

States of California, Connecticut, Illinois, Iowa, Maine, Maryland, New Jersey, New York, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, and the City of Chicago

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Via Electronic Transmission

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U.S. Environmental Protection Agency
Mail Code 28221T
1200 Pennsylvania Avenue, NW
Washington, DC 20460
a-and-r-Docket@epa.gov

RE: Comments on Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration, 83 Fed. Reg. 52,056 (Oct. 15, 2018)

Attention: Docket ID No. EPA-HQ-OAR-2017-0483

Dear Acting Administrator Wheeler,

The States of California, Connecticut, Illinois, Iowa, Maine, Maryland, New Jersey, New York, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, and the City of Chicago (“States and Cities”) respectfully submit these comments on the Environmental Protection Agency’s (“EPA”) proposed rule titled “Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration,” 83 Fed. Reg. 52,056 (Oct. 15, 2018) (“Proposed Reconsideration Rule” or “Proposal”). As detailed in these comments, the States and Cities oppose the Proposed Reconsideration Rule and continue to support EPA’s 2016 emission standards for new, reconstructed, and modified sources in the oil and natural gas sector codified at 40 Code of Federal Regulations part 60, subpart OOOOa (“2016 Standard”).¹

EPA’s Proposed Reconsideration Rule is the latest in a series of unlawful attempts by the Administration to undermine a common-sense rule that reduces emissions of harmful pollutants and recovers valuable natural gas that would otherwise be lost through fugitive emissions. EPA acknowledges that the Proposal will *increase* emissions of hazardous air pollutants, methane, and volatile organic compounds (“VOC”).² VOC emissions are a precursor to ozone formation, and exposure to ozone poses a significant threat to public health, particularly vulnerable populations including children, older adults, and those suffering from chronic lung disease and asthma.³ Indeed, EPA admits that it “expects that the forgone VOC emission reductions” resulting from the Proposed Reconsideration Rule “may also degrade air quality and adversely affect health and

¹ 81 Fed. Reg. 35,824 (June 3, 2016).

² 83 Fed. Reg. at 52,059.

³ 81 Fed. Reg. at 35,837.

welfare effects associated with exposure to ozone, PM_{2.5}, and [hazardous air pollutants].”⁴ And, the federal government’s own scientists recently underscored the overwhelming evidence of the environmental, public health, economic, and national security impacts of climate change resulting from anthropogenic emissions of greenhouses gases (“GHG”), including methane.⁵

The Proposed Reconsideration Rule is unlawful for multiple reasons. First, EPA has not complied with the substantive requirements of section 111(b) of the Clean Air Act to revise a standard of performance. EPA fails to demonstrate that the Proposed Reconsideration Rule constitutes the “best system of emission reduction.” Nor does EPA provide factual support that the efficacy of the 2016 Standard is not adequately demonstrated or that its compliance costs are unreasonable. Notably, EPA does not rely upon, or even reference, data provided by industry to date relating to compliance with the 2016 Standard, despite the fact that EPA has that information readily accessible. Instead, EPA relies upon wholly unsupported assertions that the 2016 Standard is not as cost-effective as initially expected. Second, the Proposed Reconsideration Rule violates the Clean Air Act’s provisions governing administrative proceedings, because EPA has failed to provide any data or information to justify its significant proposed rollback of the 2016 Standard. *See* 42 U.S.C. § 7607(d)(1)(C) & (3)(A)-(C). EPA provides no factual support or evidence supporting the changes it now proposes. Indeed, in many cases EPA unlawfully attempts to evade its duty altogether, claiming only “uncertainty” and requesting that the public and industry provide the data and information EPA needs to justify the proposed changes. EPA’s action thus resembles not a proposed rule, but an advanced notice of proposed rulemaking or an information collection request, and is therefore insufficient to support amending an existing rule. Third, the Proposal fails to meet the requirements for alternative means of emissions limitations under section 111(h)(3) of the Clean Air Act.

Fourth and finally, EPA’s Proposed Reconsideration Rule is arbitrary and capricious. To begin, EPA fails to justify its abrupt change in position from 2016 as to the best system of emission reduction or to reconcile its Proposal with the underlying record. EPA also ignores and fails to analyze relevant data and relies on purportedly “new” data that was already considered by the Agency in 2016. Further, EPA’s Regulatory Impact Analysis underlying the Proposed Reconsideration Rule improperly relies upon the “interim” domestic social cost of methane, which vastly understates the benefits of reducing GHG emissions.

For these reasons, as detailed further below, our States and Cities strongly oppose the Proposed Reconsideration Rule and respectfully request that EPA withdraw it and continue to implement and enforce the 2016 Standard’s important public health and environmental protections.

⁴ *Id.*

⁵ *See* U.S. Global Change Research Program, “Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II,” (D.R. Reidmiller et al. eds., 2018), available at <https://nca2018.globalchange.gov/> (the “Assessment”).

I. FACTUAL BACKGROUND

A. GHG Emissions – Including Methane – Threaten Human Health and Welfare

Climate change poses an existential threat to the States and Cities and their citizens. Within the borders of the States, climate change is causing a host of environmental problems: loss of land due to rising seas; more frequent and severe flooding due to increased rainfall and higher tides; reduced drinking water supplies due to less snow cover and earlier snow melt; decimation of biodiversity and overall ecosystem health; and increased heatwaves, insect-borne diseases, wildfires, and severe storms.⁶

In 2009, the EPA Administrator found that anthropogenic emissions of methane, along with five other GHGs, endanger human health and welfare.⁷ Methane is 28 to 36 times more powerful than carbon dioxide in its ability to trap heat in the atmosphere over a 100-year timeframe, and up to 86 times more powerful over a 20-year timeframe.⁸ Some of those public health impacts include increased ozone pollution with an associated increased risk of morbidity and mortality; extreme weather events (e.g., hurricanes, storms, heat waves) resulting in increased risk of death, injuries, illness, infections and disease; and rising sea levels with coastal areas at risk of damage to property, land erosion, and habitat loss.⁹ Children, the elderly, and the poor are most vulnerable to climate-related health effects.¹⁰

Scientific assessments since the 2009 Endangerment Finding have only strengthened the case that anthropogenic GHG emissions endanger public health and welfare, and we are currently seeing new records for climate change indicators such as increased global average surface temperatures (fifteen of the last sixteen years have been the warmest on record), Arctic sea ice retreat, and increased GHG concentrations in the atmosphere.¹¹ Indeed, the Assessment, which concludes that “[g]reenhouse gas emissions from human activities are the only factors that can account for the observed warming over the last century” and emphasizes that “[t]he impacts

⁶ See, e.g., *Massachusetts v. EPA*, 549 U.S. 497, 522-23 (2007) (citing evidence that “rising seas have already begun to swallow Massachusetts’ coastal land”); Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496, 66,497-99, 66,525-26, 66,531-35 (Dec. 15, 2009) (concluding that greenhouse gases endanger public health and welfare); see also the Assessment.

⁷ See “Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule,” 74 Fed. Reg. 66,496 (Dec. 15, 2009).

⁸ 81 Fed. Reg. at 35,830, 35,838-39; Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016, at 3-2 to 3-3; Intergovernmental Panel on Climate Change, Climate Change 2014: Synthesis Report, at 87 (2014), available at <https://www.ipcc.ch/report/ar5/syr/>.

⁹ See 81 Fed. Reg. at 35,824, 35,833-34.

¹⁰ *Id.* at 35,833.

¹¹ *Id.* at 35,834-36.

of climate change are already being felt in the United States and are projected to intensify in the future.”¹² To highlight just two of its troubling findings, the Assessment states that, “[i]mpacts from climate change on extreme weather and climate-related events, air quality, and the transmission of disease through insects and pests, food, and water increasingly threaten the health and well-being of the American people, particularly populations that are already vulnerable.”¹³ Similarly, the Assessment concludes that “[o]ur aging and deteriorating infrastructure is further stressed by increases in heavy precipitation events, coastal flooding, wildfires, and other extreme events, as well as changes to average precipitation and temperature.”¹⁴

The States and Cities have a demonstrated, legally protected interest in protecting our residents from harmful air pollution that contributes to climate change and endangers public health and welfare. Indeed, our States and Cities have already begun to experience adverse impacts from climate change as reflected in the attached declarations.¹⁵ These climate-related impacts will only get worse and their costs will mount dramatically if GHG emissions continue unabated.¹⁶ While the Assessment credits emissions-reduction strategies the States and Cities have already put into action, it concludes that “[w]hile mitigation and adaptive measures have expanded substantially in the last four years, they do not yet approach the scale considered necessary to avoid substantial damages to the economy, environment, and public health over the coming decades.”¹⁷ Thus, the overwhelming scientific consensus is that immediate and continual progress toward a near-zero GHG-emissions economy by mid-century is necessary to avoid truly catastrophic climate change impacts.¹⁸

¹² Assessment at 2, 8-9 (2018).

¹³ Assessment, *Summary Findings* at ch. 6.

¹⁴ Assessment at ch. 10.

¹⁵ See Climate Change Impacts of the States and Cities, attached hereto.

¹⁶ Assessment at 26 (“With continued growth in emissions at historic rates, annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century—more than the current gross domestic product (GDP) of many U.S. states.”)

¹⁷ *Id.* at ch. 29.

¹⁸ See Assessment at 26, 1347, 1488; see also Intergovernmental Panel on Climate Change (IPCC), 1.5°C Report, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global GHG emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development and efforts to eradicate poverty, Summary for Policymakers (“In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO₂ emissions decline by about 45% from 2010 levels by 2030 . . . , reaching net zero around 2050 Non-CO₂ emissions in pathways that limit global warming to 1.5°C show deep reductions that are similar to those in pathways limiting warming to 2°C (high confidence).”)

B. EPA Enacted the 2016 Standard to Protect Human Health and Welfare

The 2016 Standard is a critical component of that progress and is expected to help to prevent and mitigate the harms that climate change poses to human health and the environment. The production, processing, and transportation of oil and natural gas constitute the largest industrial source of the potent GHG methane in the United States.¹⁹ Indeed, according to EPA, these emissions “exceed the national-level emissions totals for all GHG and all anthropogenic sources for Greece, the Czech Republic, Chile, Belgium, and about 150 other countries.”²⁰ For this reason, the States and Cities have long called for the federal government to regulate methane emissions from new and existing sources in the oil and natural gas sector.

In 2014, EPA began answering that call by conducting an extensive public outreach and review process to develop standards of performance to regulate these harmful emissions. Among other steps, EPA published five technical white papers that received more than 43,000 public comment submissions and additional technical information from independent experts and various stakeholders. Many of the undersigned Attorneys General filed comments on these white papers,²¹ and States that had previously noticed their intent to sue EPA over its failure to address oil and natural gas sector methane emissions withheld suit as EPA’s efforts took shape.²² In September 2015, EPA issued a notice of proposed rulemaking, hosted three public hearings, and allowed for a 99-day comment period on the proposed rule, in which EPA received over 900,000 comments.²³

On June 3, 2016, pursuant to its authority under section 111(b) of the Clean Air Act,²⁴ EPA finalized the 2016 Standard to reduce emissions of methane, VOCs, and hazardous air

¹⁹ 81 Fed. Reg. at 35,839.

²⁰ *Id.*, at 35,840.

²¹ See Letter from Eric T. Schneiderman, et al., to Gina McCarthy, “Re: Comments on EPA Methane White Papers” (June 16, 2014) (signed by Attorneys General of Delaware, Maryland, Massachusetts, New York, Oregon, Rhode Island, and Vermont); see Letter from Eric Schneiderman, et al., to Janet McCabe, “Re: Addressing Methane Emissions from Distribution Sector” (Sept. 12, 2014) (signed by Attorneys General of Delaware, Maryland, Massachusetts, New York, Oregon, Rhode Island, and Vermont).

²² See Clean Air Act Notice of Intent to Sue Letter to Lisa P. Jackson, Administrator, U.S. Environmental Protection Agency, from New York, Connecticut, Delaware, Maryland, Massachusetts, Rhode Island, and Vermont (Dec. 11, 2012).

²³ 81 Fed. Reg. at 35,831.

²⁴ EPA’s issuance of the 2016 Standard also triggered the agency’s duty to propose guidelines for states to develop plans to limit methane emissions from existing sources under Clean Air Act section 111(d). 42 U.S.C. § 7411(d); 40 C.F.R. § 60.21(a); see Letter from 15 Attorneys General and Chicago Corporation Counsel to Administrator Pruitt (June 29, 2017), *available at* https://ag.ny.gov/sites/default/files/2017_06_29_ltr_oag-epa_clean_air_act_notice_of_intent_to_sue.pdf. Regulation of emissions from existing sources is

pollutants from new and modified production, gathering, processing, transmission, and storage equipment in the oil and natural gas sector.²⁵ Specifically, the 2016 Standard targets the following sources of methane and VOC emissions: hydraulically fractured oil well completions, pneumatic pumps, fugitive emissions from well sites and compressor stations, and equipment leaks at natural gas processing plants.²⁶ The 2016 Standard sets a fixed schedule for monitoring leaks of twice per year for all well sites and four times per year for all compressor stations, and requires the repair of any detected leaks within thirty days.²⁷ The 2016 Standard also requires owners and operators of affected facilities to submit annual compliance reports that include data on the number of components found leaking at each well site during an inspection, the types of components found most frequently with leaks, the time expended by a surveyor to conduct an inspection, and the percentage of leaking components repaired.

According to EPA, the 2016 Standard is expected to reduce 300,000 tons of methane, 150,000 tons of VOCs, and 1,900 tons of hazardous air pollutants (as a co-benefit of reducing VOCs) in 2020.²⁸ In 2025, the rule would reduce 510,000 tons of methane, 210,000 tons of VOCs, and 3,900 tons of hazardous air pollutants.²⁹ EPA analyzed the costs and benefits of the 2016 Standard, including the revenues from recovered natural gas that would otherwise be lost through fugitive emissions, and determined that the 2016 Standard would result in a net benefit estimated at \$35 million in 2020 and \$170 million in 2025.³⁰

C. The Proposed Reconsideration Rule: EPA’s Latest Effort to Undermine the 2016 Standard

Under the current Administration, there has been a significant reversal in federal efforts to address methane emissions from the oil and natural gas sector. In March 2017—in response to a request from Attorneys General with whom he was previously allied in opposing EPA rules³¹— the then-EPA Administrator withdrew, without any notice or opportunity to comment, EPA’s information collection request (“ICR”) to the oil and natural gas industry requesting

critical because existing sources comprise the vast majority of the sector’s emissions. *See* Environmental Defense Fund, *Rising Risk: Improving Methane Disclosure in the Oil and Gas Industry* (Jan.2016), *available at* https://www.edf.org/sites/default/files/content/rising_risk_full_report.pdf (stating that “roughly 90% of emissions in 2018 are forecast to come from existing sources.”).

²⁵ 81 Fed. Reg. 35,824 (June 3, 2016).

²⁶ *Id.*, at 35,825.

²⁷ *Id.*, at 35,826, 35,846.

²⁸ *Id.*, at 35,827.

²⁹ *Id.*

³⁰ *Id.*, at 35,827-28.

³¹ *See* Letter from Ken Paxton, Texas AG, et al., to Scott Pruitt, U.S. EPA Administrator (Mar. 1, 2017), *available at* https://www.epa.gov/sites/production/files/2017-03/documents/letter_from_attorneys_general_and_governors.pdf

information on methane emissions from existing sources.³² The ICR would have collected information including major equipment and component counts at low production wells and the effectiveness of any ongoing leak detection and repair program to which the reporting facility was subject³³ (both topics in connection with which EPA now claims to lack sufficient information, causing it to doubt the cost-effectiveness of the 2016 Standard).³⁴ Many of our States and Cities objected to EPA's unexplained withdrawal of the ICR.³⁵

EPA followed the ICR withdrawal with an announcement that it had convened a proceeding for reconsideration of the 2016 Standard.³⁶ EPA then issued its first, administrative, three-month stay of the rule, which was immediately challenged and summarily vacated by the D.C. Circuit as unlawful. *Clean Air Council v. Pruitt*, 862 F.3d 1, 14 (D.C. Cir. 2017). EPA again attempted to halt implementation of the 2016 Standard by proposing a twenty-seven month stay, purportedly supported by “notices of data availability” that failed to make any data available to the public. The States and Cities submitted comments opposing EPA's proposed stay and notices, asserting, in relevant part, that EPA's proposed action exceeded its statutory authority under the Clean Air Act, and was arbitrary and capricious because of EPA's failure to justify its change of position.³⁷ EPA never finalized its proposed stay and its actions reflect a systematic attempt to dismantle the 2016 Standard and other efforts to limit methane emissions from the oil and natural gas sector.

The Proposed Reconsideration Rule—the latest salvo in EPA's dogged attempt to unravel sensible, cost-effective methane-reduction measures—would weaken the 2016 Standard in a number of significant ways. Most notably, it would reduce the required frequency of monitoring for fugitive emissions and repair of leaks detected by such monitoring: (1) from twice per year at all well sites, to once per year at non-low production well sites and once every two years at low

³² *Notice Regarding Withdrawal of Obligation to Submit Information; Notice*, 82 Fed. Reg. 12,817 (Mar. 7, 2017).

³³ *See* Information Collection Request Supporting Statement at 95, EPA ICR No. 2548.01 (Nov. 9, 2016), *available at* <https://www.epa.gov/sites/production/files/2016-11/documents/oil-natural-gas-icr-supporting-statement-epa-icr-2548-01.pdf>; *see also* EPA Fact Sheet at 1, *available at* <https://www.epa.gov/sites/production/files/2016-11/documents/oil-gas-final-icr-factsheet.pdf>.

³⁴ 83 Fed. Reg. at 52,062, 52,066, 52,069.

³⁵ *See* Letter re: Withdrawal of Final Methane Information Collection Request to Scott Pruitt, Administrator, from Massachusetts, California, District of Columbia, Illinois, Maine, Maryland, New York, Rhode Island, and Vermont (Apr. 3, 2017).

³⁶ *See* Letter re: Convening a Proceeding for Reconsideration of Final Rule, “Oil and Natural Gas Sector: Emission Standards for New, Reconstructed and Modified Sources,” published June 3, 2016, to Counsel for Entities that Petitioned for reconsideration, *available at* (Apr. 18, 2017), *available at* https://www.epa.gov/sites/production/files/2017-04/documents/oil_and_gas_fugitive_emissions_monitoring_reconsideration_4_18_2017.pdf.

³⁷ The States and Cities comments regarding EPA's proposed stay and “notices of data availability” are attached hereto.

production well sites;³⁸ and (2) from four times per year at all compressor stations, to twice per year at compressor stations not located on the Alaskan North Slope and once per year at compressor stations located on the Alaskan North Slope.³⁹ The Proposed Reconsideration Rule would also exempt from monitoring and repair requirements wellhead-only well sites from which all major production and processing equipment has been removed.⁴⁰ EPA's reckless Proposal will increase emissions of methane by 380,000 tons between 2019 and 2025 as compared to the 2016 Standard.

In addition to increasing methane emissions, EPA's Proposed Reconsideration Rule would increase emissions of VOCs and hazardous air pollutants. The public health impacts of VOCs are also well documented.⁴¹ VOCs are a main precursor to the formation of ozone, which can cause harmful respiratory symptoms such as airway inflammation and asthma.⁴² Long-term exposure to VOCs can also result in premature death from lung and heart disease.⁴³ Children and people with respiratory disease are most at risk.⁴⁴ EPA has further found that harmful hazardous air pollutants associated with natural gas, like formaldehyde and benzene, are known to cause cancer and other adverse health effects.⁴⁵ EPA's Proposed Reconsideration Rule would upend the 2016 Standard's important safeguards against these harms and will adversely impact public health and the environment. Between 2019 and 2025 alone, 100,000 tons of VOCs and 3,800 tons of hazardous air pollutants will be emitted that would have been controlled and prevented under the 2016 Standard.⁴⁶

If EPA finalizes the Proposed Reconsideration Rule, residents of the States and Cities will be exposed to and harmed by the impacts from methane, VOCs, and hazardous air pollutant emissions that would otherwise have been avoided if the 2016 Standard's requirements remained in force. Thus, the Proposed Reconsideration Rule threatens to harm the public that EPA is obligated to protect and, as detailed below, fails to pass legal muster.

II. THE PROPOSED RECONSIDERATION RULE EXCEEDS EPA'S AUTHORITY UNDER THE CLEAN AIR ACT

The Proposed Reconsideration Rule would significantly increase emissions of harmful methane, VOCs, and hazardous air pollutants compared to the 2016 Standard based upon nothing more than industry's unsupported and unverified "concerns" regarding compliance with the 2016

³⁸ 83 Fed. Reg. at 52,062.

³⁹ *Id.* at 52,069-52,072

⁴⁰ 83 Fed. Reg. at 52,066.

⁴¹ *Id.* at 35,837.

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.* at 35,824, 35,837 ("[B]enzene . . . can lead to a variety of health concerns such as cancer and noncancer illnesses (e.g., respiratory, neurological).").

⁴⁶ *See* 83 Fed. Reg. at 52,059.

Standard. EPA's Proposed Reconsideration Rule violates sections 111(b), 307(d), and 111(h) of the Clean Air Act. The Agency has failed to cite any data or evidence to support its broad claims regarding the benefits of the Proposed Reconsideration Rule. And, EPA has failed to show that its Proposal constitutes the best system of emission reduction. In fact, EPA has proposed a rule that, if finalized, would substantially relax the monitoring and recordkeeping requirements of the 2016 Standard and would significantly increase emissions of GHGs, VOCs, and hazardous air pollutants. Finally, the Proposal fails to meet the requirements of section 111(h) of the Clean Air Act for alternative means of emissions limitations. The Proposal thus exceeds EPA's authority under the Clean Air Act.

A. The Proposed Reconsideration Rule Violates Section 111(b) of the Clean Air Act

Section 111 of the Clean Air Act contains the New Source Performance Standards program, which requires EPA to regulate all categories of stationary (non-vehicle) sources that cause, or contribute significantly to, air pollution that may reasonably be anticipated to endanger public health or welfare. 42 U.S.C. § 7411(b)(1)(A) ("Section 111(b)"). Section 111(b) requires EPA to establish standards of performance governing the emission of air pollutants from new sources, and to review and, if appropriate, revise, those standards at least every eight years. *Id.* § 7411(b)(1)(B). "Standard of performance" means "a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated." *Id.* § 7411(a)(1). EPA sets performance standards for new sources by reference to emissions levels that can be achieved using the most up-to-date control technology or method of limiting emissions that is both feasible and cost-effective for each type of pollutant, but it does not mandate any specific equipment, technology, or method. *Id.* § 7411(a)(1) & (b)(5). Under the Clean Air Act, an existing source that is modified or reconstructed after regulations are proposed for new sources is also considered a new source. 42 U.S.C. § 7411(a)(2); 40 C.F.R. § 60.15.

For EPA's proposed revisions to the 2016 Standard to be permissible under the Clean Air Act, EPA must likewise comply with the substantive requirements of Section 111(b). *See* 42 U.S.C. § 7411(b)(1)(B) (requiring EPA to "revise such standards following the procedures required by this subsection for promulgation of such standards"). Thus, EPA must demonstrate that the revised standard "reflects the degree of emission limitation achievable through the application of the best system of emission reduction" ("BSER"). *Id.* § 7411(a).⁴⁷ EPA may not

⁴⁷ EPA seeks to revise standards of performance in the 2016 Standard promulgated under section 111(b), as well as "work practice" standards promulgated under section 111(h). "Work practice" standards must reflect "the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impact and energy requirements) the Administrator determines has

ignore Section 111(b)'s technology-forcing mandate to consider the emission limitations and percent reductions achieved in practice. *Id.* § 7411(b)(1)(B); *see also Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 391 (D.C. Cir. 1973) (recognizing that Section 111(b) "looks toward what may fairly be projected for the regulated future, rather than the state of the art at present").

Here, EPA has not complied with the substantive factors required by Section 111(b). In developing the 2016 Standard, EPA compiled a robust administrative record demonstrating that the 2016 Standard meets the BSER. EPA supported its determination with an appropriate balance of factors under Section 111(b), including "the amount of the pollutant that is being emitted from the source category, the availability of technically feasible control options, and the costs of those control options."⁴⁸ In contrast, the Proposed Reconsideration Rule does not comply with Section 111(b)'s requirements because the agency has failed to demonstrate that its revised standards of performance reflect the BSER. EPA does not point to any facts or data that support decreasing the monitoring frequency for well sites, compressor stations, and low-production wells, or any of its proposed amendments to the 2016 Standard. Indeed, EPA has "received no information that resulted in any change to EPA's BSER analysis for monitoring and reducing fugitive VOC and methane emissions at compressor stations."⁴⁹

Further, EPA does not, because it cannot, assert that the efficacy of the 2016 Standard is not "adequately demonstrated." The 2016 Standard, which has been in place for over two years, is based upon technologies widely used and required. The agency does not allege (and cites no data to suggest) that either the industry as a whole or significant numbers of individual affected sources have had difficulty complying with the 2016 Standard. Indeed, the agency points to no evidence suggesting that *any* sources have been unable to meet those standards. Nowhere in the Proposal does EPA argue or even imply that the current 2016 Standard's compliance costs are exorbitant or in any way unreasonable; to the contrary, EPA admits that these costs of control for semiannual monitoring at non-low production well sites—which is the level of frequency required at such sites under the 2016 Standard—"appear to be reasonable."⁵⁰

Although state and voluntary corporate programs are not a substitute for EPA's mandatory national standards, they further support that the requirements of the 2016 Standard are achievable, cost-effective, and adequately demonstrated. For example, California's regulation, approved by the California Air Resources Board in March 2017, requires quarterly monitoring and repairing of methane leaks from both onshore and offshore oil and natural gas wells, natural gas processing facilities, compressor stations, and other equipment used in the processing and

been adequately demonstrated." 42 U.S.C. § 7411(h). Thus, both section 111(h) and section 111(b) standards of performance are referred to as BSER standards. *See* 42 U.S.C. § 7411(h)(5).

⁴⁸ 81 Fed. Reg. at 35,842.

⁴⁹ EO 12866 Interagency Comments on EPA draft proposed rule titled, "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration," (RIN 2060-AT54).

⁵⁰ 83 Fed. Reg. at 52,065.

delivery of oil and natural gas.⁵¹ California's regulation requires oil and natural gas operators above a certain size to implement vapor recovery systems that will capture methane so that it can be reused. It seeks to curb methane emissions at oil and natural gas production facilities by up to forty-five percent over the next nine years.⁵² Colorado similarly adopted rules in February 2014 that govern new and existing wells and natural gas compressor stations. Colorado requires leak inspections monthly, quarterly, annually, or one time, depending on facility emissions.⁵³ These regulations are expected to reduce methane and ethane emissions from Colorado's oil and natural gas sector by approximately 64,000 tons per year. Colorado strengthened those regulations in June 2018 to increase the frequency of leak detection inspections for oil and natural gas wells in ozone nonattainment areas, and to require leak detection and repair for pneumatic controllers.⁵⁴ California and Colorado are not alone: Pennsylvania, Texas, Utah, and Wyoming have proposed or enacted leak detection and repair standards, all of which require more frequent inspections than does EPA's Proposed Reconsideration Rule. In addition, several large oil and natural gas corporations, including Shell, BP, and Exxon Mobil, have recently committed to reducing methane emissions from their oil and natural gas operations by targeting leaks, venting, and incomplete combustion of fuel, demonstrating that such measures are a cost-effective way to reduce harmful methane emissions and save valuable fuel.⁵⁵

Finally, while the Proposed Reconsideration Rule evaluates the costs and benefits of reducing inspection frequencies at well sites and compressor stations, as EPA admits "the net benefit analysis, alone, is not sufficient for determining BSEER as required."⁵⁶ And, even if cost-effectiveness could justify weakening the 2016 Standard, which the States and Cities do not concede, EPA seemingly ignores relevant compliance data that directly speaks to the cost-effectiveness of the 2016 Standard (see Sections II.B. and III.B.). Thus, EPA's Proposed Reconsideration Rule rests entirely, without support, on the existence of "uncertainties" and "concerns" regarding the 2016 Standard. EPA cannot point to any substantial flaws in the analysis underpinning the 2016 Standard. It simply defies logic for EPA to assert that the "best system of emission reduction" is actually removal of requirements that have been in place for nearly two years resulting in significant increase in methane, VOCs, and hazardous air pollutant

⁵¹ See Cal. Code Regs., tit. 17, §§ 95665, *et al.*

⁵² New York is also moving ahead to develop, propose and adopt, as necessary, regulations to limit emissions from existing oil and natural gas transmission facilities, such as compressor stations, not regulated by the federal New Source Rule. See New York Methane Reduction Plan (May 2017), available at http://www.dec.ny.gov/docs/administration_pdf/mrpfinal.pdf.

⁵³ *Id.*

⁵⁴ 5 Colo. Code Regs. 1001-0, Section XII.L (2018).

⁵⁵ See Climatewire article, "Shell latest firm to make 'smart' move to reduce methane," (Sept. 18, 2018).

⁵⁶ EO 12866 Interagency Comments on EPA draft proposed rule titled, "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration," (RIN 2060-AT54).

emissions. For these reasons, EPA's unsubstantiated claims do not meet the substantive requirements for revising a performance standard under Section 111(b).

B. EPA's Proposed Reconsideration Rule Violates Section 307(d) of the Clean Air Act

EPA's Proposal violates the Clean Air Act's procedural requirements because EPA has failed to provide the data substantiating its proposal. Under section 307(d) of the Clean Air Act, the notice of any proposed rulemaking "shall be accompanied by a statement of its basis and purpose" which "shall include a summary of (A) the factual data on which the proposed rule is based; (B) the methodology used in obtaining the data and in analyzing the data; and (C) the major legal interpretations and policy considerations underlying the proposed rule." 42 U.S.C. § 7607(d)(3) ("Section 307(d)"). Further, "[a]ll data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule." *See id.*

This information is crucial to our ability to meaningfully comment on the Proposed Reconsideration Rule. "In order to allow for useful criticism, it is especially important for the agency to identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules." *Connecticut Light & Power Co. v. Nuclear Regulatory Com.*, 673 F.2d 525, 530-531 (D.C. Cir. 1982). Courts have found that EPA's failure to make data relating to the basis for its Clean Air Act regulations publicly available made "meaningful comment on the merits of EPA's assertions impossible" and constituted reversible error. *Kennecott Corp. v. EPA*, 684 F.2d 1007 (D.C. Cir. 1982); *see also Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 392-95 (D.C. Cir. 1973) ("It is not consonant with the purpose of a rule-making proceeding to promulgate rules on the basis of inadequate data, or on data that, (in) critical degree, is known only to the agency.")

Here, it is impossible for the public to meaningfully comment on the Proposed Reconsideration Rule based on EPA's say-so, where EPA cites only its "concerns" and "uncertainties" and has not provided any data or information supporting the rule for the public to review and critique. Throughout the Proposed Reconsideration Rule, EPA repeatedly references "uncertainties" and "absences of information," and in numerous instances seeks not just public comment regarding its proposed amendments, but also data and information to support the very changes EPA has proposed.⁵⁷ In fact, EPA appears to be using the Proposed Reconsideration Rule improperly to *gather* data to support its preferred result, instead of following the Clean Air Act's prescribed procedure for rule revision, wherein EPA would first assemble data supporting any proposed action and make it available for public comment through a proposal. To the extent EPA gathers any supportive data in response to its flawed Proposed Reconsideration Rule, the public will not have any opportunity to comment on that data, undermining the entire purpose of notice and comment and violating the Clean Air Act's clear requirements. *See Small Refiner*, 705 F.2d at 549-50 ("EPA must *itself* provide notice of a regulatory proposal. Having failed to do so,

⁵⁷ 83 Fed. Reg. at 52,065-52,081.

it cannot bootstrap notice from a comment.”); *see Costle*, 657 F.2d at 398 (public must be able to meaningfully comment on factual underpinnings of rule). In fact, the Proposed Reconsideration Rule resembles an advance notice of proposed rulemaking (ANPRM) rather than the notice of proposed rulemaking it purports to be. Given that an ANPRM cannot generally be the only support for a final rule, it would be improper as a matter of law for EPA to ultimately rely upon information provided during the public comment period on the Proposed Reconsideration Rule to make additional changes to the 2016 Standard.

Moreover, and despite Section 307(d)’s unambiguous requirements, the Proposal is devoid of any of the data and information required by that section. For example, one aspect of the 2016 Standard intended to significantly curb methane leaks from new sources in the oil and natural gas industry is the leak detection and reporting (LDAR) requirements, which require routine monitoring for and reporting of leaks and impose timeframes for repair of any identified leaks.⁵⁸ As discussed below, since these requirements have been in place, thousands of compliance reports have been submitted to EPA by the oil and natural gas industry. Such reports provide actual data regarding the ability of industry to comply with, and the cost-effectiveness of compliance with, the 2016 Standard so as to bolster (or undermine) EPA’s stated rationale for its reconsideration.⁵⁹ Yet, EPA does not reference such reports at all in its discussion of the revised LDAR requirements or any of its proposed amendments. To the extent EPA relied on the compliance reports for the Proposed Reconsideration, EPA must make them available for public review and comment.⁶⁰ In those few instances where EPA does cite to data or information in support of the Proposed Reconsideration Rule, it does so without sufficient detail or appropriate citations, again meaning the public cannot reasonably review and meaningfully comment upon the Proposed Reconsideration Rule. For example, EPA states that it has considered “available data,” but never explains what that “available data” is or whether it includes compliance data submitted to EPA pursuant to the 2016 Standard.⁶¹ EPA cannot vaguely refer to available information, but must make clear precisely the data on which the Proposed Reconsideration Rule is based.

In order to conduct a reasoned analysis of the Proposed Reconsideration Proposal and whether amendments of the 2016 Standard are even warranted, EPA must provide to the public all relevant data regarding the 2016 Standard and a failure to make this information fully available for public comment renders it impossible for interested parties to provide meaningful

⁵⁸ *See* 81 Fed. Reg. at 35,846-47.

⁵⁹ *See id.*

⁶⁰ As stated below (*infra* Section III.B.), the States and Cities submitted a request under the Freedom of Information Act over one year ago seeking the compliance reports, but EPA has only produced a portion of this data. EPA should not proceed with the Proposed Reconsideration Rule while at the same time refusing to publicly release all the data it possesses concerning industry compliance with the 2016 Standard.

⁶¹ *See, e.g.*, 83 Fed. Reg. at 52,062 (“EPA has reviewed the data provided by the petitioner, *as well as other data that have become available* since promulgation of the 2016 NSPS OOOOa” (emphasis added)), 52,068 (citing “other available information”).

comments. *See Conn. Light & Power Co. v. Nuclear Regulatory Comm'n*, 673 F.2d 525, 530-31 (D.C. Cir. 1981) (“An agency commits serious procedural error when it fails to reveal portions of the technical basis for a proposed rule in time to allow for meaningful commentary.”) For these reasons, on November 19, 2018, many of the undersigned sent a letter to EPA requesting that EPA make public all compliance data submitted to EPA pursuant to the 2016 Standard, including all second annual compliance reports that were due by October 31, 2018. EPA failed to respond, so the States and Cities hereby respectfully reiterate their request that: (1) EPA make all requested information available immediately; and (2) EPA extend the comment period of the Proposed Reconsideration Rule for an additional 60 days after such disclosure to afford the States and Cities and the public a reasonable opportunity to review and comment.

C. The Proposed Reconsideration Rule Does Not Meet The Requirements of Section 111(h) of the Clean Air Act

Additionally, the Proposal fails to meet the requirements for alternative means of emissions limitations (“AMEL”) under section 111(h)(3) of the Clean Air Act. That section provides:

If after notice and opportunity for public hearing, any person establishes to the satisfaction of the Administrator that an alternative means of emission limitation will achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such air pollutant achieved under the requirements of paragraph (1), the Administrator shall permit the use of such alternative by the source for purposes of compliance with this section with respect to such pollutant.

42 U.S.C. § 7411(h)(3). In the 2016 Standard, EPA provides for AMEL and states that, “owners and operators may . . . submit an application requesting that EPA approve certain state requirement[s] as ‘alternative means of emission limitations’ under the [2016 Standard] for their affected facilities.”⁶² The AMEL application must demonstrate that the emission reductions achieved under the state program would be “at least equivalent to the emission reductions achieved under the [2016 Standard] for a given affected facility.”⁶³

In the Proposed Reconsideration Rule, EPA seeks to bypass this tailored process and instead incorporate various state programs into the AMEL process ab initio. Specifically, EPA proposes AMEL fugitive emission standards for California, Colorado, Ohio, and Pennsylvania for both well sites and compressor stations, and Texas and Utah for well sites only.⁶⁴ EPA has “not determined whether Pennsylvania’s Exemption No. 38 for well sites should be included in the alternative standards.”⁶⁵ The States and Cities incorporate by reference the comments of the California Air Resources Board submitted on this issue, and emphasize the following: (1) EPA

⁶² 81 Fed. Reg. at 35,837.

⁶³ *Id.*

⁶⁴ 83 Fed. Reg. at 52,081.

⁶⁵ *Id.*

must retain the 2016 Standard as the baseline for making AMEL determinations (*see supra* Section II.A. and *infra* Section III.A. and B.); and (2) EPA must make a quantitative determination that a specific AMEL application submitted by “any person” will achieve a reduction in emissions at least equivalent to reductions under the 2016 Standard.

III. EPA’S PROPOSED RECONSIDERATION RULE IS ARBITRARY AND CAPRICIOUS AND CONSTITUTES AN ABUSE OF EPA’S DISCRETION

EPA’s Proposed Reconsideration Rule is arbitrary and capricious and contrary to relevant law because EPA fails either to justify reversal of its position as set forth in the 2016 Standard, or to reconcile its decision to revise the 2016 Standard with the determination in its rulemaking record that the 2016 Standard is necessary to address harm to public health and welfare. Therefore, the Proposed Reconsideration Rule constitutes an abuse of EPA’s discretion.

A. EPA Fails to Justify its Change of Position or Reconcile the Proposed Reconsideration Rule with Its Own Rulemaking Record

As the Supreme Court has explained, “[o]ne of the basic procedural requirements of administrative rulemaking is that an agency must give adequate reasons for its decisions.” *Encino Motorcars LLC v. Navarro*, 136 S. Ct. 2117, 2125 (2016). The requirement is satisfied “when the agency’s explanation is clear enough that its ‘path may reasonably be discerned.’” *Id.* (citing *Bowman Transp., Inc. v. Arkansas-Best Freight System, Inc.*, 419 U.S. 281, 286 (1974)); *see also Motor Vehicle Mfrs. Ass’n of the United States v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (an agency must “examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.”). “But where the agency has failed to provide even that minimal level of analysis, its action is arbitrary and capricious and so cannot carry the force of law.” *Encino*, 136 S. Ct. at 2125.

EPA’s Proposed Reconsideration Rule represents a reversal of EPA’s “former views as to the proper course.” *See Public Citizen v. Steed*, 733 F.2d 93, 98 (D.C. Cir. 1984). Because the Proposed Reconsideration Rule represents a change in EPA’s position, EPA must: display “awareness that it is changing position;” show that “the new policy is permissible under the statute;” “believe[]” the new policy is better; and provide “good reasons” for the new policy. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009); *see also Lone Mountain Processing, Inc. v. Secretary of Labor*, 709 F.3d 1161, 1164 (D.C. Cir. 2013) (“[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored. Failing to supply such analysis renders the agency’s action arbitrary and capricious.”). And if the Proposed Reconsideration Rule rests upon factual findings that contradict a prior policy, then the agency must include “a reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy.” *Fox*, 556 U.S. at 515-16.

Here, EPA has not met any of these requirements. First, as discussed above, EPA has not demonstrated and cannot demonstrate that the Proposed Reconsideration Rule is permissible under section 111(b) of the Clean Air Act. *See supra* Section III.A. Additionally, EPA has not provided “good reasons” for the Proposed Reconsideration Rule. *Fox*, 556 U.S. at 515. Indeed, EPA has not offered any explanation for rejecting and ignoring its 2016 findings, let alone “good” ones. In support of the 2016 Standard, EPA developed an extensive factual record. In addition to the mandatory notice and comment procedure, EPA issued white papers for peer review and public input to facilitate a more complete understanding of data on emissions and controls for oil and natural gas facilities. Through this enhanced process, which included more than 900,000 public comments and three public hearings, EPA “improved [its] understanding of the methane and VOC emissions from these sources and the mitigation techniques available to control them,” including an abundance of available, adequately demonstrated, and cost-effective technology to limit methane and VOC emissions.⁶⁶ The Agency also found that the 2016 Standard would achieve cost-effective emission reductions, explaining what it considered to be a reasonable threshold for cost-effectiveness and why the various requirements were determined to be cost-effective.⁶⁷ The 2016 Standard also expressly recognized the importance of reducing methane emissions from the oil and natural gas sector to reduce the threat that climate change poses to public health and welfare.

Now, EPA seeks to reverse its position, asserting that it can no longer conclude that the requirements of the 2016 Standard are cost-effective while completely ignoring the Proposal’s impact on public health and welfare. The oil and natural gas sector remains the largest industrial source of methane in the United States. And scientific studies issued since 2016 – including reports by the federal government itself – only confirm the dangers of climate change. Yet, the Proposed Reconsideration Rule fails to evaluate the threat to public health and the environment posed by the increase in methane emissions, nor does it reconcile the increase in emissions with the underlying record that major reductions in GHG emissions are necessary for climate stabilization. EPA does not explain how weakening the 2016 Standard can be reconciled with the existing record. Instead, EPA bases its change on numerous unspecified “uncertainties” and “absences of information” and suggests without support that its prior position, as codified in the 2016 Standard, may have been wrong. In fact, as already discussed, EPA attempts to utilize the public comment period for the Proposed Reconsideration Rule to obtain data and information to after-the-fact support the very revisions to the 2016 Standard embodied in the Proposed Reconsideration Rule.

Indeed, EPA has not provided *any* reasoned basis for rejecting or revising the conclusions set forth in the rulemaking record for the 2016 Standard and has not explained on what basis it can now reject those findings. For example, one of the significant changes in the Proposed Reconsideration Rule relates to low-producing wells: in the 2016 Standard, such wells were required to be tested for leaks semi-annually, but the Proposed Reconsideration Rule modifies this requirement to biennially. Further, under the 2016 Standard, such leaks must be repaired

⁶⁶ 81 Fed. Reg. at 35,842, 35,827; *see also* 80 Fed. Reg. at 56,595.

⁶⁷ *Id.*

within 30 days. However, the Proposed Reconsideration Rule requires only a first attempt at repair within 30 days, followed by actual repair within 60 days. Together, these modified requirements mean that a leaking component at a “low-producing well” could emit methane undetected for up to two years and could even continue to leak for longer once identified. For this proposed change, EPA relies primarily on the “Fort Worth Study” containing “component level emissions information for well sites in the Dallas/Forth Worth area,” which EPA asserts it received after promulgation of the 2016 Standard.”⁶⁸ But, the Fort Worth Study is not new: contrary to EPA’s assertion, EPA relied on the Fort Worth Study in the 2016 Standard.⁶⁹ EPA fails to explain how the very same study can be relied upon to justify such a drastic change in position regarding low production wells. As in *Encino*, EPA has “offered barely any explanation” for its change in position. 136 S. Ct. at 2126.

An agency’s action is arbitrary and capricious if it “entirely failed to consider an important aspect of the problem [or] offered an explanation for its decision that runs counter to the evidence before the agency.” *North Carolina v. EPA*, 531 F.3d 896, 906 (D.C.Cir. 2008) (quoting *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43)). Because EPA fails to justify its change of position or to reconcile the Proposed Reconsideration Rule with its own rulemaking record, the Proposed Reconsideration Rule is arbitrary and capricious and contrary to the law.

B. The Proposed Reconsideration Rule is Arbitrary and Capricious Because it Ignores Evidence and Fails to Analyze Relevant Data

Not only does EPA fail to justify the Proposed Reconsideration Rule, but the Proposed Reconsideration Rule is arbitrary and capricious and an abuse of discretion because it fails to examine the relevant data and articulate a satisfactory explanation for its action including a “rational connection between the facts found and the choice made.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc.*, 463 U.S. at 43. As stated, the 2016 Standard has been in effect for over two years, requiring owners and operators to submit various compliance reports to EPA.⁷⁰ The second annual reports were due by October 31, 2018, a mere two weeks after EPA rushed to publish the Proposed Reconsideration Rule. Despite the import of this information, however, EPA has only made available a limited number of compliance requests publicly available.⁷¹ Although the

⁶⁸ 83 Fed. Reg. at 52,067.

⁶⁹ 81 Fed. Reg. at 35,860; *see also*, <https://www.regulations.gov/document?D=EPA-HQ-OAR-2010-0505-7589>.

⁷⁰ 81 Fed. Reg. 35,824 (June 3, 2016).

⁷¹ In November 2017, the States submitted a request to EPA under the Freedom of Information Act (“FOIA”), U.S.C. § 552, seeking all records related to the 2016 Standard, including, but not limited to, all compliance reports. EPA has released some reports to the States pursuant to that FOIA request, but has indicated it is withholding numerous documents from public disclosure due to their supposed inclusion of proprietary business information. *See* Letter from Martha Segall, Acting Director, Monitoring, Assistance and Media Programs Division, Office of Compliance, EPA, to Daniel Lucas, Deputy Attorney General, California Office of the Attorney

publicly-available compliance reports represent a small fraction of the natural gas wells subject to the 2016 Standard, an initial analysis of the reports demonstrates that they offer key data that is directly relevant to the Proposed Reconsideration Rule, including the number of components found leaking at each well site during an inspection, the types of components found most frequently with leaks, the time expended by a surveyor to conduct an inspection, and the percentage of leaking components repaired.

Thus, EPA has in its possession thousands of reports of industry compliance with the 2016 Standard, yet does not reference that direct information regarding feasibility and costs of compliance to resolve its alleged “uncertainties.” EPA even acknowledges that “there are several well sites that have incorporated fugitive monitoring programs prior to the 2016 [Rule] ... Data from these programs could provide the information necessary to refine our model plant analysis,” but EPA then seemingly failed to analyze this data to determine whether it helps resolve EPA’s “uncertainties” regarding the feasibility and cost-effectiveness of the 2016 Standard. In order to conduct a reasoned analysis of the Proposed Reconsideration Rule and whether amendments of the 2016 Standard are even warranted, EPA must consider and analyze all relevant data—including all compliance reports submitted to date—and EPA’s failure to do so renders the Proposed Reconsideration Rule arbitrary and capricious and contrary to law.

C. EPA’s Regulatory Impact Analysis Is Arbitrary and Capricious in Relying on the “Interim” Social Cost of Methane

The Proposed Reconsideration Rule is also arbitrary and capricious because it improperly calculates its costs and benefits on an inherently flawed Regulatory Impact Analysis. *See Center for Biological Diversity v. Bureau of Land Mgmt.*, 422 F. Supp. 2d 1115, 1149 (N.D. Cal. 2006) (finding it arbitrary and capricious for agency’s economic analysis “to rely on a critical assumption that lacks support in the record to justify” decision). Not only does EPA’s new social cost of methane calculation depart from agency practice, it also violates Executive Order 13,783 and the Office of Management and Budget’s (OMB) Circular A-4—both of which EPA concedes guide its analysis here—by failing to use the best available science and an appropriate discount rate.

To justify the Proposed Reconsideration Rule, EPA has recalculated the costs and benefits of the 2016 Standard using an “interim domestic Social Cost of Methane” metric that greatly undervalues the impacts of increased methane emissions by failing to consider the full, global impacts of these emissions.⁷² This new interim measure instead considers only “domestic”

General (Sept. 26, 2018), attached hereto. A limited number of reports submitted via EPA’s Compliance and Emissions Data Reporting Interface are also available through EPA’s public WebFIRE database. Moreover, the compliance reports collect “emission data” within the meaning of section 114 of the Clean Air Act, and so EPA is required by the statute to make this information public.

⁷² 2018 Regulatory Impact Analysis at A-1.

impacts and “EPA approximates U.S. damages as 10 percent of the global values”—effectively dismissing 90% of the costs of increased methane emissions.⁷³ The effect of this swap is to significantly reduce the estimated benefits of the 2016 Standard, rendering them lower than largely unchanged compliance costs, without reasoned justification or basis in the record. EPA claims that it relied on this “interim” measure because Executive Order 13,783 withdrew the Technical Support Documents upon which the Regulatory Impact Analysis for the 2016 Standard relied for the valuation of changes in methane emissions.⁷⁴ However, Executive Order 13,783 still requires agencies to “monetiz[e] the value of changes in greenhouse gas emissions” and ensure that such estimates are “consistent with the guidance contained in OMB Circular A-4.”⁷⁵ Additionally, OMB Circular A-4, in turn, requires that agencies use “the best reasonably obtainable scientific, technical, and economic information available. To achieve this, you should rely on peer-reviewed literature, where available.”⁷⁶

The Interagency Working Group (“IWG”)’s approach continues to represent the best available science in monetizing the impacts of changes in GHG emissions even though Executive Order 13,783 disbanded the Interagency Working Group and withdrew the technical support documents upon which the prior social cost of methane calculation was based. The social cost of GHGs was first developed by federal agencies under President George W. Bush, and the IWG was specifically organized to develop a single, harmonized value for federal agencies to use in their regulatory impact analyses under Executive Order 12,866. This approach was developed over several years, through robust scientific and peer-reviewed analyses and public processes.

By contrast, EPA’s “interim” measure lacks substantial analysis, much less peer review, and arbitrarily ignores nearly 90% of the costs imposed by methane emissions. As EPA itself admits, “[t]he SC-CH₄ estimates presented here are interim values developed under E.O. 13783 for use in regulatory analyses until an improved estimate of the impacts of climate change to the U.S. can be developed based on the best available science and economics.”⁷⁷ EPA’s substitution of the IWG’s social cost of methane with an unvetted and outcome-driven “interim” measure is arbitrary and capricious. Moreover, even EPA’s underlying estimate of “U.S. damages” as 10% of the global values is flawed.⁷⁸ The 2017 paper by William D. Nordhaus on which EPA relies for that estimate demonstrates that such estimates vary based on the model used, and the author himself states that “regional damage estimates are both incomplete and poorly understood,” and “[a] key message here is that there is little agreement on the distribution of the SCC by region.”⁷⁹

⁷³ *Id.*

⁷⁴ *Id.*, at 3-8.

⁷⁵ 82 Fed. Reg. at 16,096.

⁷⁶ OMB Circular A-4 at 17.

⁷⁷ 2018 Regulatory Impact Analysis at 3-7.

⁷⁸ 2018 RIA at A-1.

⁷⁹ Nordhaus, William D., “Revisiting the social cost of carbon,” Proceedings of the National Academy of Sciences of the United States, 114(7) (2017), at 1518-1523, *available at*

Furthermore, neither Executive Order 13,783, OMB Circular A-4, nor Executive Order 12,866 allows EPA to completely ignore international impacts in its 2018 Regulatory Impact Analysis. To the contrary, OMB Circular A-4 specifically recognizes that a regulation may “have effects beyond the borders of the United States,” and states that an agency’s economic analysis should encompass “all the important benefits and costs likely to result from the rule,” including “any important ancillary benefits.”⁸⁰ Further, OMB Circular A-4 provides guidance for the implementation of Executive Order 12866, which directs agencies to assess “all costs and benefits” of regulatory actions.⁸¹

Nor does the best available science support the use of a “domestic-only” value of the social cost of GHG emissions.⁸² By calculating the social cost of methane on a domestic rather than a global basis, EPA fails to account for the global effects of GHGs that impact the U.S. and its citizens.⁸³ The effects of GHGs do not stop at the U.S. border; emissions in India and China, for example, can cause damage to U.S. companies and citizens (and vice versa). EPA’s use of a domestic number to justify greater U.S. emissions creates a dangerous precedent that other countries may also follow to relax their own emissions. Such increased global emissions will, in turn, harm the U.S. and its citizens.⁸⁴ EPA’s domestic social cost of methane also omits important spillover effects on U.S. corporations. The negative effects of global climate change—such as increased armed conflicts and extreme weather events—impact U.S. corporations both directly (through assets they own) and indirectly (through disruptions of supply chains).⁸⁵ Using a domestic social cost of methane also fails to consider the welfare of nine million U.S. citizens living abroad and 450,000 men and women serving in the U.S. armed forces abroad who are affected by extreme weather events outside U.S. borders. Moreover, despite sound science demonstrating that climate change will lead to an increase in the frequency of conflict domestically and globally, EPA fails to account for the likelihood that the number of American troops who will be deployed abroad will increase.⁸⁶ The “domestic only” approach is further belied by the Assessment, which contains an entire chapter on “Climate Effects on U.S. International Interests.”⁸⁷ Consequently, it was arbitrary and capricious for EPA to completely

<http://www.pnas.org/content/114/7/1518.full.pdf>.

⁸⁰ Office of Management and Budget, Circular A-4 (Sept. 17, 2003), *available at* https://www.whitehouse.gov/omb/circulars_a004_a-4.

⁸¹ Executive Order 12866, 58 Fed. Reg. 51,735 (Oct. 4, 1993).

⁸² *See* Expert Report by Maximilian Auffhammer et al., The Use of the Social Cost of Carbon in the Federal Proposal “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks,” (Oct. 19, 2018) (EPA-HQ-OAR-2018-0283-5842), attached hereto.

⁸³ *See id.*

⁸⁴ *Id.*, at 7-8.

⁸⁵ *Id.*, at 9-10.

⁸⁶ *Id.*, at 10-11.

⁸⁷ Assessment at ch. 16.

ignore the global costs of increased methane emissions that will result from the Proposed Reconsideration Rule.

Furthermore, the use of a seven percent discount rate used in the 2018 Regulatory Impact Analysis is contrary to the best available science and thus arbitrary and capricious. Established economic analyses have discounted future damages from GHGs at rates from two and a half percent to five percent, a range that captures uncertainty in future impacts and intergenerational equity.⁸⁸ Because of the long-term, irreversible consequences of climate change, the effects of emissions today will be felt for many years into the future. In fact, as OMB explained in 2015, “the use of 7 percent is not considered appropriate for intergenerational discounting. There is wide support for this view in the academic literature, and it is recognized in Circular A-4 itself.”⁸⁹ The Proposed Reconsideration Rule fails to provide a reasonable justification for adding consideration of a seven percent discount rate.

Finally, the 2018 Regulatory Impact Analysis fails to provide any weight to the unquantified, foregone benefits, such as the public health consequences of many additional tons of VOC emissions. As OMB Circuit A-4 provides, “when there are important non-monetary values at stake, you should also identify them in your analysis so policymakers can compare them with the monetary benefits and costs. When your analysis is complete, you should present a summary of the benefit and cost estimates for each alternative, including the qualitative and non-monetized factors affected by the rule, so that readers can evaluate them.”⁹⁰ EPA has failed to consider such impacts in its Proposed Reconsideration Rule.

⁸⁸ Drupp, M.A., Freeman, M., Groom, B. and Nesje, F., “Discounting disentangled,” *American Economic Journal: Economic Policy*, American Economic Association, vol. 10(4) at 109-134 (November 2018).

⁸⁹ Interagency Working Group on the Social Cost of Carbon, *Response to Comments: Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12,866* at 36 (July 2015).

⁹⁰ OMB Circular A-4 at 3.

Acting Administrator Wheeler
December 17, 2018
Page 22

IV. CONCLUSION

For these reasons, the States and Cities strongly oppose EPA's Proposed Reconsideration Rule and respectfully request that EPA not finalize the Proposal.

Sincerely,

FOR THE STATE OF CALIFORNIA

XAVIER BECERRA
Attorney General
DAVID A. ZONANA
Supervising Deputy Attorney General
CATHERINE WIEMAN
Deputy Attorney General

/s/ Kavita P. Lesser

KAVITA P. LESSER
Deputy Attorney General
Office of the Attorney General
300 South Spring Street, Suite 1702
Los Angeles, California 90013
Tel: (213) 269-6605
Email: Kavita.Lesser@doj.ca.gov

FOR THE STATE OF CONNECTICUT

GEORGE JEPSEN
Attorney General

/s/ Jill Lacedonia

JILL LACEDONIA
Assistant Attorney General
Office of the Attorney General
P.O. Box 120, 55 Elm Street
Hartford, Connecticut 06141
Tel: (860) 808-5250
Email: Jill.Lacedonia@ct.gov

FOR THE STATE OF ILLINOIS

LISA MADIGAN
Attorney General

/s/ Jason James

JASON JAMES
Assistant Attorney General
69 W. Washington Street, 18th Floor
Chicago, IL 60602 (312) 814-0660
Email: jjames@atg.state.il.us

FOR THE STATE OF IOWA

THOMAS J. MILLER
Attorney General

/s/ Jacob Larson

JACOB LARSON
Assistant Attorney General
Office of Iowa Attorney General
Hoover State Office Building
1305 E. Walnut Street, 2nd Floor
Des Moines, Iowa 50319
Tel: (515) 281-5341
Email: jacob.larson@ag.iowa.gov

Acting Administrator Wheeler
December 17, 2018
Page 23

FOR THE STATE OF MAINE

JANET T. MILLS
Attorney General

/s/ Gerald D. Reid

GERALD D. REID
Assistant Attorney General
Chief, Natural Resources Division
6 State House Station
Augusta, Maine 04333
Tel: (207) 626-8800
Email: jerry.reid@maine.gov

FOR THE STATE OF MARYLAND

BRIAN E. FROSH
Attorney General

/s/ Joshua M. Segal

JOSHUA M. SEGAL
Assistant Attorney General
Office of the Attorney General
200 Saint Paul Place
Baltimore, MD 21202
Tel: (410) 576-6446
Email: jsegal@oag.state.md.us

FOR THE STATE OF NEW JERSEY

GURBIR S. GREWAL
Attorney General

/s/ Aaron A. Love

AARON A. LOVE
Deputy Attorney General
New Jersey Division of Law
R.J. Hughes Justice Complex
25 Market Street, P.O. Box 093
Trenton, NJ 08625
(609) 376-2762

FOR THE STATE OF NEW YORK

BARBARA D. UNDERWOOD
Attorney General

/s/ Michael J. Myers

MICHAEL J. MYERS
Senior Counsel
MORGAN A. COSTELLO
Chief, Affirmative Litigation
Environmental Protection Bureau
New York State Attorney General
The Capitol
Albany, NY 12224
Tel: (518) 776-2382
Email: michael.myers@ag.ny.gov

FOR THE STATE OF OREGON

ELLEN F. ROSENBLUM
Attorney General

/s/ Paul Garrahan

PAUL GARRAHAN
Attorney-in-Charge, Natural Resources
Section
Oregon Department of Justice
1162 Court St. NE
Salem, OR 97301
Tel: (503) 947-4593
Email: paul.garrahan@doj.state.or.us

Acting Administrator Wheeler
December 17, 2018
Page 24

FOR THE STATE OF RHODE ISLAND

PETER F. KILMARTIN
Attorney General

/s/ Gregory S. Schultz
GREGORY S. SCHULTZ
Special Assistant Attorney General
Rhode Island Dept. of the Attorney General
150 South Main Street
Providence, Rhode Island 02903
Tel: (401) 274-4400
Email: gschultz@riag.ri.gov

FOR THE STATE OF VERMONT

THOMAS J. DONOVAN, JR.
Attorney General

/s/ Nicholas F. Persampieri
NICHOLAS F. PERSAMPIERI
Assistant Attorney General
Office of the Attorney General
109 State Street
Montpelier, Vermont 05609
Tel: (802) 828-3186
Email: nick.persampieri@vermont.gov

FOR THE STATE OF WASHINGTON

ROBERT W. FERGUSON
Attorney General

/s/ Katharine G. Shirey
KATHARINE G. SHIREY
Assistant Attorney General
Office of the Attorney General
P.O. Box 40117
Olympia, Washington 98504
Tel: (360) 586-6769
Email: kays1@atg.wa.gov

FOR THE COMMONWEALTH OF MASSACHUSETTS

MAURA HEALEY
Attorney General

/s/ Melissa Hoffer
MELISSA HOFFER
Chief, Energy and Environment Bureau
TURNER SMITH
Assistant Attorney General
Office of the Attorney General
One Ashburton Place, 18th Floor
Boston, MA 02108
(617) 727-2200

FOR THE CITY OF CHICAGO

EDWARD N. SISSEL
Corporation Counsel
Benna Ruth Solomon
Deputy Corporation Counsel

/s/ Jared Policicchio
Jared Policicchio
Supervising Assistant Corporation Counsel
30 N. LaSalle Street, Suite 800
Chicago, IL 60602
(312) 744-7764