



**Comments in Regard to Proposed Amendments to the
New Source Performance Standards for the Oil and Natural Gas Sector:
Emission Standards for New, Reconstructed, and Modified Sources Review**

Docket: EPA-HQ-OAR-2017-0757-0002

Posted to: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0757-0002>

Date: November 25, 2019

Dear Administrator Wheeler,

On behalf of the health and medical organizations listed below, and on behalf of our tens of thousands of members and the millions of patients whose health we protect, we strongly oppose the U.S. Environmental Protection Agency's (EPA's) proposed amendments to the 2012 and 2016 New Source Performance Standards for the Oil and Natural Gas Industry.

The existing New Source Performance Standards (NSPS) provide limits on emissions of methane and volatile organic compounds (VOCs) from new and modified oil and gas sources. These limits provide significant protection from emissions of methane – an especially potent greenhouse gas – and from VOCs, which include carcinogens, neurotoxins and hazardous air pollutants (HAPs). EPA's proposed amendments to those standards would allow higher levels of methane and VOC pollution, increasing the risks to human health, well-being and life.

Proposed amendments in brief

As described by EPA in the Proposed Rule,

These amendments, if finalized, would remove sources in the transmission and storage segment from the source category, rescind the NSPS (including both the volatile organic compounds (VOC) and methane requirements) applicable to those sources, and rescind the methane-specific requirements (the “methane requirements”) of the NSPS applicable to sources in the production and processing segments. The U.S. Environmental Protection Agency (EPA) is also proposing, as an alternative, to rescind the methane requirements of the NSPS applicable to all oil and natural gas sources...¹

To rationalize this proposal, EPA artificially divides the oil and gas industry sources into two categories and argues that, separately, they now do not emit enough pollution to warrant regulating. EPA claims that the oil and gas industry production and processing segment is so different from the transportation and storage segment that their emissions should not be lumped together. That is a flawed, contrived distinction. Without pipelines and storage tanks to move, store and distribute the fuels, the industry could not successfully afford to extract or refine the oil and gas in the first place. Without extraction and refining capability, the industry would have no product to pump through the pipelines and store for sale. Expansions in extraction and refining require expansions in transmissions and storage. The two sides are locked together in the fuel supply system they build and in the emissions they produce.

In sum, EPA proposes to eliminate existing methane standards for new oil and gas equipment and to remove the only standards for new equipment in the transmission and storage segments of the oil and gas industry put in place in the past two decades. EPA itself admits that this proposal would increase methane emissions by a total of 370,000 short tons over the period 2019 through 2025.² According to this same analysis, VOC emissions would increase by 10,000 tons between 2019-2025, and air toxins would increase by 300 tons over the same period.³

The proposal would not only increase methane emissions from new sources by hundreds of thousands of tons, but would strip away EPA’s authority to regulate methane from existing oil and gas equipment, which is responsible for the vast majority of emissions from this sector.

Climate change

Climate change poses immediate and growing threats to human health. Warming temperatures will lead to more ozone pollution, wildfire smoke, extreme heat, severe storms and flooding, longer allergy seasons, spread of infectious disease, and more.⁴ The nation has seen numerous examples of these risks in the past few years, from deadly wildfires in the West⁵ and record flooding along the Mississippi River⁶ to repeated heat waves that led to growing numbers of premature deaths in the Southwest.⁷

These impacts do not just threaten some future generation; they are creating new challenges to the nation today. The Fourth National Climate Assessment stated the reality: “The health and

well-being of Americans are already affected by climate change, with the adverse health consequences projected to worsen with additional climate change.”⁸

The 2019 fires in California provide just the most recent examples of that expanding risk to human health. Reducing the risk of fires prompted the shut-down of the electric power grid⁹ that not only inconvenienced residents and businesses, but required backup equipment for hospitals and special steps to protect the health of 33,000 people who depend on electric-powered health devices, such as respirators.¹⁰ The 2018 fires destroyed a local hospital and limited the availability of medical staff who lived nearby and lost their homes as well.¹¹

Leading national medical, health and nursing organizations have called climate change a health emergency.¹² Reducing emissions of methane from the oil and gas industry is critical to protecting health from both current and future impacts of climate change.

Methane

Methane is a greenhouse gas that over its first 20 years in the atmosphere has 86 times the warming power of carbon dioxide,¹³ making it a major driver of climate change. Those 20 years roughly correspond to the timeframe indicated in the Intergovernmental Panel on Climate Change’s 2018 Special Report, which projects that greenhouse gas emissions need to fall by about 45 percent from 2010 levels by 2030 and reach net zero around 2050 in order to avoid catastrophic impacts associated with climate change.¹⁴

Oil and gas companies release millions of tons of methane into the air every year. A study published in the journal *Science* in 2018 found that the U.S. oil and gas industry emits 13 million metric tons of methane from its operations each year—nearly 60 percent more than the EPA inventory estimate.¹⁵ Without strong methane pollution standards, those levels could rise, which would accelerate climate change. Maintaining the existing NSPS standards will help mitigate climate change and, thus, provide an element of protection from climate change-associated health risks. To proceed with a rollback of those protections would increase risks to health, safety and life—an action we consider unnecessary and reckless.

VOCs

The existing NSPS standards for new oil and gas industry sources also reduce emissions of VOCs, which leak out of wells, pipelines and other industry facilities along with methane. VOCs include gases recognized as hazardous air pollutants such as benzene, toluene, carbonyl sulfide, ethylbenzene, mixed xylenes, and n-hexane.¹⁶ Both benzene and formaldehyde, another hazardous pollutant from oil and gas emissions, are recognized as known human carcinogens, while ethylbenzene is considered a probable carcinogen.¹⁷ All efforts should be taken to shield people from exposure to these substances, including maintaining in place the existing controls on leaks and other emissions.

VOCs also react with other gases in the presence of sunlight to form ground-level ozone, a widespread and dangerous air pollutant that damages the lungs, aggravates chronic lung diseases such as chronic obstructive pulmonary disease (COPD), aggravates pre-existing heart diseases,

causes asthma attacks, increases hospital admissions, and may cause premature deaths.¹⁸ The American Lung Association reports that, in 2015-2017, more than four in 10 Americans, approximately 41.1 percent of the population, lived in counties that have monitored unhealthy levels of ozone pollution.¹⁹ EPA reports that more than 122 million Americans live in areas that fail to meet the 2015 ozone air quality standards.²⁰ The proposed rollback of regulations on VOCs could worsen that already grave situation.

The increased VOC emissions from new oil and gas extraction would extend the areas burdened by ozone into more rural areas. For example, Uintah County and Duchesne County, Utah, are two rural locations with oil and gas extraction, and both are in nonattainment for the 2015 ozone standard.²¹ As oil and gas systems spread out, the health impacts of their emissions spreads as well.

In order to protect communities living near new and modified oil and gas sites, the EPA must keep the EPA standards strong and in effect.

Additional health impacts

A growing body of peer-reviewed science indicates that oil and gas development is associated with adverse health impacts, including premature birth, congenital heart defects, neural tube defects, and low birth weight for infants born to mothers living near natural gas development.²² People most at risk of harm from breathing air pollutants from the oil and natural gas industry include infants, children and teenagers; older adults; pregnant women; people with asthma and other lung diseases; people with cardiovascular disease; diabetics; people with low incomes; and healthy adults who work or exercise outdoors. Many live and work in communities near oil and gas facilities, which are often located near lower-income or minority communities.

Children face special health risks from air pollution because they are more likely to be active outdoors and their lungs are still developing. According to EPA, asthma affects about one out of 10 school-aged children in the United States and is a leading cause of school absenteeism, causing more than 10.5 million missed school days every year.²³ On “bad-air days” or “air alert days,” particularly during the warmer months, children with asthma can be required to stay indoors to avoid aggravating their condition.

Feasibility of emission controls

The existing NSPS standards that EPA proposes to remove use commonsense and cost-effective solutions to reduce methane and other emissions. EPA’s own analysis from 2016 showed that these standards achieve significant reductions of methane and other harmful air pollution at far lower cost than the benefits they provide.²⁴

Furthermore, the experience of energy-producing states such as Colorado and Wyoming demonstrates that these commonsense, effective, and feasible emission controls don’t harm industry: regulations requiring similar measures as those required by EPA’s current standards have been in place in both states for some time, and the industry is thriving.

EPA must continue to require operators to use proven, cost-effective technologies and practices to prevent harmful air pollution from oil and gas sites from damaging the health of our families and future generations.

Existing Source Standards

Limiting methane from new oil and gas industry sources is a necessary step, but not a sufficient one. Addressing methane emissions from existing industry sources is also critical to protect human health from the consequences of climate change. Our organizations have long called on EPA to promulgate limits for existing sources, including in our comments on the 2016 NSPS standards before their finalization.

Under the Clean Air Act, the regulation of methane from the oil and gas sector triggers a mandatory duty for EPA to regulate existing sources within that sector.²⁵ This proposal to roll back the methane NSPS therefore effectively prevents EPA from setting long-overdue limits on existing sources as well.

Alternative Proposal

In the alternative proposal, EPA would remove all methane requirements that apply to the production and processing segments of the industry, leaving the VOC requirements from the existing rules in place. EPA's current argument is that methane is a VOC, after all, so any controls in place to reduce VOCs will also reduce methane. To the contrary, however, removing the methane requirements will significantly increase the amount of methane released.

As mentioned above, under the Clean Air Act, the regulation of methane from the oil and gas sector triggers a mandatory duty for EPA to regulate existing sources within that sector.²⁶ By removing the methane requirements, and thus removing future existing source requirements, EPA would subject the public to increased amounts of dangerous air pollution, including VOCs and methane.

Moreover, the impact of methane on climate and, ultimately, on public health, is much greater than methane's health effects solely addressed as a VOC. The current limits on VOCs-only would fail to appropriately protect the public against the expanded impact that methane has as a potent greenhouse gas by allowing increased pollution from existing sources that are not subject to this provision. Our groups oppose that alternative approach.

In setting the 2016 standards, EPA explored and rejected this approach. In the 2015 proposal, EPA explained that setting standards for VOCs only would fail to respond to the tremendous impact of the methane emissions on climate change. EPA explained that VOC-only standards would exempt much equipment from having to be regulated, since the VOC standards do not address the impact the substantial emissions of methane from the oil and gas industry on climate change.²⁷ EPA followed the requirements of the Clean Air Act under Section 111(b) to set separate standards for methane that would supplement the existing 2012 standards and the even stronger VOC standards they would adopt in 2016.

Our groups recommend EPA reject this alternative approach as they did in 2016.

Comments on criteria to use to determine pollutants that endanger health

As part of the proposal, EPA also requested comments on whether the Agency must determine that an additional pollutant coming from an already-listed source category significantly contributes to endangering public health before it can promulgate regulations.

Our groups note that Section 111(b)(1)(A) of the Clean Air Act does not spell out specific pollutants to regulate or to prescribe when or how to regulate them. The clear language focuses solely on the determining a “category of sources” that “causes or contributes significantly to air pollution which may reasonably be anticipated to endanger public health or welfare.” Any interpretation that strays from that clear language would violate the law.

Because the statute is silent as to the criteria for regulating an additional pollutant, the Agency need only provide a reasonable basis, as it did in 2016 when it determined that “the EPA has a rational basis for concluding that GHGs from the oil and natural gas source category, which is a large category of sources of GHG emissions, merit regulation under CAA section 111.”²⁸ Overwhelming evidence demonstrates that there is a reasonable basis to regulate methane. As our groups have explained in the comments above, methane endangers public health because of its significant contributions to climate change and the significant quantities of methane that the oil and gas industry emits. Given that methane is such a potent greenhouse gas, with impacts that last over one hundred years, it would be unreasonable not to regulate methane from the oil and gas industry.

Summation

On behalf of our patients and the communities we serve, we strongly urge EPA not to finalize this proposal into law, and instead to fully implement and enforce the existing standards. EPA’s proposal, which would roll back methane pollution standards for new oil and gas industry sources and prevent the agency from setting future standards to clean up methane pollution from existing industry sources, represents the wrong path for EPA, whose mission is to protect human and environmental health. EPA should reject these unwise amendments and instead maintain and strengthen the current New Source Performance Standards for the oil and gas industry. This will allow the Agency to live up to its mission by protecting the climate and safeguarding the communities living near oil and gas development from harmful pollution.

Sincerely,

Physicians for Social Responsibility
American Lung Association
Alliance of Nurses for Healthy Environments
American Public Health Association
Association of Schools and Programs of Public Health
California Climate Health Now

Center for Climate Change and Health
Children's Environmental Health Network
Colorado Physicians for Social Responsibility
Common Spirit
George Mason University Center for Climate Change
Communication
Greater Boston Physicians for Social Responsibility
Health Care Without Harm
Montana Health Professionals for a Healthy Climate
Montana Public Health Organization
Oregon Physicians for Social Responsibility
Physicians for Social Responsibility Arizona
Physicians for Social Responsibility San Francisco Bay Area
Pioneer Valley Physicians for Social Responsibility
Prevention Institute
PSR New York
Physicians for Social Responsibility Wisconsin
Regional Asthma Management and Prevention
St. John's Well Child & Family Center
Texas Physicians for Social Responsibility
Trinity Health
Washington Physicians for Social Responsibility

¹ At <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0757-0002>

² U.S. Environmental Protection Agency (EPA). 2019. Regulatory Impact Analysis for the Proposed Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review. EPA-452/R-19-001. https://www.epa.gov/sites/production/files/2019-08/documents/oil_and_natural_gas_review_proposal_ria.pdf

³ U.S. Environmental Protection Agency (EPA). 2019. Regulatory Impact Analysis for the Proposed Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review. EPA-452/R-19-001. https://www.epa.gov/sites/production/files/2019-08/documents/oil_and_natural_gas_review_proposal_ria.pdf

⁴ U.S. Global Change Research Program (USGCRP). 2018. Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. USGCRP, Washington, DC. Doi:10.7930/NCA4.2018; Salas RN, Knappenberger P, Hess JJ. 2018 [Lancet Countdown on Health and Climate Change Brief for the United States of America](#). Lancet Countdown U.S. Brief, London, United Kingdom. 2018.

⁵ Ruiz S. [California Made Headlines, but 5 Other U.S. States Also Broke Wildfire Records in 2018](#). World Resources Institute. March 7, 2019.

⁶ Erdman J. The Record-Long Mississippi River Flood of 2019 is Finally Ending, But One Big Concern Remains. Weather.com. July 29, 2019. Access at <https://weather.com/safety/floods/news/2019-07-29-record-long-mississippi-river-flood-ends>.

⁷ Flavelle C and Popovich N. [Heat Deaths Jump in Southwest United States, Puzzling Officials](#). *New York Times*, August 26, 2019.

⁸ USGCRP, Fourth National Climate Assessment. Page101.

⁹ Epstein K, Freedman A, Siddiqui F, and Knowles H. [‘Potentially historic’ wind event could worsen California Wildfires as another mass outage begins](#). Washington Post. October 26, 2019.

¹⁰ Bannon T. [California hospitals rely on generators during PG&E power outages](#). Modern Healthcare. October 11, 2019.

¹¹ Rogers A. [Hospitals Aren't Ready for a Mass Casualty Wildfire](#). Wired. June 19, 2019..

¹² U.S. Call to Action on Climate, Health, and Equity: A Policy Action Agenda, 2019. <http://climatehealthaction.org>

-
- ¹³ Myhre, G., D. Shindell, F.-M. Bréon, W. Collins, J. Fuglestedt, J. Huang, D. Koch, J.-F. Lamarque, D. Lee, B. Mendoza, T. Nakajima, A. Robock, G. Stephens, T. Takemura and H. Zhang. 2013. Anthropogenic and Natural Radiative Forcing. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA
- ¹⁴ Intergovernmental Panel on Climate Change (IPCC), 2018. Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. World Meteorological Organization, Geneva, Switzerland. <https://www.ipcc.ch/sr15/chapter/spm/>
- ¹⁵ Alvarez R A et al. July 2018. Assessment of methane emissions from the U.S. oil and gas supply chain. *Science* 13 Jul 2018: DOI: 10.1126/science.aar7204.
- ¹⁶ U.S. Environmental Protection Agency (EPA). 2015. Regulatory Impact Analysis of the Proposed Emissions Standards for New and Modified Sources in the Oil and Natural Gas Sector. EPA452/R-15-002. https://www3.epa.gov/ttn/ecas/docs/ria/oilgas_ria_proposed-nsps_2015-08.pdf
- ¹⁷ U.S. Department of Health and Human Services (HHS). National Toxicology Program. 2011. Report on Carcinogens, Twelfth Edition. Research Triangle Park, NC: U.S. Department of Health and Human Services.
- ¹⁸ U.S. Environmental Protection Agency (EPA). 2013. Integrated Science Assessment for Ozone and Related Photochemical Oxidants. EPA 600/R-10/076F. <http://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=247492#Download>.
- ¹⁹ American Lung Association. 2019. State of the Air 2019. <https://www.lung.org/assets/documents/healthy-air/state-of-the-air/sota-2019-full.pdf>
- ²⁰ U.S. EPA. Green Book: 8-hour Ozone (2015) Area Information. <https://www.epa.gov/green-book/green-book-8-hour-ozone-2015-area-information>
- ²¹ U.S. EPA. Green Book.
- ²² Cf: Casey J.A., D.A. Savitz, S.G. Rasmussen, E.L. Ogburn, J. Pollak, D.G. Mercer, et al. 2015. Unconventional Natural Gas Development and Birth Outcomes in Pennsylvania, USA: *Epidemiology* 1; doi:10.1097/EDE.0000000000000387.
McKenzie L.M., R. Guo, R.Z. Witter, D.A. Savitz, L.S. Newman, J.L. Adgate. 2014. Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado. *Environmental Health Perspectives* 122; doi:10.1289/ehp.1306722.
Stacy S.L., L.L. Brink, J.C. Larkin, Y. Sadovsky, B.D. Goldstein, B.R. Pitt, et al. 2015. Perinatal Outcomes and Unconventional Natural Gas Operations in Southwest Pennsylvania. *PLoS ONE* 10:e0126425; doi:10.1371/journal.pone.0126425
- ²³ U.S. Environmental Protection Agency (EPA). *Asthma - Improving Health in Communities and Schools*. <https://www.epa.gov/asthma/asthma-improving-health-communities-and-schools>
- ²⁴ U.S.EPA. Regulatory Impact Analysis of the Final Oil and Natural Gas Sector: Emissions Standards for New, Reconstructed, and Modified Sources. EPA-452/R-16-002. May 2016.
- ²⁵ 42 U.S.C. 7411(d).
- ²⁶ 42 U.S.C. 7411(d).
- ²⁷ 80 Fed. Reg. at 56,599-56
- ²⁸ 81 Fed. Reg. at 35,842.