
Fly Ash					
Fly Ash Production Million Metric Tons	71,100	65,568	71,520	73,632	75,616
Beneficial Use Consumption	29,118	27,392	44,376	50,625	56,358
Concrete Consumption	14,504	8,898	15,565	19,842	23,721
Cement Kiln Consumption as raw material	2,834	3,017	4,404	4,458	4,458
Cement/Concrete Share of Beneficial Use	59.6%	43.5%	45.0%	48.0%	50.0%
Estimated Landfill	41,982	38,176	27,144	23,007	19,258
Sources: PCA, USGS, Various EPA emissions documents.					
Note: No credible Cadmium emissions data for cement kilns could be found and is omitted from analysis.					



alternate fuel sources. Tire-derived fuel (TDF) is a significant energy source due to its relatively high BTU value. A decrease in its use would lead to higher fuel costs and higher emissions rates³. As for primary fuels during this period, coal and coke represented over 80% of total fuel consumption, whereas natural gas represented around 3.5%. These are supplemented by middle distillates, gasoline, residual oil, and liquefied propane gas (LPG).

Compliance With EPA Standards Scenario

The EPA emission compliance scenario includes all assessments regarding cement consumption and capacity changes contained in the baseline scenario. The compliance scenario assumes the EPA declares fly ash as a hazardous waste, but provides allowances for beneficial use of fly ash in cement production and concrete. This assumption changes the cement consumption outlook significantly. Potential impacts on cement capacity, domestic cement production, capacity utilization and imports are estimated in the context of assumed EPA imposed emission policies.

Seven different, existing or proposed, EPA regulatory standards are considered in the compliance scenario. These standards are at different stages of potential enactment, ranging from in-place standards to the public comment stage. The existing and proposed standards, with enforcement dates in parenthesis, include:

³ The EPA states on its website (epa.gov/epawaste/conservation/materials/tires/tdf.htm#cement) "based on over 15 years of experience with more than 80 individual facilities, EPA recognizes that the use of tire-derived fuels is a viable alternative to the use of fossil fuels. EPA testing shows that TDF has a higher BTU value than coal."

- National Ambient Air Quality Standards (NAAQS) (Currently effective);
- Greenhouse gas reporting (Currently effective).
- Clean Air Act's "Tailoring Rule" (Currently effective).
- New Source Performance Standards (Currently effective).
- National Emission Standards for Hazardous Airborne Pollutants (NESHAP) (Compliance 2013).
- Potential new standards for Commercial and Industrial Solid Waste Incineration (CISWI) (Proposed compliance 2015).
- Fly Ash determination as a hazardous waste (Assumed to be effective 2015).

The EPA has been vague regarding the meshing of these standards into a coherent regulatory strategy directed at emitting industries, including those targeting cement producers. Lacking definitive rulings on EPA standards, PCA is forced to make assumptions regarding the timing, coverage and scope of EPA policies that impact cement plant emissions.

Compliance Scenario: Fly Ash Ruling

PCA assumes the EPA will not classify fly ash used in concrete mixes and cement as a hazardous waste. While the EPA has yet to reach a final ruling on fly ash, this report assumes an enforcement date of 2015.

Most EPA standards impact the cement industry's supply side by mandating compliance cost investments and the annual operating costs associated with those investments. EPA's proposal on fly ash, however, has potentially large impacts on cement consumption, with smaller impacts on the supply side. Consumption levels play a role in determining plant operating rates, expected return on investments (ROI), and imports. As a result, the fly ash rule must be addressed first in the compliance scenario. Otherwise, all other assumptions and assessments made in the baseline scenario pertaining to consumption remain in place for the compliance scenario.

Fly ash is a by-product of coal combustion from electric utilities and independent power producers. A large portion of fly ash generated from electricity generation is recycled in cement and concrete. The benefits of using fly ash in concrete come from improved durability, increased ultimate compressive and flexural strengths, reduced permeability, and mitigation of alkali silica reactivity (ASR). Concrete made with fly ash often extends the life of construction projects by decades, minimizing environmental impacts of rebuilding. Since fly ash requires no calcination (converting limestone to cement) and therefore produces no carbon dioxide (CO₂) or other emissions excluding those associated with the initial coal combustion, it is environmentally attractive. Finally, fly ash is less expensive than cement, reducing the cost of construction projects.

Coal powered electric utilities account for roughly 22.5% of total United States electric power, or roughly 100 quadrillion BTUs. Total energy consumption will grow in the years ahead. Based on statistics from the American Coal Ash Association (ACAA), roughly 70 million tons of fly ash is produced as a by-product of this energy generation annually. According to the Energy Information Agency (EIA), coal powered electricity generation will account for slightly less than 22% of total electric power by 2030 – or roughly 110 quadrillion BTUs. This implies that the fly ash by-product of coal combustion from electric utilities will increase from current levels, despite efforts to pursue renewable energy power sources. PCA estimates that 78 million tons of fly ash will be produced in 2025.

Roughly 30 million tons of fly ash produced annually is re-used for beneficial purposes. This implies that roughly 40 million tons of fly ash is committed to landfills. The ACAA identifies 15 major users of fly ash ranging from construction to agricultural industries. Cement and concrete are the largest consumers of fly ash for beneficial purposes. Fly ash is normally contained in the concrete mix, accounting for roughly 12

million tons of consumption annually. Fly ash is also used in cement kilns as raw feed, accounting for roughly 3 million tons of consumption annually.

Coal combustion residuals, often referred to as coal ash, are currently considered exempt wastes under an amendment to the Resource Conservation and Recovery Act (RCRA). EPA is proposing to regulate, for the first time, coal ash, in order to address the risks posed by the disposal of the wastes generated by electric utilities and independent power producers. EPA is considering reclassifying fly ash as a hazardous waste under Subtitle C of the Resource Conservation and Recovery Act. EPA may exclude from the hazardous designation material used for beneficial purposes (as specified by EPA).

Should the EPA designate fly ash as a hazardous waste under the proposed rule, it would reverse decades of progress in sustainability of building materials. Use of fly ash in concrete production has become recognized worldwide as a practice that improves the performance and sustainability of concrete by adding decades to the life of construction projects, and greatly reducing carbon dioxide emissions and resource consumption in cement production. Moreover, the proposal would be inconsistent with the EPA's Comprehensive Procurement Guideline program mandating procuring agencies to purchase certain designated products containing recycled materials, including, in particular, cement and concrete containing fly ash. These standards are often amplified by state mandates for fly ash usage in public construction projects.

EPA concluded the public comment stage regarding fly ash's designation as a hazardous waste. EPA is currently considering two options; (1) designation of all fly ash as a hazardous waste when disposed or as a solid waste and (2) omitting the designation of fly ash as a hazardous waste if its use has beneficial purposes. For this report, PCA assumes EPA will omit the designation of fly ash as a hazardous waste for concrete mixes and cement kiln use. While EPA has yet to reach a final ruling on fly ash, this report assumes an enforcement date of 2015.

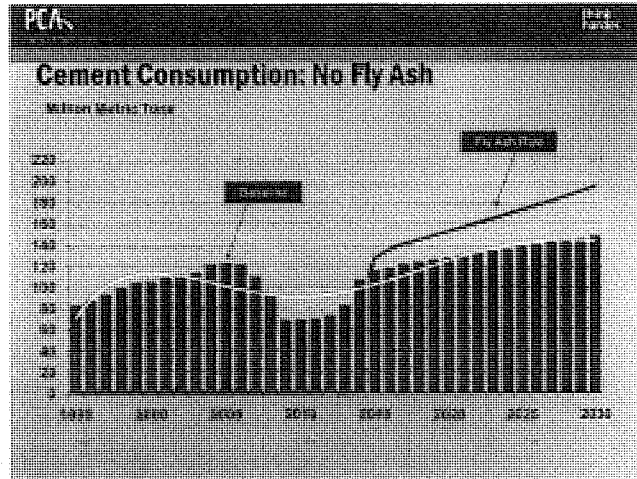
While this may seem a generous assumption, in all likelihood fly ash usage, even if beneficial, will be open to legal actions, with similar results as if it were declared a hazardous waste. Fly ash's designation as a hazardous waste, whether for beneficial use or not, would have several impacts including; stigmatization of its use as an ingredient in concrete or cement, raise the potential of law suits against producers and end-users of fly ash, including electric utilities, cement and concrete producers, and construction companies, and potentially raise insurance premiums for principals that continue to employ the use of fly ash.

The exposure to legal action will dramatically hinder, and possibly eliminate, the use of fly ash use in concrete mixes. Typically, parties with the largest financial resources are the most exposed to law suits – namely the electric utilities. PCA assumes that rather than sell fly ash for beneficial use and risk exposure to legal action, most electric utilities will landfill fly ash⁴. The additional costs associated with this decision are likely to be built into the rate base for the coal burning electric utility. In such a scenario, it makes little difference whether concrete producers and construction companies opt to accept legal risks associated with fly ash usage because coal burning electric utility companies will stop selling fly ash.

This scenario implies that the fly ash ruling could increase electricity costs to consumers. According to this scenario, coal burning utilities will forego revenues associated with fly ash sales and incur landfill costs (estimated at \$300 per ton). At 15 million tons of fly ash used by the cement/concrete industry annually, this implies a net incremental cost to coal burning utilities of roughly \$5.7 billion annually. Keep in mind,

⁴ "The stigma of being associated with hazardous waste is real and is already affecting the markets". Thomas A Adams, Executive Director of the American Coal Ash Association. EPA public hearing, October 27, 2010, Knoxville, Tennessee.

cement/concrete usage of fly ash is expected to increase according to the baseline scenario, implying even larger potential net incremental costs to coal burning utilities. PCA estimates that this could translate into roughly a 4% increase in incremental costs to coal burning utilities which will likely be passed onto consumers in the form of higher electricity rates. As a significant consumer of electricity, cement production cost would significantly increase resulting in upward price pressure on cement.



Fly Ash Ruling Impact: Higher Cement Consumption

Without the use of fly ash in concrete mixes, cement consumption will increase dramatically.

The elimination of fly ash usage suggests a significant increase in cement consumption. While the ratio can vary depending upon the application, one ton of fly ash in the concrete mix is assumed to displace one ton of cement consumption. The baseline scenario assumes the use of fly ash in concrete mixes has been increasing steadily, constituting roughly 10.5% of total cementitious material consumption (cement, slag cement and fly ash). By 2025, PCA expects fly ash will account for 14%-15% of total cementitious material consumption. PCA expects fly ash consumption used in concrete mixes will reach nearly 30 million tons by 2025. This implies that cement consumption will increase by an equal amount.

Fly Ash Ruling Impact: Increases Construction Costs

Concrete construction costs will increase, adding nearly \$1 billion annually to total United States construction costs.

In most construction projects, fly ash accounts for 15% to 40% of the cementitious material mix. This will vary by project and region depending upon the availability of slag as well as user preferences. During 2001-

2010 the price of fly ash averaged \$65.55 per ton compared to \$90.52 per ton for cement. Using these averages implies that concrete mixes using:

- A 15% fly ash mix averaged \$86.77 per ton, or a savings of \$3.74 per ton - translating into a 4.1% reduction in concrete costs for a construction project;
- A 25% fly ash mix (most common) averaged \$84.27 per ton, or a savings of \$6.24 per ton, translating into a 6.9% reduction in concrete costs for a construction project.
- A 40% fly ash mix averaged \$80.53 per ton, or a savings of \$9.99 per ton, translating into an 11% reduction in concrete costs for a construction project.

Using a five year average of cementitious material intensities, out of every one million real 1996 dollars of construction activity, roughly \$14,500 is attributed to cementitious material costs. Prior to the recession's collapse of construction activity, the construction market was averaging roughly \$750 billion in real construction spending. This translates into roughly \$11 billion in cementitious material spending. A hazardous waste designation for fly ash would likely increase construction costs 4% to 11% per construction project.

Fly Ash Ruling Impact: Lowers Domestic Cement Supply

Use of supplementary cementitious material could be reduced by 25%, reducing domestic cement supply by more than 2.0 million metric tons.

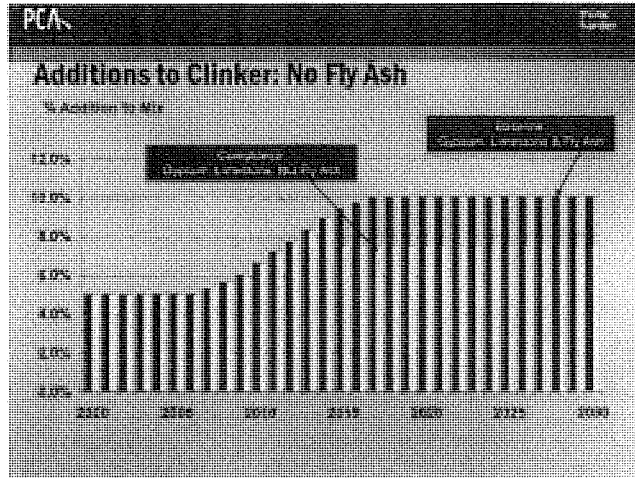
Specification changes have allowed for an increase in the amount of limestone and added to ground clinker to form cement. Recently, specification changes have permitted the use of inorganic materials, or fly ash, to be added to limestone, gypsum, and ground clinker to form cement. PCA's baseline scenario assumed that "inorganic" additions (fly ash and slag) would represent a 2.5% national average of the cement mix by 2015 and beyond. Under the proposed fly ash ruling, these additions cease. This implies that while domestic supply of clinker remains unchanged by the fly ash rule, domestic supply of cement is reduced by roughly 2.5 million metric tons annually by 2015.

The combination of increased demand of roughly 16 million metric tons in 2015, 20 million metric tons in 2020, and 24 million metric tons in 2025 and reduced domestic supply of roughly 2.5 to 3.0 million metric tons annually suggests that the fly ash rule will push domestic production to its limits and add significantly to either domestic manufacturers' incentive to invest or increase their volume of imports. Given the context of a harsh regulatory environment facing domestic producers, aside from the fly ash rule, it is unlikely additional investment will be forthcoming. The disparity between increased cement demand and reduced cement supply suggests a dramatic increase in imports beginning in 2015.

To compensate for the elimination of fly ash as an addition to the cement mix, PCA assumes that domestic cement production will increase to offset the shortfall. This implies a higher utilization rate among existing domestic plants beginning in 2015 (2.5% increase in production). Compared to cement production, this implies that the absence of fly ash additions to the cement mix increases:

- CO₂ emissions by more than 2.5 million tons annually.
- Mercury (Hg) emissions by 820 pounds lbs annually.
- Total hydrocarbons (THC) emissions by 1.5 million pounds annually.
- Particulate Matter (PM) emissions by 1.2 million pounds annually.

- Nitrogen oxide (NOx), sulfur dioxide (SO₂), dioxin/furans (D/F), carbon monoxide (CO), lead (Pb), cadmium (Cd) generated by alternative fuel burning plants will also increase.



These assessments dramatically underestimate the potential increase in emissions associated with the fly ash ruling due to PCA's assumption that it is unlikely additional investment in capacity expansion will be forthcoming given the context of a harsh regulatory environment facing domestic producers. By itself, the fly ash ruling would imply an increase in more than 25 million metric tons by 2025 of cement consumption in the United States due to fly ash's elimination in concrete mixes. Absent other existing and potential regulations this ruling would encourage increases in investment to expand domestic cement capacity to meet the increase in forced consumption. Assuming 25% of this new, forced demand would be met by imports, this implies capacity expansion equivalent to 11 new cement plants at an average capacity of 2 million tons operating at 90% utilization. This equates to an increase in domestic production eventually reaching 20 million metric tons annually, adding to economic activity (GDP) and employment.

If PCA's assumption regarding additional capacity investment is relaxed, cement production would increase significantly and the emissions associated with cement production would increase as well, even with optimal emission capture technologies in place. Accordingly, the absence of fly ash additions to the concrete mixes increases domestic production and hence emissions by the following:

- CO₂ emissions by 16-24 million tons annually during 2015-2025;
- Mercury (Hg) emissions by 3.3 to 4.5 thousand pounds annually during 2015-2025.
- Hydrochloric Acid (HCL) emissions by 1.2 to 1.7 million pounds annually during 2015-2025.

- Total hydrocarbons (THC) emissions by 6 to 8 million pounds annually during 2015-2025.
- Particulate Matter (PM) emissions by 4.8 to 6.7 million pounds annually during 2015-2025.

The ruling on its surface, seems to run counter to a coordinated EPA emission reduction strategy (fly ash all about "off coal"; EPA assumes no stigma). Or, it implies a coordinated EPA strategy that successfully reduces wastes by exporting the problem. PCA's assumption that is unlikely additional investment will be forthcoming given the context of a harsh regulatory environment facing domestic producers falls in-line with the latter. Keep in mind, removing fly ash from concrete mixes increases cement production – either domestically or in foreign source countries or both. The extent to which the corresponding emission increases are realized in the United States is dependent on further investment in United States cement capacity. World-wide emissions arising from increased cement production will result from the fly ash ruling. If the additional cement is not produced in the United States, it will be produced elsewhere and the emissions associated with additional cement production will be released, plus the emissions associated with its transportation back to the U.S.

Fly Ash Ruling Impact: Domestic Kiln Usage and Cost Impacts

Raw feed costs will increase – adding to the costs of cement and concrete.

The fly ash ruling not only impacts the volume of cement consumption and its supply, but would also have an impact on the cost of producing cement in the United States. Fly ash is used in cement kilns as raw feed, accounting for roughly 3 million tons of fly ash consumption annually. Fly ash is used mainly for its alumina in cement kilns but also contributes silica, iron and calcium to the raw material mix. It improves clinker quality, mainly due to its lower alkali content and fineness. The rate of substitution is generally 3–5% of the raw materials. Use of fly ash in cement kilns may also release unburned carbon – reducing energy requirements at the kiln. The fly ash ruling would end its use in the kiln. This ruling, therefore, seems to run contrary to the EPA's Tailoring Rule aimed at best practices to reduce CO2 emissions.

Other materials would be used to offset fly ash's displacement in the kilns. One benefit of fly ash usage is low cost. It is likely that the replacement materials would be more expensive than fly ash – potentially increasing the manufacturing cost per ton of cement. PCA estimates roughly a \$4 increase in material cost per ton for the replacement of fly ash in the kiln. At roughly 3 million metric tons of fly ash consumed annually this translates into a \$12 million increase in kiln material costs per year or roughly \$0.15 to \$0.20 per ton when dispersed across national production.

Fly Ash Ruling Impact: Demolition Costs

A hazardous waste designation could lead to substantive increase in demolition costs associated with the containment of fly ash.

The legal risk associated with fly ash's designation as a hazardous waste pertains to both continued use in construction and for the demolition of existing concrete structures. A hazardous waste designation could lead to substantive demolition costs associated with the containment of fly ash. Presumably these costs will be borne by the demolition company and passed onto the site developer. Even in this context, legal risks remain. PCA has not addressed this issue in the current study.

Compliance Scenario: NESHAP & CISWI Impact

EPA has recently ruled on National Emission Standards for Hazardous Air Pollutants (NESHAP). This regulation requires compliance in 2013, requiring cement producers to invest billions of dollars in compliance equipment targeting specific emissions prior to the compliance date. At the same time, EPA

recently proposed a broader set of emission standards, and at different levels of tolerance and measurement, than NESHAP, for emissions generated by alternative fuel burning plants under Commercial and Industrial Solid Waste Incineration (CISWI). CISWI is scheduled for enactment in 2015.

EPA has not issued guidance regarding compliance for alternative fuel burning plants during the time gap between NESHAP and CISWI implementation, or the 2013-2015 period. Conceivably, an alternative fuel burning plant (which has been encouraged by the EPA) could be faced with investing by 2013 in compliance equipment for NESHAP and a different set of compliance equipment for CISWI by 2015. Such a scenario suggests a lack of coordination between the two policies. At issue is the EPA's designation of specific cement plants as either a cement kiln or an incinerator – not both. Such a scenario amounts to double jeopardy.

As a result, PCA assumes alternative fuel burning plants, or potential CISWI plants, do not have to conform to NESHAP standards in 2013, but must commit to a CISWI designation at that time. These plants would then be forced to comply with CISWI standards in 2015.

In any case, the proposed CISWI standards must be analyzed in the context of NESHAP. The proposed CISWI standard presents cement plant executives with two options including; (1) continue to burn alternative fuels and invest in compliance technologies, or (2) discontinue the burning of alternative fuels, avoid CISWI compliance, and then become subject to NESHAP standards. Which option is chosen will be based on cement industry executives weighing the potential marginal change in CISWI compliance costs against NESHAP compliance costs and considering the potential fuel costs savings resulting from the continued burning of alternative fuels. PCA's assumption suggests these decisions must be made well in advance of 2013 so facilities can prepare for compliance.

PCA's NESHAP and CISWI analysis includes all assessments regarding cement consumption and capacity changes contained in the baseline scenario. Potential impacts on cement capacity, domestic cement production, imports, and total U.S. cement emissions are estimated in the context of the existing NESHAP standards and the EPA proposed CISWI standards.

Three layers of analysis were performed to determine emission control policy impacts on cement capacity. First, PCA must split the universe of cement plants into CISWI plants and NESHAP plants.

Second, emission control technologies are applied to each plant's expected emissions. Expected emissions by plant were calculated using the same method identified in the baseline scenario. Six emission control technologies were applied to bring plants into compliance including enhanced bag house/ESP controls, ACI systems, wet scrubber systems, RTO systems, selective non-catalytic reduction systems (SNCR), and kiln burner design enhancements. Bag house/ESP controls, ACI systems, and wet scrubber systems address emission compliance efforts for both the NESHAP and CISWI standards. RTO systems are targeted at reducing total hydrocarbons contained only in the NESHAP standard. SNCR enhancements are targeted at reducing nitrogen oxide (NO_x). Kiln burner designs are targeted at carbon monoxide emissions. Regulations aimed at reducing nitrogen oxide and carbon monoxide are only in the proposed CISWI standard. No other systems or technology measures are considered in the context of this analysis. Technology efficiencies were assumed in the capture of emissions by each system. Regardless of costs, if a plant failed to meet the standard, it was assumed to be a forced closure.

In the third layer of analysis, plants capable of meeting the NESHAP and CISWI standards were subjected to cost analysis. PCA assumes a 15 year horizon for the capitalization of fixed costs. For plants with less than an estimated 15 years left in quarry life, fixed emission compliance costs are capitalized over the

longest period possible. Annual operating costs for the compliance systems were also included in the analysis. Finally, these estimates are based on a 90% utilization rate.

Each these EPA standards also include provisions for "new source" emitters that imposed emission limits which are considerably more severe than "existing source emitters". New greenfield plants that are commissioned after 2013 are assumed to be subject to these tighter standards. Major modifications to existing plants could force a reclassification of a plant from an existing source to a new source.

Designation of NESHAP and CISWI Plants

According to PCA's Labor/Energy data, sixty one plants used alternative fuels in their kilns on a sustained basis during 2006-2008. Of these, 16 plants' alternative fuel usage accounted for less than one percent of their total fuel consumption. Those plants were excluded from the analysis in this report. This report includes only the remaining 45 plants that burn alternative fuels accounting for more than 1% of their total fuel usage. In the context of regulation uncertainty, PCA assumes no additional cement plants will begin burning alternative fuels. Alternative fuels include scrap tires, solvents, waste oil and other solids and liquids. Coal, petroleum coke, natural gas, middle distillates, residual oil, and liquids/gases are considered primary fuels and plants burning only these fuels are not considered subject to CISWI standards.

PCA compares the CISWI compliance costs against NESHAP compliance costs. This results in the incremental increase in investment to comply with CISWI over the existing NESHAP standards. Finally, these incremental changes in CISWI compliance costs were weighed against the potential fuel cost savings arising from alternative fuel usage. If the marginal increase in compliance costs for CISWI are more than offset by fuel savings, then plants are assumed to continue burning alternative fuels and comply with CISWI. Plants lacking this return are assumed to discontinue burning alternative fuels and would then fall under NESHAP rules. PCA assumes this compliance decision must be performed well before the onset of NESHAP compliance.

Emission Control Technology Assumptions

Technology assumptions were made regarding the effectiveness of various emission control systems. Sparse evidence exists regarding the actual effectiveness of emission control technologies applied to cement kilns. The emissions captured by the various technologies are often based on theoretical estimates of capture efficiencies and may not reflect actual operating efficiencies. Furthermore, it should be noted that emission capture efficiencies used in this report may differ from the estimates indicated elsewhere in the PCA comments. Due to uncertainties regarding emission control efficiencies, PCA has assigned its own estimates regarding emission capture efficiencies. Considerable effort was undertaken by PCA to yield fair and realistic emission capture efficiencies. PCA's emission capture assumptions are typically less optimistic than those assumed by EPA.

Mercury (Hg) Emission Control Assumptions (NESHAP and CISWI)

The bulk of mercury emission control is likely to occur through the use of ACI systems, wet scrubber systems, or a combination of both. According to some experts, ACI systems are preferred. PCA estimates that ACI systems can potentially capture 75% of Hg emissions. EPA estimates the capture efficiency at 90%. Wet scrubber systems alone are believed to be less effective than ACI systems as they do not capture the elemental form of mercury. PCA estimates that wet scrubber systems could potentially capture 50% of Hg emissions. The EPA estimates the capture efficiency at 80%. Use of an ACI system coupled

with a wet scrubber is expected to capture 85% of mercury emissions. EPA estimates the capture efficiency of this combination at 98%. Keep in mind, most research regarding Hg emission control and capture has targeted coal burning utilities. These form the basis of EPA's high emission capture

Technology Assumptions Regarding the Recapture of Emissions										
	THC	H	HCL	D/F	PM	NOx	SOx	CO	Pb	Cd
Bag house	--	--	--	--	99%	--	--	--	99%	99%
RTO	95%	--	--	--	--	--	--	--	--	--
RTO-Wet Scrubber	95%	--	--	--	--	--	--	--	--	--
SNCR	--	--	--	--	--	90%	--	--	--	--
Web Scrubber	--	50%	99%	--	--	--	80%	--	--	--
ACI	--	75%	--	80%	--	--	--	--	--	--
Wet Scrubber-ACI	--	85%	99%	--	--	--	--	--	--	--
Cooling & Burning Design	--	--	--	99%	--	--	--	90%	--	--
Source: PCA										

assumptions. The chemical dynamics inside a cement kiln, however, are far different than those of a utility boiler. The lower capture rate assumed by PCA suggests that fewer plants can meet the NESHAP standards and therefore would likely shut down.

Total Hydrocarbons (THC) Emission Control Assumptions (NESHAP Only)

The bulk of total hydrocarbon emission control is likely to occur through the use of an ACI system, RTO system, or a wet scrubber combined with an RTO system. PCA estimates an ACI system can capture 50% of total hydrocarbon emissions. The EPA estimates the emission capture at 75%. The addition of an RTO system, increases hydrocarbon capture to 95%, compared to 98% estimated by the EPA. An RTO's emission capture cannot be guaranteed at emission rates below 10 ppmv regardless of inlet THC concentration.

Particulate Matter (PM) Emission Control Assumptions (NESHAP and CISWI)

The bulk of particulate matter emission control is likely to occur through the use of bag houses and enhancements to existing bag houses. Bag house systems capture nearly all particulate matter emissions. PCA accepts EPA's estimate of 99.9% emission capture.

Hydrochloric Acid (HCL) Emission Control Assumptions (NESHAP and CISWI)

The bulk of hydrochloric acid emission control is likely to occur through the use of wet scrubber systems. PCA and EPA agree that wet scrubber systems will likely capture 99.9% of all hydrochloric acid emissions. PCA notes that EPA has not considered that the capture of mercury in a wet scrubber may result in the added concentration of mercury in the by-products generated by wet scrubbers. EPA has also not considered that many plants do not have availability of water to supply a wet scrubber system.

Sulfur Dioxide (SO₂) Emission Control Assumptions (CISWI Only)

Several strategies could be employed to address SO_x emissions including the use of wet scrubber systems, lime injection and hydration systems, as well as calcinatory slip steam systems. PCA assumes the bulk of sulfur dioxide control is likely to occur through the use of wet scrubber systems. PCA assumes that wet scrubber systems will likely capture 80% of all sulfur dioxide.

Nitrogen Oxide (NO_x) Emission Control Assumptions (CISWI Only)

The bulk of nitrogen oxide emission control is likely to occur through the use of selective non-catalytic reduction systems (SNCR). PCA assumes that SNCR systems will capture at most 50% of all nitrogen oxide emissions. It should be noted, the performance of an SNCR system is very variable, almost as variable as the pyroprocessing systems on which they are installed. NO_x reduction is dependent on how much NO_x emissions is generated. The more NO_x available, the more efficient is the NO_x reduction process. In a perverse way, a plant with relatively low NO_x may have less reduction than a plant with a higher NO_x.

Carbon Monoxide (CO) Emission Control Assumptions (CISWI Only)

The bulk of carbon monoxide emission control is likely to occur through enhancements to burner systems and strict adherence to good combustion practices. PCA assumes that these enhancements will likely capture 99% of all carbon monoxide emissions.

Dioxin/Furan (D/F) Emission Control Assumptions (CISWI Only)

The bulk of dioxin/furan emission control is likely to occur by achieving cooler exhaust temperatures to the kiln system air pollution control device (APCD), or bag house. Enhancements to APCD design including the use of ACI will likely capture 99% of all dioxin/furan emission.

Lead (Pb) Emission Control Assumptions (CISWI Only)

The bulk of lead emission control is likely to occur through the use of bag houses and enhancements to existing bag houses. Bag house systems capture nearly all lead emissions. PCA assumes 99% of all lead emissions are captured.

Cadmium (Cd) Emission Control Assumptions (CISWI Only)

PCA's search for cadmium emissions data for cement kilns was more than ten years old and covered only 13 plants. Analysis of cadmium emissions, therefore has been omitted from this report. It is likely that the bulk of cadmium emission (99%) will be captured through the use of bag houses and enhancements to existing bag houses. Since nearly all CISWI plants will require investment in bag house systems to capture

other emissions, omission of Cadmium in this analysis is unlikely to result in any significant skewing of the conclusions.

Industry Capital Costs to Comply with EPA Emission Standards

Total industry investments to comply with NESHAP standards are estimated at \$3.4 billion and an additional \$2.0 billion to comply with CISWI.

No cement plant in the United States can currently meet all NESHAP and/or CISWI standards simultaneously. As a result, all cement plants will require investment in emission capture systems. PCA employs EPA and PCA kiln and plant emission information to determine whether a plant must expend capital to reach compliance.

The emission standards differ between NESHAP and CISWI. The standards use different measures for compliance limits. All emission data by plant, used in this report were sourced from one of several sources including: (1) EPA's ISIS model used for NESHAP, (2) EPA's National Emission Inventory database, (3) PCA SN3048 - Air Emissions Data Summary for Portland Cement Pyroprocessing, (4) PCA SN3050 - Air Emissions Data Summary for Portland Cement Pyroprocessing Operations Firing Tire-Derived Fuels, (5) PCA's annual Labor/Energy Input Survey. Units of measurement for the toxic air pollutants available from these various sources often did not map directly to CISWI and/or NESHAP emission limit units, therefore conversions were required. For mercury (Hg) emissions, PCA used the EPA plant-by-plant study on Hg emissions from the cement industry, reflecting 2006 information. (EPA: The Toxics Release Inventory (TRI) 2006)⁵. A follow-up study was performed reflecting 2007 information for some 50 cement plants. Historical benchmarks on plant-by-plant Hg emissions reflect the most recently available data for each plant.

On a plant-by-plant basis, PCA employs a matrix solution that accounts for the plant's emissions of THC, Hg, HCl, PM, NOx, SOx, D/F, Pb and CO and employs PCA technology emission capture assumptions to determine which emission systems must be employed at the plant to comply with EPA standards. A plant with extremely high levels of Hg, HCl, and SOx, for example, would likely be forced to invest in an ACI-wet scrubber system. Investment in the ACI-wet scrubber system to comply with mercury emissions, for example, would presumably also take care of their HCl emissions at the same time. This investment for mercury control would also reduce SO₂ emissions by 80%. Double counting of systems required for compliance is eliminated through this process. Each plant is carefully assessed using this methodology.

For the NESHAP plants, PCA estimates that 90% cement plants will be forced to invest in bag houses to meet particulate matter standards. This includes investments to existing bag houses and in some cases the construction of new bag houses. To comply with the combined Hg, THC, PM, and HCl standards, PCA estimates that 9% of all plants will be required to invest in a stand-alone wet scrubber system, 75% of all plants will be required to invest in ACI systems, 20% of all plants will be required to invest in wet scrubber-ACI systems, and 65% of all plants will be required to invest in RTO systems. The methodology used to arrive at these estimates may differ from estimates indicated elsewhere in other PCA comments.

For the CISWI plants, PCA estimates that 87% of all CISWI cement plants will be forced to invest in bag houses to meet particulate matter, lead and cadmium standards. This includes investments to existing bag houses and in some cases the construction of new bag houses. To comply with the combined Hg, SOx and HCl standards, PCA estimates that 22% of all plants will be required to invest in a stand-alone wet scrubber system, 62% of all plants will be required to invest in wet scrubber-ACI systems. To meet NOx standards

⁵ EPA: The Toxics Release Inventory (TRI) 2006

22% of all plants will be required to invest in SNCR systems. To meet carbon monoxide standards 39% will be required to invest in burner systems.

PCA capital cost estimates for each emission control system are based on survey information from cement companies as well as equipment manufacturers and based on an average 1.2 million ton dry kiln cement plant with a pre-calculator and a pre-heater. Adjustments to this information are made to account for differences in the type of plant, such as a long dry or wet kiln. PCA assumes a 29% emission equipment installation cost premium for long dry kilns and a 143% cost premium for a wet kiln. Adjustments to this information are also made to account for size differences among plants.

This survey information reflects current estimated investment costs on emission systems. This information contains significant upside risk in the context of likely market conditions facing emission equipment suppliers. The cement industry will be mandated to install a massive amount of emission control equipment to comply with both NESHAP and CISWI. This equipment must be in-place within three years for NESHAP compliance and five years for CISWI compliance. There are a limited number of emission control equipment suppliers. Keep in mind, while there are 30 or more emission equipment suppliers only 6-8 are cement kiln emission focused. Demand for their services from the cement industry will increase dramatically. A premium will likely be placed on the urgency to install the systems over a short period of time. This dynamic is likely to be amplified as the overall economy regains traction. The likely outcome is an escalation in the costs of these systems. A 10% to 20% premium over existing costs is possible. PCA assumes a 15% increase over the survey information. Please note that these adjusted equipment cost estimates differ from the current equipment cost estimates indicated elsewhere in the PCA comments. Based on these adjustments, PCA's estimates for a 1.2 million ton dry kiln with a pre-calculator and pre-heater are as follows:

- Bag house System = \$9.2 million
- Activated carbon injection (ACI) = \$17.5 million
- Wet Scrubber System = \$22.1 million
- ACI system combined with a wet scrubber system = \$39.6 million
- Regenerative thermal oxidizer system (RTO) = \$20.2 million
- RTO system combined with a wet scrubber system = \$42.3 million
- Selective catalytic reduction systems (SNCR) = \$ 8.5 million (wet kiln), \$3.5 million (dry kiln).
- Burner Enhancements = \$ 1 million

U.S. cement industry will be forced to spend billions of dollars to comply. Six plants would be forced to spend in excess of \$100 million to reach compliance. Total industry investments to comply with NESHAP standards are estimated at \$3.4 billion. Total industry investments to comply with CISWI standards are estimated at \$2.0 billion (\$5.4 billion for total NESHAP and CISWI compliance).

Industry's Financial Ability to Comply with NESHAP Emission Standards

Large compliance expenditures are magnified in the context of the short compliance time horizon of three to five years. Further, this expenditure comes at a time when the financial ability of the industry to meet these investment requirements has been greatly reduced by current economic conditions.

The cement industry is still in the midst of aggressive investment in domestic capacity to modernize and expand its kilns. The commitment to these investments were made in response to domestic shortage conditions that materialized during 2003-2006, an understanding that dependence on the free flow of foreign supply is dictated by uncertain international logistic conditions surrounding dry bulk carriers thereby impacting freight rates, and in recognition of the long-term demographic trends that suggest strong demand requirements in the United States. Furthermore, the \$6.7 billion commitment to expand and modernize in the domestic industry was undertaken before the current economic hardships were clearly understood. Capitalization and financial commitment to many of these projects are already in-place.

Furthermore, harsh demand conditions currently face the industry. Since 2005, cement consumption declined by 59 million metric tons – or roughly 46%. With the slower than expected economic recovery, these conditions are unlikely to abate soon. Utilization rates are likely to remain near 60% through 2012 and hence the industry's financial performance will remain depressed.

The EPA's short three year compliance period for NESHAP suggests that compliance investments must begin soon. PCA estimates total 2009 cement industry **revenues** at less than \$6.5 billion. For 2010-2012, total industry revenues are estimated at \$19 billion. The \$3.4 billion in investment required to comply with NESHAP standards equates to more than 18% of industry **revenues** accumulated during the years preceding NESHAP compliance (2010-2012).

Investments to comply with CISWI standards do not have to be in-place until 2015. The \$2.0 billion in investment required to comply with CISWI standards equates to more than 6% of industry **revenues** accumulated during the years preceding CISWI compliance (2010-2014). This assessment assumes a substantive recovery in cement consumption materializes in 2013 and beyond.

The combination of the industry's pre-existing financial commitment to provide reliable and efficient supply of cement to the U.S. market, coupled with sustained harsh economic and financial realities may overwhelm the industry's financial capability to comply with the NESHAP and proposed CISWI standards.

Forced Cement Capacity Closures Due to NESHAP and CISWI Emission Standards

NESHAP standards will force 18 cement plants to close, perhaps more.

NESHAP emission standards will force cement plants to close beginning in 2013. Closures are expected to come in two forms. First, some plant's emissions are sufficiently high that even with the installation of emission capture systems they will not be able to meet NESHAP standards. Second, even if a plant can technically meet the NESHAP standards, the compliance investment required may not be justified on a financial basis. In either case, PCA assumes closure of the plant.

PCA estimates that 18 plants could be forced to close due to the inability to meet NESHAP or CISWI standards or because the compliance investment required may not be justified on a financial basis. These

closures represent roughly 11 million metric tons of clinker capacity, or roughly 12% of current capacity. Of these plants, 7 burn alternative fuels and would be subject to CISWI standards. Each of these alternative fuel burning plants would require at least as much compliance investment to meet the more comprehensive and harsher CISWI compliance. These 7 alternative fuel burning plants are assumed to be shut down in 2015 when CISWI enforcement begins. An additional 3 plants, reflecting 2.5 million tons of clinker capacity, are at high risk of closure. These high risk plants are assumed to continue to operate.

Unfortunately, the process of plant closures confronting tight emission standards may have already begun. Since August 2008, seven plants, with an estimated annual capacity of nearly 4 million metric tons, have been announced for permanent closure. Undoubtedly, the harsh recession contributed to the decision to close these plants. Weak cyclical demand conditions, however, would likely dictate temporary – not permanent closures. It is likely that the prospect of tight emission standards, coupled with expectation for a slow recovery in demand, contributed to decisions to permanently close these plants. According to ISIS model runs, each of these plants would have been forced to close under the EPA's NESHAP standards. These plants are not included in PCA's estimate of NESHAP closures. If included, NESHAP expected closures would equate to 25 plants and 15 million metric tons. These plant closures include:

Recent Permanent Plant Closures	
Buzzi Unicem: Independence, Kansas <ul style="list-style-type: none"> o Capacity: 324,000 metric tons annually o Employment estimated at 108 workers 	Cemex: Davenport, California <ul style="list-style-type: none"> o Capacity: 842,000 metric tons annually o Employment estimated at 114 workers
Essroc: Frederick, Maryland <ul style="list-style-type: none"> o Capacity: 306,000 metric tons annually o Employment estimated at 82 workers 	Essroc: Bessemer, Pennsylvania <ul style="list-style-type: none"> o Capacity: 605,000 metric tons annually o Employment estimated at 111 workers
Holcim: Clarksville, Missouri <ul style="list-style-type: none"> o Capacity: 948,000 metric tons annually o Employment estimated at 164 workers 	Holcim: Dundee, Michigan <ul style="list-style-type: none"> o Capacity: 630,000 metric tons annually o Employment estimated at 155 workers
Texas Industries: Riverside, California <ul style="list-style-type: none"> o Capacity: 86,000 metric tons annually o Employment estimated at 88 workers 	

Compliance Scenario: Impact on Alternative Fuel Practices by the Cement Industry

CISWI standards will force two thirds of all cement plants to eventually discontinue the use of alternative fuels.

CISWI emission standards will force cement plants to opt between compliance or discontinue alternative fuel usage. The decision to discontinue the use of alternative fuels is expected to be based on two factors. First, some plant's emissions are sufficiently high that even with the installation of emission control systems they will not be able to meet CISWI standards. Second, even if a plant can technically meet the CISWI standards, the compliance investment required may not be justified on a financial basis. In either case, PCA assumes the discontinued use of alternative fuels.

According to PCA's Labor/Energy data, sixty one plants used alternative fuels in their kilns on a sustained basis during 2006-2008. Of these, 16 plants' alternative fuel usage accounted for less than one percent of

their total fuel consumption. Since the alternative fuel reliance of these plants are relatively small, each of these plants are assumed to discontinue burning alternative fuels rather than incur CISWI compliance costs.

Among the remaining 45 plants that burn alternative fuels, PCA estimates that 18 plants could be forced to discontinue the use of alternative fuels due to the inability to meet "existing facilities" CISWI standards or because the compliance investment required may not be justified on a financial basis. Fifteen of these plants discontinue the use of alternative fuels due to financial criteria. An additional three of these plants cannot meet "existing facilities" CISWI emission standards based on assumptions regarding existing technology and the ability to capture emissions.

Keep in mind, 24 of the 45 cement kilns covered by CISWI are at least 35 years old and may require substantial investment and modification to insure efficiency and remain "world-class" competitive. Such investments could result in existing plants being reclassified as new sources and subject to more severe emission standards. Given this, the technical ability to meet the CISWI standards as well as industry compliance costs could be underestimated if this impact is not taken into consideration. PCA assumes that all plants require a major upgrading or maintenance investment within 35 years of initial plant launch. This suggests that all plants commissioned before 1985 could be subject to a major reinvestment – and could result in an EPA reclassification of the plant as a "new source" within five years after the CISWI standard has been imposed. These 24 plants represent nearly 25 million metric tons of capacity.

Cement Plants Burning Alternative Fuels		
	2015	2025
Total Cement Plants Burning Alternative Fuels in 2010	61	61
- Less: Marginal Burners	16	
- Less: Failure to Meet CISWI "Existing Facilities"	3	
- Less: Failure to Meet ROI under CISWI "Existing Facilities"	15	
- Less: Failure to Meet CISWI "New Facilities"		7
Total Cement Plants Burning Alternative Fuels	27	20
- Percent Reduction	55.7%	67.2%
Source: PCA		

Plants originally commissioned during this time period, but which have had significant capacity changes have been excluded from this analysis. ***Even with no new greenfield plants, our analysis suggests the emission standards facing the industry will be essentially tightened as the industry pursues normal investment to maintain efficiency and competitiveness.*** For nitrogen oxide (NO_x), as an example, the effective CISWI emission standard is lowered from 1,100 ppmv to 140 ppmv by 2020 – representing a dramatic tightening of the standard facing the industry. Among those commissioned before 1985, PCA estimates an additional 7 plants will discontinue burning alternative fuels.

Compliance Scenario: CISWI Impact on Scrap Tire Stockpiles

CISWI will dramatically increase the number of tires in landfills.

Three hundred and eleven million scrap tires were generated in 2009 according to the Rubber Manufacturers Association (RMA). The amount of tires scrapped annually is determined by the number of vehicles on the road and vehicle miles travelled. Historically, 1.24 tires annually are scrapped per vehicle on the road. Based on United States Census projections of population growth, licensed drivers and the number of vehicles per driver, PCA estimates the number of scrap tires produced annually will increase by an average of roughly 2.8 million each year - reaching over 356 million scrapped tires per year by 2025.

Scrapped tires are used as alternative fuel, used in products, or placed in landfills. Since 2005, roughly 55% of scrapped tires were used as alternative fuels, 33% used in other products and 24% placed in landfills. Totalling these uses equates to 112% and is explained by a reduction in stockpiled tires. In 2005, stockpiled tires were estimated at 188 million by the RMA. PCA estimates 2009 stockpiles at 125 million tires.

The cement industry is the largest consumer of tire derived fuel (TDF), utilizing nearly 60 million tires annually and accounting for nearly 40% of all scrapped tires used as fuel. Recent adverse economic conditions has forced a decline in domestic cement production, and as a result, prompted a temporary cyclical decline in TDF consumption by the cement industry. As the economy recovers, cement production and its consumption of TDF will recover.

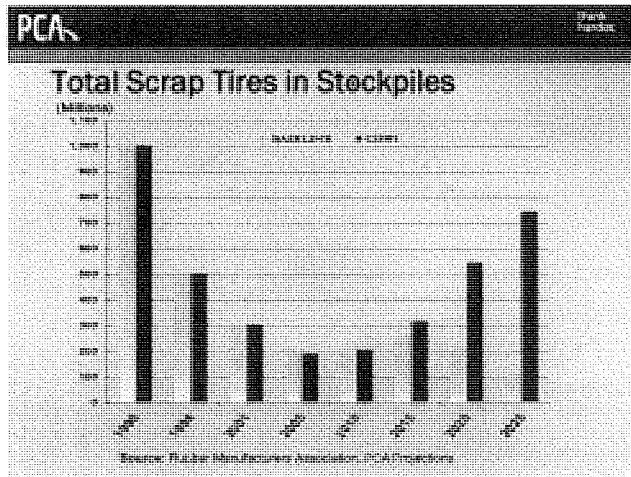
The recovery in consumption of TDF, attributed to stronger production levels, is expected to be supplemented by changes in cement kiln fuel characteristics in the years ahead – favoring alternative fuels. A gradual and sustained recovery in world economic conditions leading to synchronized world growth is expected to emerge in 2013 and beyond. Much of this growth will be fueled by conditions among lesser developed economies. Indeed, the Energy Information Agency (EIA) expects world economic growth will average 3.2% during 2010-2030. In the context of these world growth conditions, it is likely that oil prices will record sustained gains. Indeed, the Energy Information Agency (EIA) expects oil prices will reach \$105 per barrel in 2015, \$132 per barrel in 2020, and \$156 in 2025. Given these increases and potential substitution effects, all fossil fuel prices, including coal, are expected to increase. PCA uses EIA fuel price projections. Lacking EIA guidance, PCA employs rough cross-elasticity of demand estimates to project other fossil fuel prices.

Alternative fuel prices beat to a different drummer. While these fuels are influenced by overall fuel prices, supply of these fuels are dictated by producer and consumer activity of end-products, such as tires. The disparity in price drivers between fossil fuels and alternative fuels suggests a change in the relative fuel costs – favoring alternative fuels. Such a potential implies an incentive for change in kiln fuel characteristics in favor of alternative fuels at the expense of coal.

PCA estimates the current average fuel cost differential between primary and alternative kiln fuels at roughly \$15 per ton. As fossil fuel prices increase, the cost differential margin will increase to an estimated \$16 per ton in 2015, \$18 per ton in 2020, and \$20 per ton in 2025. The potential widening in price differentials between primary and alternative kiln fuels suggests cement companies will increasingly rely upon alternative fuels. This point has been borne out by long term trends in cement kiln alternative fuel usage. Keep in mind, use of alternative fuels also reduces greenhouse gas emissions.

Based on the likelihood of the eventual widening in the differential between primary and alternative cement kiln fuels, PCA expects alternative fuel usage will increase in proportion to primary fuels. In 2008, alternative fuels accounted for nearly 11% of total cement kiln fuel consumed. This share is expected to reach 12% in 2015, nearly 15% in 2020, and nearly 17% in 2025. These gains are expected to come at the expense of coal.

With the economic slowdown resulting in production declines, TDF usage for all industries is expected to decline. This suggests the proportion of tires going into landfills will increase and the stockpile of scrapped tires will increase as well. PCA estimates the stockpile of tires will increase from 188 million tires in 2005 to 246 million tires in 2010, with further increases in tire stockpiles materializing as long as industrial production remains depressed – reaching a cyclical peak of 392 million tires in 2015. Sustained declines in tire stockpiles are expected to materialize during 2015-2025, reducing stockpiles to 311 million tires in 2020, and 126 million in 2025. The cement industry’s consumption of scrapped tires plays an important role in reducing the scrapped tire stockpile. According to this scenario, existing cement kilns using TDF continue - allowing 63 million scrapped tires to be consumed by the cement industry in 2015, 68 million in 2020, and nearly 78 million in 2025.

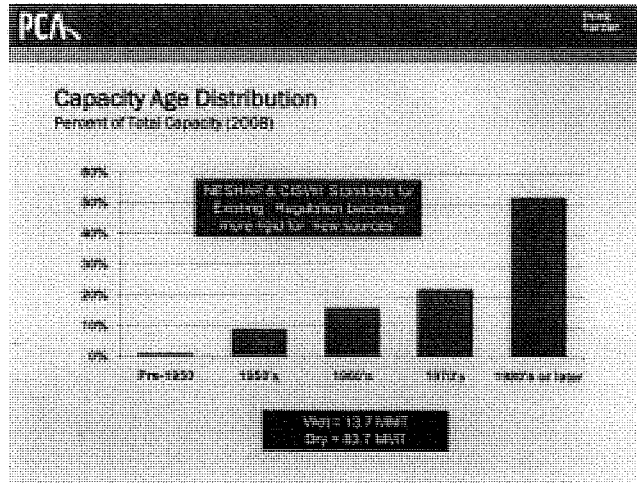


CISWI rules would significantly reduce the amount of scrapped tires consumed by the cement industry. Under CISWI, PCA estimates cement industry scrapped tire consumption would decline to 27 million tires in 2015 and roughly 20 million tires annually during 2020-2025. Holding all other assessments included in our baseline analysis constant, scrapped tire stockpiles would reach 358 million tires in 2015 nearly 534 million tires in 2020, and more than 600 million tires in 2025. The CISWI standard potentially reverses decades of environmental cleanup success and EPA support for using TDF as a fuel.

Compliance Scenario: “New Source” Emitters

EPA’s regulatory standards are not static – they are dynamic and are designed to become ever more difficult to meet as time passes.

EPA’s regulatory standards are not static – they are dynamic and are designed to become ever more difficult to meet as time passes. This is accomplished by a set of standards for existing sources and much more rigorous standards for new sources. EPA’s NESHAP and CISWI standards emission limits, for example, are considerably more severe for new sources than existing sources. New greenfield plants commissioned after 2013 are subject to the new source emission standards. Major modifications to



existing plants could force, or "trigger", a reclassification of the plant from an existing source to a new source – potentially requiring further compliance investment for cement plants. Similarly, the New Source Performance Standards (NSPS) and the Clean Air Act’s Tailoring Rule contain an investment "trigger" prompting compliance investment.

Keep in mind, 63% of all cement kilns are at least 30 years old and may require substantial investment and modification to insure efficiency and to remain "world-class" competitive. Such investments could result in existing plants being reclassified as new sources and then subject to more severe emission standards. Consequently, the technical ability to meet EPA standards, as well as industry compliance costs, could be underestimated if this impact is not taken into consideration. PCA assumes that all plants require a major kiln investment within 35 years of initial plant launch. This suggests that all plants commissioned on or before 1990 could be subject to a major reinvestment during the forecast horizon – and result in an EPA reclassification of the plant as a new source. This represents 33 plants. According to this methodology, 15 plants would have to engage in major investment by 2015, representing nearly 14.5 million metric tons, 14 plants by 2020 representing 14 million metric tons, and 4 plants by 2025 representing 3.3 million metric tons

of capacity. Plants originally commissioned during this time period, but which have already had significant capacity changes have been excluded from this analysis. ***Even with no new greenfield plants, our analysis suggests the effective emission standards facing the industry will be tightened as the industry pursues normal investment to maintain efficiency and competitiveness.***

New source triggers are particularly alarming and could lead to decisions to abstain from necessary competitive investments that have always been on-going and, most recently done at an aggressive pace. In some ways the “new source” trigger provisions send a clear signal to cement producers not to invest to remain world-class competitive. Keep in mind, large multinational companies dominate ownership of the United States cement industry. Within a multinational company, each geographic region, such as the North America, competes for scarce corporate investment dollars (expanding cement capacity is extremely expensive – a two million metric ton plant now costs upwards of \$600 million). The rate of return on investment for new capacity in the United States is compared against returns in other countries. The new source provisions could reduce expected returns on investments in the United States and contribute to corporate decisions to pursue other options to source the United States cement market.

Compliance Scenario: New Source Performance Standards (NSPS)

New source designations will likely deter investment to remain world-class competitive or force additional plant closures.

The EPA's New Source Performance Standards (NSPS) are aimed at “progressively tightening emission standards over time to achieve steady improvement in air quality without unreasonable economic disruption. This is accomplished by mandating significant improvement in source emitters when they make a substantive investment in plants to modernize to remain competitive. ***In other words, re-investment in domestic production facilities will trigger NSPS compliance.*** For the cement industry, the NSPS targets three key emissions including nitrogen dioxide (NO_x), sulfur dioxide (SO_x) and particulate matter (PM). The EPA's NSPS requires “new source” cement emitters to comply to:

- NO_x emissions at 1.5 pounds per ton of clinker.
- SO₂ emissions at 0.4 pounds per ton of clinker.
- PM emissions at 0.01 pounds per ton of clinker.

These standards require cement plants to comply with these standards when modernization/investment results in an hourly increase in NO_x, SO₂ or PM emissions. If there is no increase in hourly emissions from the modernization/investment, then the NSPS standards have no impact on cement producers' overall emission compliance strategy.

Unfortunately, many of the older plants that will require modernization investment during the forecast horizon are characterized by smaller sized kilns. According to PCA's Plant Information Survey report, the average kiln size requiring modernization investments during the forecast horizon is 760,000. This compares against an average of 1.8 million metric tons for kilns built between 2000-2010 (950,000 metric tons if one massive new plant is excluded from the calculation). Larger kiln sizes, due to the economies of scale, lowers per ton fixed costs under “normal” operating conditions (greater than 80% utilization rate). These lower costs can improve a plant/company's regional competitiveness, with some of the potential cost savings passed onto users of concrete for the construction of residential, nonresidential and public structures. Given the existing trends to lower fixed costs via larger kiln sizes, it is likely that any major

modernization investment at a cement plant will result in an increase in hourly emission rates of NO_x, SO₂ and PM.

Assuming the typical modernization investment patterns are extended into the future, PCA believes that all 34 plants requiring modernization investment during the forecast horizon will be forced to comply with NSPS standards. Compliance with NSPS standards will require investment in bag houses to meet particulate matter emissions standards, SCNR systems to meet NO_x emissions standards, and wet scrubber systems to meet SO₂ emission standards. In most instances, these systems may already be in place due to NESHAP (PM) and/or CISWI standards (PM, NO_x, SO_x).

New Source Performance Standards (NSPS)

	<i>(lbs/ton)</i>				
	NESHAP	CISWI	NESHAP	CISWI	NSPS
	Existing	Existing	New Source	New Source	New Source
NO_x	-	7.23	-	0.9	1.5
SO_x	-	3.83	-	0.03	0.4
PM	0.04	0.24	0.01	0.01	0.01

Sources: Federal Register: V75#174, V75#107

Note: CISWI standards are estimated conversions based on general volumetric emissions, stack moisture, and oxygen levels

PCA assumes that plants with specific emission control equipment already in place to meet "existing source" NESHAP and CISWI standards, but that cannot meet the more rigorous new source standards, will delay modernization investments and let the plants run as long as they remain viable. As long as strong demand conditions prevail, these plants could remain open throughout the forecast horizon. This possibility is heightened in the context of PCA assessments regarding the fly ash ruling. A moderate recession prompting sub-80% utilization rates, however, could necessitate a closing of these plants – some permanently.

The key result of the NSPS and new source initiatives is to thwart modernization investments in the cement industry. Such investments during the past ten years have been responsible for sustained improvement in energy use, emissions and production costs – resulting in a 20% reduction in high carbon fuel consumption, roughly a 6% reduction in emissions per ton of clinker, and cement prices that have remained remarkably stable (absent the cement shortage era that was promulgated by easy lending standards and the industry's dependence on imports). NSPS could increasingly hinder modernization investments diminishing these future beneficial trends.

NESHAP's, CISWI's and NSPS's tighter "new source" emission standards can be triggered by major investments/modernization to existing facilities. If normal modernization/investment strategies were pursued, however, additional cement plants would face closure. The "new source" standards are significantly tighter than "existing source" standards. This could force the 33 older plants, which would

normally be subject to investment during the forecast horizon to consider investing or close. *If normal modernization/investment strategies are not pursued to remain world class competitive it could eventually lead to an additional 4 plant closures representing another 3.4 million metric tons of capacity.* This estimate is *not* included in PCA's compliance scenario estimates.

Compliance Scenario: Clean Air Act Tailoring Rule

The EPA's exercise of the Clean Air Act (CAA) with regard to CO₂ emissions targeted at the cement industry could be interpreted as a tacit first step in climate change regulation. Effective in 2011 for all plants that emit at least 100,000 tons of greenhouse gases (GHG) per year, any major investments resulting in a 75,000 ton increase in GHG emissions will be required to invest in "best available control technology" (BACT) to limit CO₂ emissions.

The production of cement results in CO₂ emissions. For every ton of cement produced, roughly 0.9 tons of CO₂ is emitted. The emission of CO₂ arises from two sources, namely process emissions and combustion emissions. Process related emissions from cement production are created through a chemical reaction that converts limestone to calcium oxide and CO₂. The quantity of process-related emissions from cement production is proportional to the lime content of the clinker. These emissions generated during the calcination process are naturally occurring and as a result BACT compliance has no impact. These emissions account for 55% of CO₂ emissions released in the manufacture of one ton of clinker.⁶ The remaining CO₂ emissions are generated by fuel combustion.

Given the existing trends to lower fixed costs via larger kiln sizes, it is likely that any major modernization investment at a cement plant will result in an increase in production and hence an increase in CO₂ emissions in excess of the Tailoring rule thresholds. This implies that all 33 plants requiring a major investment/modernization during the forecast horizon will be subject to the Tailoring Rule. There are a multitude of processes and equipment that can be combined to reduce CO₂ emissions. These key "best available control technology" (BACT) to limit CO₂ combustion emissions generated during the manufacture of cement focused on in this report include;

- Conversion from the wet process to the dry process, which is significantly less energy intensive
- Installation of pre-heaters and pre-calciners, thereby improving energy efficiency and reducing emissions.
- Substitution of lower carbon content fuels (natural gas) for coal, coke and petroleum coke, an alternative fuels..
- Greater use of limestone in the grinding of cement, thereby reducing the CO₂ content per ton of **cement**.

Major investments trigger compliance with the Tailoring Rule. The industry is already aggressively pursuing the conversion of its capacity from the wet process to the dry process. It is unlikely that any major investment in a wet kiln will materialize, hence there will be no trigger for the Tailoring Rule. The wet kiln process is an older process and is typically less energy efficient.⁷ During the past two years, the phase-out

⁶ CO₂ Emissions Profile of the U.S. Cement Industry, Lisa J. Hanle, U.S. Environmental Protection Agency

⁷ Note: the last wet kiln was installed 35 years ago.

of wet kilns has accelerated – reducing wet kiln clinker capacity by nearly 5.6 million metric tons. In the context of current economic distress, the potential for higher energy prices in the future, the accelerated pace of wet kiln retirement is expected to continue. ***This suggests that cement producers will maintain the operation of wet kilns and let the plants run as long as they remain viable, but will not invest in these plants.***

More than 80% of all dry cement kilns use pre-heaters and pre-calcinators to save on energy consumption. It is likely that older dry kiln plants among the 33 likely to require investment during the forecast horizon are characterized by a smaller presence of these devices. In the context of rising energy prices it is likely that all kilns will install pre-heaters and pre-calciners at a time of major investment – with or without the Tailoring Rule.

Perhaps the most significant impact the Tailoring Rule could exert on costs comes in the form of the possible substitution of lower carbon content fuels (natural gas) for coal, coke and petroleum coke. In order to determine the change in production costs resulting from a change in fuel types, fuel input cost data from the Energy Information Agency was used to determine that natural gas cost almost 140% more than coal on an equivalent BTU basis. As a result, PCA has assessed that the cost per ton of clinker production would increase nearly 12% if the industry were to switch from coal as a kiln fuel source to natural gas⁸.

Other EPA Regulations Impacting the Cement Industry

The EPA has also initiated new standards regarding greenhouse gas reporting and the National Ambient Air Quality Standards (NAAQS). While each initiative could impact cement production costs. In the context of NESHAP, CISWI, NSPS and the Tailoring Rule, these initiatives are believed to represent less of an immediate threat to the industry and are not addressed in this report.

EPA Regulations' Impact on U.S. Imported Cement Projections

The increase in cement consumption resulting from the fly ash ruling, combined with the reduction in cement capacity due to NESHAP/CISWI will force increased reliance on imports to meet expected future consumption. import share is expected to reach 32% in 2015, 47% in 2020 and nearly 56% in 2025, compared to roughly 9% estimated in 2010.

Compared to the baseline scenario, cement consumption estimates increase under the compliance scenario due to the fly ash ruling, adding 16 million metric tons to cement consumption in 2015, 20 million metric tons in 2020, and 23 million metric tons in 2025. With the forced closure of domestic plants due to NESHAP emission standards, an increased reliance on cement imports is expected to materialize. PCA estimates import share is expected to reach 32% in 2015, 47% in 2020 and nearly 56% in 2025, compared to roughly 9% estimated for 2009. These share estimates reflect volume estimates of 36 million metric tons in 2015, nearly 62 million metric tons in 2020, and 82 million metric tons in 2025. The current U.S. import terminal capacity is estimated at 45 million metric tons.

⁸ This calculation is based on the conversion rate of relative fuel BTU costs and its impact on clinker costs implied in the study "Fuel Switching from Coal to Natural Gas – California Portland Cement Industry", Environ International Corporation, August 22, 2008.

Compliance Scenario					
	2005	2010	2015	2020	2025
US Cement Industry					
US Cement Consumption (000 tons)	128,035	68,879	127,397	151,229	170,833
US Clinker Capacity (000 tons)	94,693	96,877	97,874	95,604	95,604
US Production (000 tons)	89,981	58,286	85,976	83,508	83,186
Imports (000 tons)	27,305	5,900	36,000	62,000	82,000
Total Fuel Consumption (billion BTU, bbtu)	341,999	237,896	343,904	334,033	332,746
Primary Fuel Consumption (bbtu)	307,009	211,345	315,750	318,091	314,113
Alternative Fuel Consumption (bbtu)	34,989	26,551	18,359	15,942	18,633
Alternative Fuel Plants (AFP)					
Capacity at AFP (000 tons)	48,209	49,923	22,465	22,465	20,219
Production at AFP (000 tons)	48,209	49,923	22,003	21,959	19,737
Total Fuel Consumption (bbtu)	177,984	120,146	194,555	191,958	191,220
Primary Fuel Consumption (bbtu)	142,995	94,125	176,196	176,016	172,587
Plant Alternative Fuel Consumption (bbtu)	34,989	26,021	18,359	15,942	18,633
Plant Tire Derived Fuel (bbtu)	12,143	8,587	5,759	4,532	4,796
Scrapped Tires Consumed (millions)	58	39	27	21	20
Scrapped Tire Stockpile (millions)	188	246	358	534	604
Fly Ash					
Fly Ash Production	71,100	65,568	71,520	73,632	75,616
Beneficial Use Consumption	29,118	27,392	0	0	0
Concrete Consumption	14,504	8,898	0	0	0
Cement Kiln Consumption	2,834	3,017	0	0	0
Cement/Concrete Share of Beneficial Use	59.6%	43.5%	-----	-----	-----
Estimated Landfill	41,982	38,176	71,520	73,632	75,616
Sources: PCA, USGS, Various EPA emissions documents.					
Note: No credible Cadmium emissions data for cement kilns could be found and is omitted from analysis.					

Impact on Global Emissions

A significant portion of the improvement in emissions due to EPA regulations comes from plant closures. Displaced domestic production implies an increase in foreign production and higher emissions in those countries. The EPA standards effectively export our emissions to cement supplying countries.

Absent global cement plant emission standards, the improvement in global emissions arising from EPA policy is limited to the improvements attributed to the implementation of emission controls at U.S. cement plants and plant closures. Since U.S. cement plant closures necessitate an increase in imports, the

potential policy impact of NESHAP emission standards is to export the emission to foreign cement producing countries which have more relaxed emission standards than those proposed under NESHAP.

Indeed, global emissions associated with cement manufacture are likely to increase due to EPA regulations. Removing fly ash from concrete mixes, for example, increases cement production, either domestically or in foreign source countries or both. The extent to which the corresponding emission increases are realized in the United States depends on further investment in United States cement capacity. World-wide emissions arising from increased cement production will be a result of the fly ash ruling. If the additional cement is not produced in the United States, it will be produced elsewhere and the emissions associated with additional cement production will be released.

EPA Regulations Impact on U.S. Construction Costs

EPA regulations could add \$2.4 billion to nearly \$4 billion in annual construction costs.

The average costs associated with the cement industry's compliance to EPA regulations could increase domestic production costs by \$22 to \$36 per ton. Keep in mind, the increase in costs by a particular cement plant will depend on its designation as a CISWI or NESHAP plant, the composition of current emissions and the need for compliance equipment, its use of fly ash in its kiln, and dependence on coal fired utilities for electricity. Wide variations in cost increases from EPA regulations among cement producers could exist. This assessment includes;

- Capital costs associated with compliance investments dispersed over a 15 year time horizon,
- Annual operating associated with compliance systems,
- The increase in fuel costs for plants forced to stop burning cheaper alternative fuels,
- The increase in kiln costs associated with the replacement of fly ash by limestone,
- The increase in costs associated with the replacement of fly ash in concrete by cement,
- The increase in electricity costs associated with fly ash's hazardous waste designation,
- The possible substitution of lower carbon content fuels (natural gas) for coal, coke and petroleum coke due to the Tailoring Rule.

Using a five year average of cementitious material intensities, out of every one million real 1996 dollars of construction activity, roughly \$14,500 is attributed to cementitious material costs. Prior to the recession's collapse of construction activity, the construction market was averaging roughly \$750 billion in real construction spending. This translates into roughly \$11 billion in cementitious material spending. Cost increases resulting from EPA regulation could increase cement/concrete construction costs between 22% to 36% per construction project. This translates to an estimated \$2.4 billion to \$3.9 billion (real 1996 \$) in a "typical" \$750 billion construction market.

The largest consumer of cement/concrete is the public sector, accounting for 50% of cement consumption. High cement consuming public construction efforts include new highways, bridges, schools, public buildings as well as water, sewer and conservation projects. Of public construction activity, more than 90% is undertaken by state and local governments. PCA estimates that EPA compliance costs could add as much as \$1.2 to \$2 billion annually to state and local governments' expenditures just to maintain existing roadways and bridges.

EPA Regulations Impact on U.S. Employment

EPA regulations could result in the direct loss of 3,000 to 4,000 jobs in the cement industry and potentially another 12,000 to 19,000 direct jobs in the construction industry due to higher construction costs. These direct job losses could be amplified if up and downstream indirect impacts are considered.

The potential closure of plants in the industry due to EPA regulations could result in a direct job loss of 3,000 to 4,000 jobs. These jobs are typically high paying jobs and translate into \$200 million to \$260 million in lost wages. Loss of these jobs and wages results in less economic activity and leads to further job losses, often referred to as the "employment multiplier effect". PCA calculates these additional job losses at 6,500 to 10,000 jobs⁹. Most of these job losses would be concentrated in areas near the plant shutdowns, magnifying the potential distress in these communities.

Cost increases in the manufacture of cement and concrete due to EPA compliance will displace some construction activity. In doing so, some jobs that may have been created, might not materialize due to the EPA regulations. PCA roughly estimates these potential direct job losses in the construction sector at 12,000 to 19,000. Employment multiplier effects could add another 30,000 to 50,000 job losses.

NSPS and new source initiatives could thwart modernization and expansion of investments in the cement industry. Based on the age composition of kilns operating in the United States, dozens of large-scale investments could be foregone and the jobs these investments would provide. PCA makes no estimate regarding the magnitude of these potential job losses.

⁹ Employment multiplier used is based on a working paper by Josh Bivens, Economic Policy Institute, August 2003.

Mr. SULLIVAN. Mr. Harrington, you have testified that EPA's recent rules affecting the cement sector could force the closure of 18 out of nearly 100 U.S. cement plants, or 20 percent of the U.S. cement production capacity. Where are most of these cement plants located? Are they like in small towns, rural areas?

Mr. HARRINGTON. Yes, they are mostly in small towns in rural areas, and they are sprinkled throughout the United States. I mean, there is one in upper California. There might be one in Ohio. There could be one in upper New York State. There could be one in Illinois. So they are spread throughout the United States. They are always in small rural areas, as Mr. Rubright said, and it is a company town. It is not quite like it was in the 1930s and 1940s but that is sort of the environment that our plants are in.

Mr. SULLIVAN. Will the employees at these facilities be likely to find new work elsewhere in their communities?

Mr. HARRINGTON. Anything is possible, and of course, we would like that to be the case, but the opportunities are very limited because they are high-wage jobs. Most of our employees are represented by collective bargaining agreement so they are union employees and they are well paid. They are highly skilled and they are very specialized for the plants and the equipment that we run, so just transferring that job knowledge is difficult. So it will be devastating to those communities.

The other thing that we lose, and I am sorry to keep rambling here, but there are a series of small businesspeople and large industry that service our plants—contractors, engineers—sorry.

Mr. WHITFIELD. No, go ahead.

Mr. HARRINGTON. Contractors, engineers, local wall material suppliers who may not be employees of our plant but who exist—Pennsylvania, for sure—who exist because of our plants.

Mr. SULLIVAN. Also—

Mr. WHITFIELD. Your time is expired.

Mr. DOYLE. Thank you, Mr. Chairman, and thank you to our witnesses today. I think it is important that we have a well-informed debate on these regulations with inputs from all sides.

As many of you know, I represent Pittsburgh, which is in Allegheny County in southwestern Pennsylvania. Allegheny County is home to manufacturing industry, chemical industry, steel industry, energy industry and much, much more, and like all of you, many of these companies have voiced concerns to me with some of the regulations coming out of the Environmental Protection Agency. Most specifically, I have heard a great deal about the boiler MACT rules that we are discussing today.

But let me first give you a little background on Allegheny County. Last year, the Pittsburgh Post Gazette ran a series of air pollution effects in the region called Mapping Mortality. In it, they told us in Allegheny County air pollutants are generated by 32 industries and utilities classified by the county health department as major sources because they emit or have the potential to emit 25 tons or more a year of a criteria pollutant, or 10 times or more of hazardous air pollution. The Post Gazette article went further to detail in Allegheny County and research mortality rates not only in our county but in the 13 counties surrounding Allegheny County

in and around Pittsburgh. This is what they found: that in all 14 counties that have heart disease, all 14 counties have heart disease mortality rates exceeding the national average. Twelve of the 14 counties have respiratory disease mortality rates exceeding the national average. Three of the 14 counties have lung cancer mortality rates exceeding the national average, and 13 of 14 have a combined mortality rate for all three diseases in excess of the combined national expected rates for the three.

So as you can see, I have cause to take these regulations very seriously. I recognize that the boiler MACT rule issued in February wasn't perfect. I know that the industries in southwestern Pennsylvania are providing good-paying jobs for my constituents. But the mortality rates due to heart, respiratory and lung disease can't be ignored. For me and my constituents, the issue is not a political football that we should toss around in Washington. This is real and it is a matter of life and death.

So I just have one question for Mr. Rubright, Mr. Gilman and Mr. Elliott. The Clean Air Act already gives you 3 years to comply with the possibility of a fourth year. If you can't do it in three, you can petition your State. I don't think the folks in my district believe that it should take 5 years or, in the case of this bill, 5 years being the minimum and we don't know what the maximum would be, to deal with reining in some of these pollutants, and I understand there are specific issues with the final rule and I think they need to be worked out, and I am for doing that, for EPA, sitting with you and working out these issues sufficiently when they re-propose the final 15 months.

My question is, once that is done, would you be willing to accept a deadline within the Clean Air Act of 3 to 4 years?

Mr. RUBRIGHT. I would like to—there are a couple of things. First, relative to your indication of the health risks, please understand that particulate matter is already regulated under the National Ambient Air Quality Standards, and nine of the 10 virgin mills that we operate are currently in attainment zones and yet they are being regulated under a statute that wasn't intended to regulate particulate matter as a health risk as a particulate matter without regard to whether they are in an attainment zone or a non-attainment zone. So it is a rule that really is inapplicable in many respects to the current environment.

Mr. DOYLE. My question is, once they do this re-proposing of the rules and address some of these concerns, do you need more than 4 years to comply?

Mr. RUBRIGHT. Well, certainly. I have already indicated we wasted \$80 million to comply with the rule that was rescinded. You heard Ms. McCarthy testify that she doesn't know of a cement plan that can comply with the rules today. We know that 2 percent of the pulp and paper mills today can comply with the standards that apply. Now, my understanding of the act is that maximum achievable control technology is what 12 percent of the existing mills can comply with. So do you think there is going to be litigation of this rule? I think this rule is going to be litigated and I think Ms. McCarthy's testimony is going to be admitted in that litigation. So we are going to have some period of time where again we are going to be required to spend money on a rule which is in litigation.

So apart from the fact that our best technological people are telling me we can't do it in 3 years, I certainly know I am going to be doing in advance of the resolution of this rule. So think it just doesn't make any sense to spend money that in the face of—

Mr. DOYLE. Do you think it should be addressed at all? Do you think there is a health concern and that the concern over health warrants your company doing something to reduce these pollutants?

Mr. RUBRIGHT. Please understand, where we understand that there is an identifiable health risk, we do everything we can today. What I am saying to you is, there is nothing we know we can do to comply with these rules, but I also have indicated that I think there is a scientific debate with respect to specific effects of particulate emissions of our plants in rural attainment areas.

Mr. DOYLE. Dr. Gilman?

Mr. GILMAN. I would say yes if one of those things that isn't part of the reconsideration process now because the agency feels constrained by prior judicial decisions, that is, the pollutant-by-pollutant approach versus the plant-by-plant approach. That is what makes these unachievable. That is what introduces a technological barrier to implementing achievable standards.

Mr. DOYLE. Mr. Chairman, you have been generous with my time. I appreciate it.

Mr. WHITFIELD. Thank you.

We have two votes on the floor and we only have like a minute left, Morgan, and I know some other members want to ask questions, so you all might as well just spend the day with us. So if you wouldn't mind, we will recess. We only have two votes, and the time is expired on the first one, so we will back, I would say in about 15 minutes, and we will reconvene and finish up the questions at that time. Thank you.

[Recess.]

Mr. WHITFIELD. I am going to now recognize the gentleman from Virginia, Mr. Griffith, for his 5 minutes of questions and then when you all come in we will go to you.

Mr. GRIFFITH. Thank you all very much for your patience with us. Sometimes we have to run off and cast votes, and I appreciate you all waiting.

I do want to say that this is important legislation. Both pieces are extremely important to my district. I don't want to underestimate it but I also have to point out that in the hearings that we had earlier this year and the hearings that we have now, we have had testimony from people who employ folks in Giles County. Thank you, Mr. Elliott, as the largest employer in that county, which is in the 9th district of Virginia, which I am very proud to represent. We have had testimony from Titan America, which is a Roanoke cement facility, employs people who live in the 9th district of Virginia. We have had testimony from MeadWestVaco at their Covington facility, which employs people in the 9th district of Virginia. And we had testimony earlier today from Mr. Rubright of RockTenn, which employs people in the Martinsville area, which include people in the 9th district of Virginia.

So when folks say to me, you know, why do you get worked up about this and why do you charge in on some of these things, all

I can say is that a lot of these folks didn't actually come from the 9th district of Virginia but they represent jobs in the 9th district of Virginia and they represent people who work there and people who are in the areas where we have double-digit unemployment and, you know, I came off this break doing the Labor Day parade in Covington, which is sponsored by the union there, and last year they had the parade route lined with signs about fixing boiler MACT, so amongst all the political signs were, you know, we have got to fix boiler MACT, and so I am trying to do what my constituents want and what I think my constituents need in order to create jobs not only in the United States of America but in particular in the 9th district of Virginia, and I think that that is what the boiler MACT does, that is what the cement MACT bill that we have before us today for testimony.

So, you know, I understand all of you want to be careful in the health side of it but when you face extensive unemployment in the regions that I have just mentioned and already have had announced lost jobs from other rules of the EPA in Giles County in particular and in Russell County within the 9th district of Virginia within the last 2 or 3 months, these are serious matters.

And so I would ask you, Mr. Elliott, in regard to jobs, if you don't have the 5 years to comply—and you touched on it in your statement some about the fact that you don't have a big enough gas line to flip over to natural gas and you have a big river beside your facility as well. Exactly, you know, do you need the 5 years or is there a significant potential that those jobs because of costs may go elsewhere?

Mr. ELLIOTT. Well, I think all business management is tasked with continuous evaluation of options, you know, what are the best cases for growing and protecting our business, so we always look at alternatives, whether that is alternatives for our facilities in the United States or throughout the world. We like to focus on timelines. I know that is important. But that is part of the issue here. There was a lot of testimony about flexibility around fuel source, at least I talked about the unknown questions still or answers with respect to fuel source, fuel variability. That is very specific to coal. So we still—we are operating several coal-fired boilers today so we want to resolve whether we can sort out whether we can use certain coals to meet certain standards, so that is going to take some time. So I am happy to get into the specifics once we hear back from the EPA exactly how we will resolve that.

That then sets the stage one way or the other whether we then have to look at Plan B. Plan B might be installation of natural gas boilers. That is yet another exercise, another engineering effort to then go into the work that would require a 30-odd-mile natural gas line through the mountains of Virginia ultimately. So that is another phase of work that requires engineering, requires estimates and timing and right-of-ways and factors in as well.

Then we get to the ultimate question which I think is where you are going, Mr. Griffith, and that is then what do you do, and really depends on the certainty around those choices, the costs and capital associated with those, the resulting operating costs of those decisions.

Mr. GRIFFITH. My time is running out, so let me cut to the chase.

Mr. ELLIOTT. Yes.

Mr. GRIFFITH. If you only get the 3 years, is it not true that you are more likely to have to make a decision to reduce jobs in Giles County than if you have the 5 years proposed in the bill?

Mr. ELLIOTT. Yes, I am not sure we could address the regulation as written within the time—

Mr. GRIFFITH. As written, you might have no choice but to move those jobs somewhere else no matter the longstanding commitment to Giles County which exceeds, what, 79 years?

Mr. ELLIOTT. Or significantly scale back operations, change operations, look at a footprint alteration.

Mr. GRIFFITH. Thank you, Mr. Chairman. I yield back.

Mr. WHITFIELD. At this time I will recognize Mr. Olson from Texas for 5 minutes.

Mr. OLSON. I thank the chairman, and I have just got a couple of questions I just would like to pose to all the panelists, and a lot of this was targeted to Mr. Rubright, and of course he had to leave, but I have some concerns. Again, thank you guys for coming.

Just to let you guys know where I am coming from, my dad spent his entire working career in the forest and paper industry, so I have seen, I know as Mr. Rubright said, that the industry has gone through some, quote, unquote in his testimony, trying economic times, and I have seen it firsthand. My father worked for a large paper company, Champion Papers. They had a mill there on the Houston ship channel. He worked for the longest part of his career at anyone place over a decade, and that facility no longer exists because it couldn't compete in the global market. Lots of reasons for that. But again, when I see the fact that they have lost thousands of jobs, they have this blank spot there along the Houston ship channel that is not being used to create jobs and turn our economy around, I get concerned. I get concerned that some of the regulations and that this Administration is pushing this Environmental Protection Agency, they are hurting our economy right here and inhibiting the growth of job creation that we were seeking to have.

My question for all of you guys, are there any boilers in your facilities that in your experience are capable of complying with the boiler MACT standard issued by EPA in March of 2011? Anybody out there can hit the target right now? I will start at the end. Mr. Elliott?

Mr. ELLIOTT. I think it was acknowledged earlier, Mr. Green asked the question. In some cases we were actually identified by the EPA as having some of the top-performing units around that help set of the regulatory standards for hydrochloric acid and mercury. However, even our best performing boilers can't meet both simultaneously.

Mr. OLSON. But that was Mr. Green's point. You guys are the best performers and yet you can't hit the standards?

Mr. ELLIOTT. Yes, simultaneously.

Mr. OLSON. Dr. Valberg?

Mr. VALBERG. I would concede any type to the actual people who run the facilities.

Mr. OLSON. Well said. I do that a lot of times myself.

Mr. Schaeffer?

Mr. SCHAEFFER. I think you are addressing the question to companies that are operating boilers, so I will—

Mr. OLSON. Well, in your experience in the industry—I mean, you are obviously an expert witness. You are here to testify before this committee, so are you aware of any boiler out there that can comply with the standards right now?

Mr. SCHAEFFER. Well, I went through the particulate matter standards, which are the surrogate for toxic metals, and it looked like an awful lot of facilities were currently meeting the standard. I haven't gone through all the limits to check that.

Mr. OLSON. OK. Mr. Walke?

Mr. WALKE. EPA has identified boilers that can meet the standards, and I will be happy to get that information to supplement the record. Natural gas boilers under the standards for major sources and area sources can easily meet the standards. They are simple tune-up requirements, really, not emission limits, and so we can supplement the record with that information as well.

Mr. OLSON. That side comment there, that makes my argument for why we need to increase natural gas production here in this country. EPA is trying to thwart that, at least having some study done on hydraulic fracturing, the process that has basically revolutionized the gas resource we have in this country. I mean, that is a great, great point that you made, Mr. Walke.

Dr. Gilman?

Mr. GILMAN. The agency is on the right track for the smaller boilers, the area source boilers. It is the large boilers and the problem goes back to this, you don't get to just pass one emissions standard, you have to pass them all, and you have to be the best at all, and none of our facilities—if we put in the best technology available today, I can't guarantee to my management that we will meet the standard. So as long as we are evaluating these emissions standards on this pollutant-by-pollutant basis rather than looking for the overall performance of the plant, we won't make it.

Mr. OLSON. That sounds like an issue we are having with the EPA in terms of flexible permitting process for our refineries and our power plants. We are basically—our system in Texas had five different regulated sources, emission sources. We could be over in one but we had to be significantly under in the other four so that the combination was what really matters and unfortunately EPA has taken that from us, and it sounds like that would be something very beneficial to you, Dr. Gilman, some system like that.

Mr. Harrington, down at the end, last but certainly not least, sir.

Mr. HARRINGTON. I really can't comment on the boilers but I can comment on the cement, and there is not one plant in the United States that meets the NESHAP regulation because of the, as Dr. Gilman pointed out, the four specific elements. We might be good in one, bad on another, not too good here, good over there, and it varies from coast to coast from the top of the border to the bottom of the border across the United States.

Mr. OLSON. So a flexible permitting system like we had in Texas would address your concerns as well?

Mr. HARRINGTON. It would be a great help.

Mr. OLSON. And again, it has been demonstrably cleaner air since the system has been in process 15 years, and again, last year the EPA took it over from us.

I have run out of time. I thank the chair. Yield back.

Mr. WHITFIELD. Mr. Green, you are recognized for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. Walke, in your testimony you write that it is important to recognize the EPA always has set maximum achievable control technology standards on this very same pollutant-by-pollutant basis for the over 100 MACT standards it has set under each Administration since adoption in the 1990 Amendments. You go on to say that the plain language of the Clean Air Act compels the EPA pollutant-by-pollutant approach and industries' contorted arguments that have not succeeded in court or appeals to different Administrations should not be embraced by Congress to produce dramatically weaker emissions standards. But how do you reasonably do a pollutant-by-pollutant approach without ending up with what has been termed a Franken plant, a plant that even with some of the top performers like Mr. Elliott's in Virginia are not in compliance?

Mr. WALKE. Well, you do it with pollution control measures that are able to successfully meet all the limits as has been the case in those 100-plus standards including for oil refineries and chemical plants in Texas, Mr. Green, and, you know, this argument just strikes me as kind of a straw man since it is never been one even taken seriously by, you know, three Bush Administration terms or two Clinton Administration terms because those standards were all able to be met without resulting in the apocalyptic consequences that people are claiming.

Mr. GREEN. Well, some of your colleagues on the panel talk about they cannot design, install and commission emissions controls on their existing coal-fired boilers within 3 years. They claim that it is particularly true because third-party resources with expertise to design and install these controls will be in high demand as multiple boiler rules are being implemented in a short-term period of time by both the industry and electric utility industries. Do you share that concern?

Mr. WALKE. Well, that is a very different concern, and if there are concerns about the ability to install the controls within 3 years, the Clean Air Act provides an additional year, an fourth year for that happen.

I would like to note in responding to a question that Mr. Whitfield asked earlier of the panelists, EPA is slated to finalize this boiler standards in April of 2012. If you listen carefully to what Ms. McCarthy said, it is within their power to extend the compliance deadlines to start 3 years from that period with an additional fourth year for this additional period of controls that I just mentioned. So we are already looking at 2016 under the Clean Air Act, which is exactly 5 years from now, from 2011. The Clean Air Act has the flexibilities and the administrative tools necessary to allow EPA to give sufficient time to comply with these standards, and I think we should let that responsible process work.

Mr. GREEN. Mr. Harrington, some of my cement companies have talked about how the subcategorization of the fuels is the crux of

the issue for their industry and that EPA should have used better discretion here. Do you agree with this statement, and if so, can you elaborate?

Mr. HARRINGTON. It is very much a plant-by-plant decision and issue. We do agree with subcategorization. A lot of the issue still comes back to uncertainty—will it be accepted, will it not be, is there a positive dialog where real, true information is passed back and forth and is accepted. So we can have dialog and we can propose different things and there is always politeness and a spirited and professional discussion but then we go back and then things don't happen. So we continue to look at the clock and look at the calendar and understand what the regulations are and have to go back and plan for our fuel sources, for our capital investment needs, even how we operate our kilns. So I do agree with that issue.

Mr. GREEN. Mr. Elliott, in your testimony you say that making it cost prohibitive to burn alternative fuels, the current rule would force industry to pay excessive prices for natural gas will curtail production. I know that natural gas is the cheapest it has been for decades almost now and can you elaborate on that?

Mr. ELLIOTT. Well, this is a particular note around curtailment, and we would like it to be more clear ultimately in the regulation that if, for example, a plant like ours converts to natural gas, if we have to curtail for residential heating or something like that, that we would have the wherewithal to convert temporarily to a backup fuel like fuel oil, for example, and that we would not then have to meet specific regulation standards for that particular source of fuel. So it is a very specific point around curtailment and flexibility on a temporary basis to have that flex fuel option, and I think that is probably fairly common with industrial boiler operators.

Mr. GREEN. Well, I would hope we have enough natural gas now that has been developed that we wouldn't have to worry about curtailment, particular in fuel oil, because I know that is also another issue on the East Coast.

Mr. ELLIOTT. It is just not crystal clear at this point that that flexibility exists.

Mr. GREEN. Thank you.

Thank you, Mr. Chairman.

Mr. WHITFIELD. Thank you, and I see no one else, so I want to thank all of you for taking time and giving us your expert opinions on these pieces of legislation. We look forward to working with all of you as we consider whether or not we are going to move forward with them.

With that, we will terminate today's hearing, and we will have 10 days for any member to submit additional material and questions.

So thank you all very much for being with us today and we appreciate your patience.

[Whereupon, at 2:22 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]



James A. Rubright
Chairman and
Chief Executive Officer

October 6, 2011

The Honorable Ed Whitfield
Chairman
Committee on Energy and Commerce
Subcommittee on Energy and Power
U.S. House of Representatives
Washington, D.C. 20415

Dear Mr. Chairman:

I am pleased to respond for the record to Congressman Olson's question from the hearing on HR. 2250.

Question: What do you think is the impact of EPA's recent Boiler MACT rule and other major rules are having (or will have) on investment decisions about whether to do business in the United States?

Jim Rubright Answer:

The Boiler MACT Rule increases the relative cost of domestic production compared to offshore production and therefore would be a negative factor in the mix of considerations that relate to investments in the U.S. Further, since the EPA final Rule is in a form that industry participants do not believe can be complied with using existing technology, it would have a very negative impact on U.S. investments for two reasons, the first being that one wouldn't make a new investment in directly affected facilities without confidence the facility would comply with the rule, and second, it would chill other investments based on the fear that the EPA might adopt unachievable standards in the other of the 20 rules that the EPA is considering.

Thank you for the opportunity to respond.

With best regards,

A handwritten signature in black ink that reads 'James A. Rubright'.