

Testimony for the Proposed Rule titled “Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration” on behalf of the American Lung Association

Diana Van Vleet, Director of Media Advocacy, Healthy Air Campaign

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Good morning. My name is Diana Van Vleet, and I am Director of Media Advocacy for the American Lung Association’s Healthy Air Campaign. The American Lung Association is the nation’s oldest voluntary health organization. Our mission is to save lives by improving lung health and preventing lung disease.

The American Lung Association represents millions of Americans with life-changing lung diseases, including the more than 6 million children with asthma and more than 12 million adults with chronic obstructive pulmonary disease. Safeguarding Americans from the health threats posed by air pollution and climate change are key priorities for the Lung Association, as they should be for this Administration.

I am here today to urge you to reject the proposed rule titled “Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration.” The American Lung Association strongly opposes this rule, which would weaken and substantially undermine sensible, health-protective safeguards.

This rule would undermine protections against methane, one of the most potent greenhouse gases which trap heat and cause climate change. A recent report from the Intergovernmental Panel on Climate Change made it clear that a world warmer than 1.5 degrees Celsius above pre-industrial temperatures is not a livable option. The report also found that we have limited time to prevent this scenario. Put bluntly, this proposed rule ignores science and reality.

We can already see the fingerprints of climate change happening right now. We need only look at how our changing climate is currently intensifying drought, heatwaves, wildfires, storms, and the spread of disease to realize the magnitude of this problem. Needless to say, the fact that the Administration could be actively pursuing a step **BACKWARDS** in the fight against climate change at this moment is reckless and inexcusable.

Rolling back sensible safeguards that require oil and gas operations to detect and repair leaks would not only result in more methane pollution, it would also result in additional hazardous pollutants emitted alongside methane, including toxic volatile organic compounds (VOCs).

These VOCs include gases recognized as hazardous air pollutants. Six organic hazardous air pollutants from oil and gas extraction dominate the list of emissions and can seriously harm human health: benzene, toluene, carbonyl sulfide, ethylbenzene, mixed xylenes, and n-hexane. (EPA, 2015). Benzene and formaldehyde, another hazardous pollutant from oil and gas emissions, are recognized as known human carcinogens, while ethylbenzene is considered a probable carcinogen (HHS, 2011).

But the harm from the rollback doesn't stop there. VOCs are also precursors to the formation of ozone when they react with nitrogen oxides in the presence of sunlight. Some VOCs are also precursors to the formation of fine particulate matter (PM_{2.5}), which causes respiratory and cardiovascular harm, lung cancer and premature death. By weakening safeguards from leaks, the proposed rollbacks would allow additional emissions of VOCs, increasing the amount of ozone formed in the air and, consequently, the incidence of ozone-related health effects, including asthma attacks, hospital admission and premature deaths (EPA, 2013).

VOCs from oil and gas extraction have led to levels of ozone pollution in rural lands that rival those monitored in dense urban areas and harm residents' health. For example, in Sublette County, Wyoming, studies showed that unhealthy levels of ozone above the national air quality standard sent county residents to seek treatment for asthma (Pride, et al. 2015; Abmadov R. et al., 2015; Emery BR, et al., 2015). Similar high ozone readings continue in Uintah County, Colorado.

What's more, emissions from oil and gas development disproportionately harm the most vulnerable populations. People most at risk of harm from breathing these 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 these oil and gas facilities, which are often located near lower income or minority communities.

Here is just one snapshot of some of these health impacts on our most vulnerable populations: 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 (Casey et al., 2015; McKenzie et al., 2014; Stacey et al., 2015).

Simply put, moving this rule forward is not acceptable. Without question, this proposed rule would result in harm to the health of Americans. The American Lung Association strongly opposes this unsound and illogical weakening of these pollution protections. Please reject this proposed rule in order to safeguard public health.

Thank you.

Citations

- Abmadvov R. et al. Understanding high wintertime ozone pollution events in an oil- and natural gas-producing region of the western US. *Atmospheric Chemistry and Physics*. 2015. 15: 411-429.
- 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.
- Emery BR, et al. Barrier Wind Formation in the Upper Green River Basin of Sublette County, Wyoming, and its Relationship to Elevated Ozone Distributions in Winter. *J of Applied Meteorology and Climatology*. 2015. 54: 2428-2442.
- 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.
- Pride KR, et al. Association of short-term exposure to ground-level ozone and respiratory outpatient clinic visits in a rural location - Sublette County, Wyoming, 2008-2011. *Environ Res*. 2015; 137: 1-7
- 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

- 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.
- U.S. Environmental Protection Agency (EPA). 2013. Integrated Science Assessment for Ozone and Related Photochemical Oxidants. EPA 600/R-10/076F.
Available: <http://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=247492#Download>.
- 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. EPA-452/R-15-002.
Available: http://www3.epa.gov/airquality/oilandgas/pdfs/og_prop_ria_081815.pdf.