EENEVANGELICAL ENVIRONMENTAL NETWORK

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September 9, 2022

Office of Information and Regulatory Affairs (OIRA) Office of Management and Budget Executive Office of The President The White House 1600 Pennsylvania Ave NW Washington, DC 20500

Ref: RIN: <u>2060-AV16</u>

CFR Citation: <u>40 CFR 60</u> <u>40 CFR 60 subpart OOOOa</u>

Title: Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review

Dear OIRA,

Below is a short real life true story of a leaking low producing gas well in Western Pennsylvania. My colleague and friend, Melissa Ostroff from EARTHWORKS captured this OGI <u>video</u> on July 16, 2022. Ms. Ostroff is a Certified Optical Gas Imaging Thermographer, and here are the facts in Melissa's own words.

"My name is Melissa Ostroff, and I am a certified optical gas imaging thermographer and public health professional with Earthworks. On Saturday, July 16th, I joined community members for a walk-through Boyce Park in Allegheny County, Pennsylvania. While in the park, we noted a strong odor of hydrocarbons and eventually found the source: a marginal well owned by Diversified Production LLC. This FLIR optical gas imaging video of the well site shows continuous methane and volatile organic compound emissions gushing out of the well and into the open air, indicating a serious equipment problem and a hazard to public health and climate.

The trails surrounding this well were populated by runners, cyclists, and families with children taking a walk in the otherwise pristine wooded environment. The emissions shown in the video had been occurring for an

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unknown amount of time, but DEP production data shows a precipitous drop in production in 2021 that may or may not be related to when this leak began. We do not know when the site was last inspected before our visit or how long these emissions were pouring into the air where families recreate."

Melissa and her team reported their findings to both the Pennsylvania DEP and to Diversified Production's Hotline. Diversified Production LLC responded by addressing the leak and performing site management including grass mowing, painting, etc.

This instance highlights the necessity and importance of requiring regular LDAR inspections on low producing wells. Under the current system, this well would likely still be spewing methane, volatile organic compound, and other hazardous pollutants if it were not for the volunteer community efforts of Melissa and her team.

While this is just one example, we believe with a high degree of certainty that it is not an isolated case. We strongly urge EPA to require semi-annual inspections and OIRA to support the required inspections for all wells, particularly low-producing wells which research shows are a <u>major sources of leaked methane and</u> <u>VOC's</u>.ⁱ

As Evangelical Christians, we are people of the book, The Bible. Throughout Scripture, we are called to join God in pursuing justice. In the book of Amos, the prophet cries out: *But let justice roll on like a river, and righteousness like a never-failing stream!* (Amos 5:24 NIV). Additionally, as Jesus states in Matthew 25:40 (NIV), *"Truly I tell you, whatever you did for one of the least of these brothers and sisters of mine, you did for me.* Our children are especially among those Jesus calls us to care for most. The old Sunday School song says it best:

Jesus loves the little children, All the children of the world; Red, brown, yellow, black, and white, They are precious in His sight, Jesus loves the little children of the world.

All of us would agree that our children are precious and must be defended from the threats imposed by known cancer causing toxins like benzene, VOCs that increase ozone levels, and methane. Methane is over 80 times more potent greenhouse gas than CO_2 in the first twenty years and a major contributor to global warming and climate-fueled extreme weather. Rising temperatures not only pose the threat of heat illness and death during heat waves, but also directly contribute to worsening ozone levels. The medical and scientific literature is clear –

living within 0.5 miles of a methane extraction or production site harms our children,ⁱⁱ and newer research suggests that even those living further afield within a 5-mile radius may also be at risk. Currently 3.1 million American children attend school within 0.5 radius of oil/gas facilities. Within my home state of Pennsylvania at least 310,896 kids face this hazard.ⁱⁱⁱ This makes addressing fugitive and leaking methane from both existing and leaking oil/gas facilities a moral responsibility.

As pro-life evangelicals, we have a special concern for the unborn. We want children to be born healthy and unhindered by the ravages of pollution even before they take their first breath. The medical community has long known that unborn children are especially vulnerable to environmental impacts. Of these impacts, it is clear that fossil fuels are the most serious threat to children's health worldwide.^{iv} The once-thought chemical protection a mother gives her developing child is untrue. Studies have shown that smog, VOCs, and air toxics have a disproportionate impact upon life in the womb. Research by Dr. Shaina L. Stacy and others at the University of Pittsburgh found close proximity to unconventional gas wells in Butler County, PA is associated with babies born with lower birthweight.^v Dr. Lisa M. McKenzie with the Colorado School of Public Health published peer reviewed research that links birth defects to methane production.^{vi} Research by Casey J.A., et al (2019) further describes that living within a half-mile radius of natural gas development leads to increased brain, spine, or spinal cord birth defects.^{vii}

We are thankful that EPA's proposed rule will defend children's health. We are especially thankful that the new proposed standards are based on actual methane emissions instead of the amount of oil and gas production. Recent studies clearly prove that smaller leak-prone wells have disproportionately high emission rates of methane and associated gases.^{viii ix}Under the new emission-based rule, these methane super-emitters will no longer slip through the cracks.

EPA's first proposal listed that the new standard would save \$6.6 - \$9.2 billion in avoided health costs and loss of life. The original proposal is a major step forward and includes important safeguards, like phasing out intentionally polluting equipment by requiring zero emitting pneumatic controllers. Still, it does not go far enough to address pollution from unlit flares or require frequent enough inspections of covered sources that further benefits public health.

EPA must work quickly to issue a supplemental rule that will enact a ban on routine flaring and end potential loopholes that allow smaller wells with leak-prone equipment to forgo regular inspections.

Specifically, EPA's supplemental proposal must require regular monitoring at smaller wells with leak-prone equipment so that these sources of pollution can be addressed in the final rule.

Hundreds of thousands of wells across the country generate just a trickle of usable product but are large and disproportionate emitters of methane. A new study published in the journal <u>Nature Communications</u> reveals that low-producing oil and gas wells are responsible for approximately half of the methane emitted from all well sites in the United States while accounting for only 6% of the nation's oil and gas production. EPA has recognized in the proposal that a "low production" exemption is not appropriate. However, under EPA's current proposal, operators that calculate lower potential emissions (less than 3 tons per year of methane) could still escape regular leak monitoring and does include or equipment failures.

EPA's supplemental proposal must also prohibit the practice of routine flaring at oil and gas sites. When companies rush to extract oil, many forgo investments necessary to capture and sell gas and instead burn it as a waste product, emitting a host of climate and health-harming pollutants. Flares have been found to malfunction or fail entirely, spewing methane directly into the atmosphere. EPA must follow the lead of states like Colorado and New Mexico and move to eliminate routine flaring except in emergency situations. EPA's supplemental rule must end the use of intentionally polluting equipment, including requiring zeroemitting pneumatic controllers and pumps. Zero-emitting equipment is widely available, and there's no excuse for companies to continue to intentionally pollute.

In the US, oil and gas production is the largest industrial source of methane pollution. Each year, the oil and gas industry releases 16 million metric tons of methane. Without immediate action, methane pollution from the industry will continue to skyrocket. We are not alone in our remarks. Over 133,000 pro-life Christians submitted comments to the EPA regarding the original proposed rule requested the same needed rule improvements summarized above. They recognize the health and life threats to our children – both born and unborn – and want strong protective action.

We urge OIRA to recommend that EPA promulgate the strongest possible standard under law to defend our children and their future and do so in the most expeditious fashion so that the rule is published by the end of summer.

Sincerely, The Rev. Mitchell C. Hescox

President/C.E.O.

ⁱⁱ Hays J, Shonkoff SBC (2016) Toward an Understanding of the Environmental and Public Health Impacts of Unconventional Natural Gas Development: A Categorical Assessment of the Peer- Reviewed Scientific Literature, 2009-2015. PLoS ONE 11(4): e0154164. doi:10.1371/journal. pone.0154164

https://oilandgasthreatmap.com/

^v Stacy SL, Brink LL, Larkin JC, Sadovsky Y, Goldstein BD, Pitt BR, et al. (2015) Perinatal Outcomes and Unconventional Natural Gas Operations in Southwest Pennsylvania. PLoS ONE 10(6): e0126425. doi: 10.1371/journal.pone.0126425, downloaded September 28, 2015, http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0126425

^{vi} Lisa M. McKenzie, Ruixin Guo, Roxana Z. Witter, David A. Savitz, Lee S. Newman, and John

https://www.sciencedirect.com/science/article/pii/S0160412018317999?via=ihub

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<sup>viii</sup> Zavala-Araiza, et al., (2015) "Toward a Functional Definition of Methane Super-Emitters: Application to Natural Gas Production
Sites," Environ. Sci. Technol. 2015, 49, 13, at 8167–8174 ("Zavala-Araiza (2015)")
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^{ix}Omara, M., Zavala-Araiza, D., Lyon, D.R. *et al.* Methane emissions from US low production oil and natural gas well sites. *Nat Commun* **13**, 2085 (2022). https://doi.org/10.1038/s41467-022-29709-3

ⁱ Omara, M., Zavala-Araiza, D., Lyon, D.R. *et al.* Methane emissions from US low production oil and natural gas well sites. *Nat Commun* **13**, 2085 (2022). https://doi.org/10.1038/s41467-022-29709-3

^{iv} Perera F. Pollution from Fossil-Fuel Combustion is the Leading Environmental Threat to Global Pediatric Health and Equity: Solutions Exist. *Int J Environ Res Public Health*. 2017;15(1):16. Published 2017 Dec 23. doi:10.3390/ijerph15010016

L. Adgate, Birth Outcomes and Maternal Residential Proximity to Natural Gas

Development in Rural Colorado, Environmental Health Perspectives doi:10.1289/ehp.1306722. downloaded September 28, 2015, http://ehp.niehs.nih.gov/1306722/#tab3

^{vii} Casey J.A., et al., "The association between natural gas well activity and specific congenital anomalies in Oklahoma, 1997-2009," Environment International, Volume 122, January 2019, 381-388,