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United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

RYAN JACKSON, MAJORITY STAFF DIRECTOR
BETTINA POIRIER, DEMOCRATIC STAFF DIRECTOR

December 4, 2015

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Administrator McCarthy:

I write to express concerns over the Environmental Protection Agency's (EPA) application of the social cost of methane (SCM) in the September 18, 2015, proposed rule for methane emissions from the oil and gas sector.¹ The SCM was developed by EPA officials to represent the theoretical cost of an incremental ton of methane emissions in a given year.² EPA's reliance on the SCM estimate for the oil and gas proposal and other rulemakings is inapt. The SCM estimate is based on the deeply flawed methodology underpinning the social cost of carbon (SCC).³ EPA endorsed the SCM for use in regulatory impact analyses (RIAs) without subjecting the estimate to the necessary level of peer review and public participation. Accordingly, I request EPA fully cooperate with our Congressional inquiry and refrain from citing the SCM in RIAs until these shortcomings are resolved.

At the outset, I am alarmed EPA introduced the SCM during an ongoing review of the SCC by the National Academy of Sciences (NAS).⁴ EPA has admitted "any limitations that apply to inputs and modelling assumptions underlying the [SCC] . . . also apply to the [SCM]."⁵ The Office of Management and Budget (OMB) Circular A-4 informs agencies to use 3 and 7 percent discount rates in developing RIAs,⁶ but the SCC and SCM are both derived from 2.5, 3, and 5 percent discount rates.⁷ Similar to the SCC, the SCM is based on global rather than

¹ Env'tl. Prot. Agency, Oil and Natural Gas Sector: Emission Standards for New and Modified Sources, Proposed Rule, 80 Fed. Reg. 56593 (Sept. 18, 2015), available at <https://www.federalregister.gov/articles/2015/09/18/2015-21023/oil-and-natural-gas-sector-emission-standards-for-new-and-modified-sources>.

² Env'tl. Prot. Agency, Whitepaper on Valuing Methane Emissions Changes in Regulatory Benefit-Cost Analysis, Peer Review Charge Questions, and Responses, available at <http://www3.epa.gov/climatechange/pdfs/social%20cost%20methane%20white%20paper%20application%20and%20peer%20review.pdf> (last accessed Dec. 4, 2015) [hereinafter *Whitepaper*].

³ *Id.*

⁴ The Nat. Academies of Sciences, Bd. On Env'tl. Change & Soc'y, Assessing Approaches to Updating the Social Cost of Carbon, http://sites.nationalacademies.org/DBASSE/BECS/CurrentProjects/DBASSE_167526 (last accessed Dec. 4, 2015).

⁵ Whitepaper, *supra* note 2.

⁶ OFFICE OF MGMT & BUDGET, CIRCULAR A-4: REGULATORY ANALYSIS (Sept. 17, 2003), https://www.whitehouse.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf [hereinafter *CIR. A-4*].

⁷ Whitepaper, *supra* note 2.

domestic costs and benefits,⁸ yet Circular A-4 states that agencies must consider the domestic effects.⁹ The SCM also used the same faulty set of integrated assessment models as the SCC.¹⁰ These issues, among others, were the subject of public comments submitted on the SCC and are currently under consideration by the NAS.

I am especially concerned by the continued lack of transparency and disregard for well-established peer review and information quality guidelines that underpin the process for developing the SCM, similar to the concerns raised for the SCC. Rather than provide the public notice of EPA's intent to develop estimates for methane, EPA inserted the estimates in the recent rulemakings offering public input only after the estimates had been applied to RIAs. On June 11, 2015, seven members of the Senate Committee on Environment and Public Works wrote President Obama and specifically asked whether a SCM estimate would be used in the potential oil and gas rule.¹¹ The Committee has yet to receive a response. However, over a year ago EPA had its economists conduct a study creating the SCM¹² without any public notice or input. Critically, this SCM study is a fully taxpayer funded study¹³ and is not accessible on EPA's website; in fact, the study is behind a paywall.¹⁴

In addition, the SCM was not properly peer reviewed for its application to RIAs. Per OMB's "Final Information Quality Bulletin for Peer Review:"

More rigorous peer review is necessary for information that is based on *novel methods* or presents complex challenges for interpretation. Furthermore, the need for rigorous peer review is greater when the information contains *precedent-setting* methods or models, presents conclusion that are likely to change prevailing practices, or is *likely to affect policy* (emphasis added).¹⁵

There is no question the SCM meets this definition. The proposed rule for the oil and gas sector marks the first time the EPA has applied the SCM to monetize direct benefits of a rulemaking. Further, the SCM's application set a new precedent for EPA rulemakings affecting methane and has implications for other federal agency actions relating to methane. Environmental activists such as the Environmental Defense Fund have already called for the application of the SCM in

⁸ Whitepaper, *supra* note 2.

⁹ CIR.A-4, *supra* note 6.

¹⁰ Env't. Prot. Agency, Regulatory Impact Analysis of the Proposed Emission Standards for New and Modified Sources in the Oil and Natural Gas Sector, EPA-452/R-15-002, Aug. 2015, pp. 4-12, available at http://www3.epa.gov/airquality/oilandgas/pdfs/og_prop_ria_081815.pdf.

¹¹ Hon. James M. Inhofe et al., S. Comm. on Env't & Pub. Works, to President Barack Obama (June 11, 2015), http://www.epw.senate.gov/public/_cache/files/f92db775-750a-4d39-b8e9-f2dcb1873620/methaneoilandgasletter.pdf.

¹² "Estimating the Social Cost of CH₄ and N₂O Emissions Consistent with U.S. SC-CO₂ Estimates" (Alex Marten, Elizabeth Kopits, Charles W. Griffiths, Steve Newbold, and Ann Wolverton). Climate Policy. 2015, available at <http://www.tandfonline.com/doi/pdf/10.1080/14693062.2014.912981#.VmHHenarRhE>.

¹³ *Id.* In footnote of study, "This work was authored as part of the Contributor's official duties as an Employee of the United States Government and is therefore a work of the United States Government."

¹⁴ *Id.* To download the article it costs \$48.

¹⁵ OFFICE OF MGMT & BUDGET, INFORMATION QUALITY GUIDELINES (Oct. 1, 2002), available at https://www.whitehouse.gov/sites/default/files/omb/inforeg/igq_oct2002.pdf [hereinafter *IQA Guidelines*].

EPA-Department of Transportation's heavy-duty truck rule.¹⁶ The Sierra Club has also urged the Bureau of Land Management to use such an estimate in reviewing applications for coal leases on federal lands.¹⁷ If the Administration's far-reaching application of the SCC is any indication, I can expect the SCM's use to spread well beyond the EPA. As such, robust peer review is essential.

OMB information quality guidelines mandate that such information meet a higher level of transparency.¹⁸ Even EPA's recently updated Peer Review Handbook explained "[o]ne important element in ensuring that decisions are based on sound and defensible science is to have an open and transparent peer review process."¹⁹ Despite these directives, EPA's internal peer review of the SCM's application to RIAs was neither transparent nor robust. Only after EPA proposed the methane rules the Agency provided—buried at the bottom of the EPA webpage for the SCC—a paragraph on the SCM and a link to a whitepaper on peer review of the estimates.²⁰ EPA did not seek any public input in this peer review process and seemingly sought to shield its work on the SCM from necessary sunshine. EPA did not even include the SCM peer review process on its publicly available Peer Review Agenda.²¹

I am equally concerned EPA has deemed this peer review process sufficient to justify the SCM's use in rulemakings. Indeed, it is unclear when or how EPA developed the charge questions and selected the three peer reviewers. All three reviewers identified the need for improvement to the SCM.²² Critically, one peer reviewer advised "a more extensive public peer review process should be pursued going forward that will give the public greater confidence in the ultimate values."²³ Now, nearly a year after EPA first sought peer review of the estimates and only after the SCM had been applied to RIAs, EPA is seeking public comment on the SCM.

The timing of the SCM's application is seemingly driven by the international climate negotiations so the Obama Administration can cite regulatory actions for methane and tout outlandish benefit estimates for reducing methane conjured by the SCM. For example, at a 3% discount rate in 2025 the SCM is a whopping \$1,500 per ton.²⁴ EPA uses the SCM to justify

¹⁶ InsideEPA, *Environmentalists Seek New 'Social Cost of Methane' For Truck GHG Rule* (Aug. 27, 2014), <http://insideepa.com/inside-epa/environmentalists-seek-new-social-cost-methane-truck-ghg-rule>.

¹⁷ Nathaniel Shoaff & Marni Salmon, *Incorporating the Social Cost of Carbon into National Environmental Policy Act Reviews for Federal Coal Leasing Decisions*, Sierra Club (Apr. 2015), pg. 9, available at <http://content.sierraclub.org/environmentallaw/sites/content.sierraclub.org/environmentallaw/files/scc%20white%20paper%20final.pdf>.

¹⁸ IQA Guidelines, *supra* note 15.

¹⁹ Env'tl. Prot. Agency, Science & Tech. Policy Council, *Peer Review Handbook*, 4th Ed. (Oct. 2015), available at http://www2.epa.gov/sites/production/files/2015-09/documents/final_epa_peer_review_handbook-4th_ed_091415_dunmy_link.pdf.

²⁰ Env'tl. Prot. Agency, *The Social Cost of Carbon*, available at <http://www3.epa.gov/climatechange/EPAactivities/economics/scc.html> (last accessed Dec. 4, 2015).

²¹ Env'tl. Prot. Agency, *EPA Science Inventory, Peer Review Agenda*, available at http://cfpub.epa.gov/si/si_public_pr_agenda.cfm (last accessed Dec. 4, 2015).

²² Whitepaper, *supra* note 2.

²³ Whitepaper, *supra* note 2.

²⁴ InsideEPA, *EPA Uses Novel 'Social Cost of Methane' In Landfill, Oil & Gas Proposals* (Aug. 26, 2015), <http://insideepa.com/inside-epa/epa-uses-novel-social-cost-methane-landfill-oil-gas-proposals>

regulations where the world benefits but only Americans pay the costs of compliance. In regards to the proposed rule for the oil and gas sector, EPA estimates \$460-550 million in global benefits and \$320-420 million in domestic costs.²⁵ However, with respect to the SCC the Administration explained “the domestic benefit would be proportional to be U.S. share of global [gross domestic product].”²⁶ Applying that logic to the SCM in the proposed oil and gas rule would amount to \$124-148 million domestic benefits²⁷—far less than the estimated costs of the rule. In fact, virtually all the monetized benefits are attributed to the SCM; without EPA’s new SCM estimates the rule would fail the benefit-cost test.

Clearly, this metric is yet another attempt by the Obama Administration to advance an unpopular climate agenda—by inventing a dollar amount for the price of a ton of methane to justify onerous regulations and cite in public statements. Similar to the SCC, the SCM was not part of an open and public process—instead it was quietly inserted into EPA rulemakings. The SCM was not subject to public notice and comment procedures, is built upon a faulty framework and have not been peer-reviewed properly for the purpose of which they are being utilized. These actions only exacerbate the regulatory uncertainty that exists under the Obama Administration’s regulatory fiat over the U.S. economy and calls into question the integrity and fate of regulations relying on the SCM.

As such, it is critical the EPA immediately halt the use of the SCM in regulations and respond to the following requests by no later than December 21, 2015. Please also include a copy of your responses to the following requests in the docket for the oil and gas proposal.

1. Please describe the circumstances surrounding when and how the Agency first decided to develop a social cost of methane estimate.
2. Please provide a description of the staff resources dedicated to formulating the social cost of methane estimates.
3. Please describe any efforts by the Agency to seek public input or external expert advice on the social cost of methane during the development stages of the estimates.
4. Please explain what impact President Obama’s Climate Action Plan and subsequent White House Methane Strategy had on the Agency’s decision to develop a social cost of methane estimate.
5. Please describe the circumstances surrounding when and how the Agency decided to seek peer review of the social cost of methane’s application to regulatory impact analyses. This response should include the names and qualifications of all those

²⁵ Env’tl. Prot. Agency, Regulatory Impact Analysis of the Proposed Emission Standards for New and Modified Sources in the Oil and Natural Gas Sector, EPA-452/R-15-002, Aug. 2015, pp. 1-9, available at http://www3.epa.gov/airquality/oilandgas/pdfs/og_prop_ria_081815.pdf.

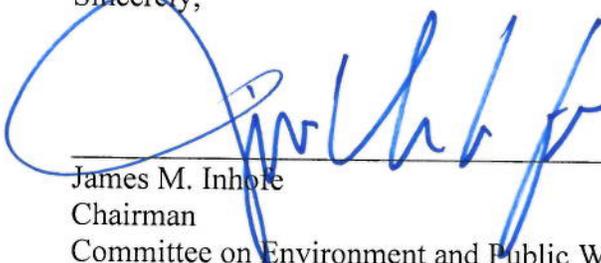
²⁶ Interagency Working Group on Social Cost of Carbon, United States Government, Technical Support Document – Social Cost of Carbon for Regulatory Impact Analysis – Under Executive Order 12866 (Feb. 2010), pg 11, available at <https://www.whitehouse.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf>

²⁷ Wayne J. D’Angelo, EPA’s Estimate of the “Social Cost of Methane” Used to Justify New Source Performance Standards for the Oil and Natural Gas Industry, Fracking Insider (Aug. 19, 2015), <http://www.frackinginsider.com/regulatory/epas-estimate-of-the-social-cost-of-methane-used-to-justify-new-source-performance-standards-for-the-oil-and-natural-gas-industry/> Note: author determined this figure by applying a 27% proportion of US global GDP to the benefit estimates.

- contacted by the Agency to participate in the peer review. Why did the Agency not seek public nominations for peer reviewers? Why was the SCM peer review not included in EPA's Peer Review Agenda?²⁸
6. When did EPA make the "Whitepaper on Valuing Methane Emissions Changes in Regulatory Benefit-Cost Analysis, Peer Review Charge Questions, and Responses" publicly available? Why did the Agency post this whitepaper at the bottom of its webpage for the SCC? Why is the whitepaper not available on EPA's webpage for oil and natural gas regulatory actions? Has the Agency considered creating a separate webpage for the SCM?
 7. Did the Agency consider seeking the expert advice of the EPA Science Advisory Board or another external peer review panel? If not, why?
 8. In response to public comments on the SCC, OMB explained "The [Interagency Working Group] IWG will continue to follow and evaluate literature on the social cost of non-CO2 greenhouse gases and the feasibility of developing non-CO2 social cost estimates."²⁹ Did the Agency consider asking the Interagency Working Group that developed the social cost of carbon to review the social cost of methane estimates? If not, why?
 9. Please describe the process used and input received in developing the seven charge questions provided to the three peer reviewers. Why did the Agency not seek public comment on the charge questions?
 10. Please make the SCM study available online as soon as possible and explain why this federally-funded study is not available on EPA's website.
 11. Please explain why the EPA did not wait for the NAS to complete its review of the SCC before applying the SCM.

Thank you for your prompt attention to this matter. If you have any questions with this request, please contact the Committee on Environment and Public Works at (202) 224-6176.

Sincerely,



James M. Inhofe
Chairman
Committee on Environment and Public Works

²⁸ Env'tl. Prot. Agency, EPA Science Inventory, Peer Review Agenda, available at http://cfpub.epa.gov/si/si_public_pr_agenda.cfm (last accessed Dec. 4, 2015).

²⁹ Interagency Working Group on Social Cost of Carbon, United States Government, Response to Comments: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (July 2015), available at <https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-response-to-comments-final-july-2015.pdf>.