























December 4, 2015

U.S. Environmental Protection Agency

Attention: Docket ID No. EPA-HQ-OAR-2010-0505

Mr. Bruce Moore

Office of Air Quality Planning and Standards Sector Policies and Programs Division (E143-05)

Research Triangle Park, NC 27711

RE: Docket No. EPA-HQ-OAR-2010-0505: Oil and Natural Gas Sector: Emission Standards for New and Modified Sources; RIN 2060-AS30; Federal Register Vol. 80, No. 181 (Friday, September 18, 2015)

Dear Mr. Moore:

The U.S. Chamber of Commerce, the American Chemistry Council, the American Coke and Coal Chemicals Institute, the American Forest & Paper Association, the American Fuel & Petrochemical Manufacturers, the American Petroleum Institute, the Brick Industry Association, the Council of Industrial Boiler Owners, the National Association of Manufacturers, the National Mining Association, the National Oilseed Processors Association, and the Portland Cement Association (collectively, "the Associations") submit the following comments in response to the Environmental Protection Agency's ("EPA's") proposed emissions standards for new and modified sources in the oil and natural gas sector ("the Proposed Rule").

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

The American Chemistry Council ("ACC") represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is an \$801 billion enterprise and a key element of the nation's economy.

The American Coke and Coal Chemicals Institute ("ACCCI"), which was founded in 1944, is the international trade association that represents 100% of the U.S. producers of metallurgical coke used for iron and steelmaking, and 100% of the nation's producers of coal chemicals, who combined have operations in 12 states. It also represents chemical processors, metallurgical coal producers, coal and coke sales agents, and suppliers of equipment, goods and services to the industry.

The **American Forest & Paper Association** ("AF&PA") is the national trade association of the paper and wood products industry, which accounts for approximately 4 percent of the total U.S. manufacturing GDP. The industry makes products essential for everyday life from renewable and recyclable resources, producing about \$200 billion in products annually and employing nearly 900,000 men and women with an annual payroll of approximately \$50 billion.

The American Fuel & Petrochemical Manufacturers ("AFPM") (formerly known as NPRA, the National Petrochemical & Refiners Association) is a national trade association whose members comprise more than 400 companies, including virtually all United States refiners and petrochemical manufacturers. AFPM's members supply consumers with a wide variety of products and services that are used daily in homes and businesses.

The **American Petroleum Institute** ("API") represents over 625 oil and natural gas companies, leaders of a technology-driven industry that supplies most of America's energy, supports more than 9.8 million jobs and 8 percent of the U.S. economy, and, since 2000, has

invested over \$3 trillion in U.S. capital projects to advance all forms of energy, including alternatives.

The **Brick Industry Association** ("BIA"), founded in 1934, is the recognized national authority on clay brick manufacturing and construction, representing approximately 250 manufacturers, distributors, and suppliers that historically provide jobs for 200,000 Americans in 45 states.

The **Council of Industrial Boiler Owners** ("CIBO") is a trade association of industrial boiler owners, architect-engineers, related equipment manufacturers, and University affiliates representing 20 major industrial sectors. 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 about issues affecting industrial boilers, including energy and environmental equipment, technology, operations, policies, laws and regulations.

The **National Association of Manufacturers** ("NAM") is the largest manufacturing association in the United States, representing small and large manufacturers in every industrial sector and in all 50 states. Manufacturing employs more than 12 million men and women, contributes \$2.09 trillion to the U.S. economy annually, has the largest economic impact of any major sector and accounts for more than three-quarters of private-sector research and development. The NAM is the powerful voice of the manufacturing community and the leading advocate for a policy agenda that helps manufacturers compete in the global economy and create jobs across the United States.

The **National Mining Association** ("NMA") is a national trade association whose members produce most of America's coal, metals, and industrial and agricultural minerals. Its membership also includes manufacturers of mining and mineral processing machinery and supplies, transporters, financial and engineering firms, and other businesses involved in the nation's mining industries. NMA works with Congress and federal and state regulatory officials to provide information and analyses on public policies of concern to its membership, and to promote policies and practices that foster the efficient and environmentally sound development and use of the country's mineral resources.

The **National Oilseed Processors Association** ("NOPA") is a national trade association that represents 12 companies engaged in the production of vegetable meals and vegetable oils from oilseeds, including soybeans. NOPA's member companies process more than 1.6 billion bushels of oilseeds annually at 63 plants in 19 states, including 57 plants which process soybeans.

The **Portland Cement Association** ("PCA") represents 27 U.S. cement companies operating 82 manufacturing plants in 35 states, with distribution centers in all 50 states, servicing nearly every Congressional district. PCA members account for approximately 80% of domestic cement-making capacity.

INTRODUCTION

In numerous rulemakings over the last couple of years, the Associations have challenged the use of the Social Cost of Carbon ("SCC") as a means of justifying rules and standards proposed by various federal agencies, including the EPA and the Department of Energy. The Associations consistently have called for a more thorough and transparent regulatory review process for the SCC, including meaningful opportunity for notice and comment by the public and appropriate legal recourse to challenge the SCC as final agency action. Those calls have been largely unanswered or dismissed out of hand by the Administration.

Once again, the EPA is relying upon the SCC in its cost-benefit analysis for the Proposed Rule at issue here. The Agency takes this reliance a step further by also using the Social Cost of Methane ("SCM") – a calculation that the Agency bases in part on the SCC methodology in estimating the benefits of the Proposed Rule. While the EPA requests comments on certain aspects of the SCM methodology as part of this rulemaking, the SCM is a new calculation that the public has not had an opportunity to review and/or comment on previously. In other words, the process inadequacies of the SCC are being compounded with the SCM and the EPA's reliance upon it in showing that the benefits of the Proposed Rule outweigh the costs.

As described more fully below, the Associations also have concerns with the SCM methodology chosen by the EPA, the global aspects of the SCM, and the potential impacts of the pending review of the SCC by the National Academy of Sciences. In light of these concerns and the procedural flaws associated with the SCM, the Associations believe the SCM should be withdrawn as a basis for the Proposed Rule

I. THE SCC SHOULD UNDERGO A NOTICE AND COMMENT PROCESS BEFORE IT IS USED IN OR RELIED UPON IN THE PROPOSED RULE, IN CALCULATING THE SCM OR ANY OTHER RULEMAKINGS

The Interagency Working Group ("IWG") – a group of 13 federal agencies that developed the SCC – has defined the SCC as "an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year." In the Proposed Rule, the EPA uses SCM benefits, which were calculated, in part, based upon the SCC, to justify proposed emission standards for new and modified sources from the oil and natural gas sector. The SCC, however, has not passed through an adequate notice and review period before being used in this Proposed Rule or any other rulemaking. As described in the attached Petition for Correction pursuant to the Information Quality Act, the Associations believe that the 2010 and 2013 Technical Support Documents and SCC estimates should be withdrawn and not used in any rulemaking and policymaking, including the Proposed Rule, for the following reasons:

Department of Energy (Docket No. EERE-2010-BT-STD-0003-0079;

http://www.roguletione.gov/#ldocumentDetail.D=EERE 2010 BT STD 0003-0070); and the Sentember 4-20

http://www.regulations.gov/#!documentDetail;D=EERE-2010-BT-STD-0003-0079); and the September 4, 2013 Information Quality Petition filed with the Office of Management and Budget, a copy of which is attached hereto.

¹ The Associations incorporate by reference previous comments filed on the SCC, including comments filed with the Office of Management and Budget (Docket No. EERE-2010-BT-STD-0003-0079; http://www.regulations.gov/#!documentDetail;D=EERE-2010-BT-STD-0003-0079); comments filed with the

- 1. The SCC estimates fail in terms of process and transparency. The SCC estimates fail to comply with OMB guidance for developing influential policy-relevant information under the Information Quality Act.² The SCC estimates are the product of an opaque process and any pretensions to their supposed accuracy (and therefore usefulness in policy-making) are unsupportable.
- 2. The models with inputs (hereafter referred to as "the modeling systems") used for the SCC estimates and the subsequent analyses were not subject to peer review as appropriate.
- 3. Moreover, even if the SCC estimate development process was transparent, rigorous, and peer-reviewed, the modeling conducted in this effort does not offer a reasonably acceptable range of accuracy for use in policymaking.
- 4. The IWG has failed to disclose and quantify key uncertainties to inform decision makers and the public about the effects and uncertainties of alternative regulatory actions as required by OMB.
- 5. By presenting only global SCC estimates and downplaying domestic SCC estimates in 2013, the IWG has severely limited the utility of the SCC for use in benefit-cost analysis and policymaking.

Given all of the concerns summarized above and detailed in the attached petition, none of the IWG estimates of SCC (2010, 2013 or 2015) should be used or relied upon in the Proposed Rule, as well as any other rulemaking and policymaking until the SCC undergoes a more rigorous notice, review and comment process subject to the APA.

II. THE SOCIAL COST OF METHANE

In the Proposed Rule, the EPA defines the social cost of methane as "a metric that estimates the monetary value of impacts associated with marginal changes in methane emissions in a given year." According to the EPA, the SCM estimates used in this proposal were developed by Marten, et al. (2014). The EPA projects that the Proposed Rule will reduce approximately 340,000 to 400,000 U.S. short tons (or 308,000 to 363,000 metric tons) of methane emissions annually in 2025 when the rule is fully in effect. The EPA estimates that the annual benefit in 2025 of removing that amount of methane emissions will be \$460 million to \$550 million based upon reductions in climate change economic damages over the following 300 years. The EPA bases its benefits calculation on a SCM value of \$1,500 per metric ton (\$1,361).

² The SCC estimates also fail to comply with the OMB Bulletin for Agency Good Guidance Practices, which requires pre-adoption public notice and comment for economically significant guidance documents. *See* OMB Bulletin, 72 F.R. at 3440 (Sec. IV).

³ 80 Fed. Reg. 56654 (Sept. 18, 2015).

⁴ *Id*.

⁵ *Id*.

⁶ *Id*.

per short ton) estimated by Marten, et al. (2014).⁷ The Marten, et al. (2014) estimate for methane in 2025 is 32.6 times greater than the OMB/IWG estimate of \$46 per ton estimate for SCC (applicable to 2025 emissions reductions).

A. The Overall Procedural Flaws of the Social Cost of Methane

For many of the same reasons cited in Section I above and in the comments and petition incorporated herein, the social cost of methane itself, including the data it is based upon and the methodology used to determine it, should be subject to a notice, review and comment process. In addition to lacking the hallmarks of the regulatory process and the Administrative Procedure Act – transparency, public notice, stakeholder input and meaningful review – the SCM fails to meet the guidelines and requirements of the OMB, including those imposed by the Information Quality Act. Before the EPA or any other federal agency bases a regulation or policy upon the SCM or uses the SCM to justify a regulation or policy, the SCM should be subject to a valid rulemaking process based on public input, sound science, quality data, and transparency. Simply asking for input into the methodology of the SCM after already relying upon it in a proposed regulation's cost-benefit analysis is insufficient and contrary to the laws and requirements governing agency rulemaking. Consequently, the SCM should not be used or relied upon in the Proposed Rule, as well as any other rulemaking or policymaking until the SCM undergoes a notice, review and comment process.

B. The Social Cost of Methane Methodology

According to the United Nations' Inter-governmental Panel on Climate Change ("IPCC"), methane, like carbon dioxide (CO₂), is a greenhouse gas that has the potential to increase global temperature averages if its concentration in the atmosphere increases. The IPCC also maintains that, in general, the impact of methane as a climate-affecting gas is said to be about twenty-five times greater than that of CO₂, at least in the near-term (100 years or less). This twenty-five times global warming potential ("GWP") factor is the commonly-used factor for conversion between methane and CO₂, as endorsed by the IPCC. Authors before Marten, et al. (2014) have proposed alternative calculations to address various concerns with the GWP method, but none has gained widespread acceptance in the scientific community. Without more extensive peer review and scientific scrutiny, it is too early to assume that the recently published Marten, et al. (2014) paper will become widely accepted as a substitute for the GWP approach.

Despite general consensus around the twenty-five times GWP factor for valuing methane, the EPA is proposing to value methane reductions as worth $\it thirty-two$ times more than $\rm CO_2$

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⁷ *Id.* at 56654-56655.

⁸ See Intergovernmental Panel on Climate Change, 4th Assessment Report (2007) Working Group 1: Physical Science Basis, section 2.10.2, Table 2.14 at https://www.ipcc.ch/publications and data/ar4/wg1/en/ch2s2-10-2.html. The twenty-five GWP factor cited is the IPCC methane GWP value for a 100 year horizon, including "indirect effects from enhancements of ozone and stratospheric water vapor." Footnote c, Table 2.14. Notably, just a few years ago, the methane GWP was changed from 21 to 25 times, further highlighting the uncertainty of the calculation. See 40 CFR 98.

⁹ While it may be the general consensus approach, the GWP approach also has flaws; the Associations are not taking the position that the GWP approach to valuing SCM is the appropriate method.

reductions based on a single, recently-published report. Under the Marten, et al. (2014) approach, the estimated benefits of the Proposed Rule increase significantly (from the GWP approach). The table below shows revised benefit calculations based on the GWP approach, which is explained in detail below.¹⁰

Reproduction of EPA Table 6-2, Summary of Monetized Benefits, Costs and Net Benefits with benefits based on the GWP of methane value reported by IPCC ¹¹					
	2020 (range \$millions)			2025 (range \$millions)	
Total Monetized Benefits (GWP)	\$162	\$172		\$324	\$381
Total Costs (per EPA)	\$150	\$170		\$320	\$420
Net Benefits	\$12	\$2		\$4	(\$39)

Under the twenty-five times GWP approach, the SCM value is \$1,050 per metric ton in 2025, and \$953 per short ton. In terms of the U.S. short ton, the SCM value based on the widely used GWP factor is \$953, and the benefit of eliminating 340,000 to 400,000 tons of methane in 2025 is \$324 million to \$381 million, compared to costs estimated by EPA of \$320 million to \$420 million. Using the GWP factor, the net impact of the Proposed Rule would be at best only a \$4 million net benefit (under the optimistic low cost scenario) and possibly a negative net impact of minus \$39 million under the higher cost scenario.

Applying the consensus GWP approach, the costs and the benefits of the Proposed Rule present a very different picture, namely that there is a scenario in which the costs outweigh the benefits. This is significant information that the EPA should be using in its cost-benefits analysis. At the very least, the EPA should have reported in its regulatory analysis the net benefit results based upon both the Marten, et. al (2014) approach and the GWP approach.

C. Global Aspects of the Social Cost of Methane

Another flaw in the EPA's treatment of the SCM is the Agency's failure to address the global aspects of the estimated SCM values and benefits. Specifically, the costs of the Proposed Rule are borne only domestically by U.S. businesses and consumers; however, the EPA justifies the Proposed Rule using benefits spread globally to other countries. Similar to the SCC, it is reasonable to assume that only 10-23% of global benefits actually accrue domestically. This domestic benefit proportion applies whether the SCM benefits are calculated using the Marten, et al. (2014) approach or the GWP approach. At a minimum, the EPA should make available the Proposed Rule's costs and benefits for which a global benefits reduction rate is applied so that stakeholders and the public have a true representation of the costs and the benefits that the United States alone will bear with the promulgation of the rule.

¹⁰ Any calculation of the SCM based upon the SCC would be deficient regardless of the conversion factor used, for the reasons stated herein.

¹¹ See EPA's Regulatory Impact Analysis, Table 6-2 (available at http://www3.epa.gov/airquality/oilandgas/pdfs/og-prop-ria-081815.pdf).

D. National Academy of Sciences' Review of SCC

A special working group of the National Academy of Sciences, Engineering, and Medicine (NAS) is currently conducting a comprehensive analysis of the existing methods used by the government to estimate the SCC.¹² The working group is scheduled to release its findings and recommendations in late 2016. These findings and recommendations will have direct applicability to the related estimation of the social cost of methane. The EPA should delay any rulemaking that applies a SCM concept – or eliminate the reliance upon a SCM concept – until the NAS working group's analysis and report are complete, including be subject to peer review.¹³

CONCLUSION

For the reasons stated herein and based upon the arguments incorporated by reference, the SCC estimates and the SCM estimates should be withdrawn as a basis for the Proposed Rule. Further, the SCC and SCM estimates should not be used in any rulemaking or policymaking until they undergo more rigorous notice, review and comment processes.

Thank you for your consideration of this important matter. If you have any further questions, please feel free to reach out to William Kovacs, Senior Vice President at the U.S. Chamber of Commerce at (202) 463-5457 or by e-mail at wkovacs@uschamber.com.

Respectfully submitted,

American Chemistry Council
American Coke and Coal Chemicals Institute
American Forest & Paper Association
American Fuel & Petrochemical Manufacturers
American Petroleum Institute
Brick Industry Association
Council of Industrial Boiler Owners
National Association of Manufacturers
National Mining Association
National Oilseed Processors Association
Portland Cement Association
U.S. Chamber of Commerce

¹² See http://sites.nationalacademies.org/DBASSE/BECS/CurrentProjects/DBASSE 167526.

¹³ This recommendation does not preclude the Associations' right to disagree with and/or challenge those NAS results.