

August 16, 2023

Deputy Administrator Tristan Brown Pipeline and Hazardous Materials Safety Administration U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590

Re: Pipeline Safety: Gas Leak Detection and Repair Proposed Rule, Docket No. PHMSA-2021-0039

Dear Deputy Administrator Brown:

The undersigned health organizations write in support of PHMSA's proposed rule to reduce leaks of methane from pipelines nationwide. We urge you to strengthen the rule further and to quickly finalize it. Doing so is crucial for addressing climate change and improving public health.

Our organizations appreciate PHMSA's work to incorporate protecting the environment alongside protecting public safety into this proposed rule. For our organizations, protecting the environment is integrally connected with human health and safety. Simply put, climate change is a health emergency. As people nationwide know all too well, climate change is leading to more frequent and intense extreme weather events like flooding, excessive heat, drought and wildfires with enormous public health and safety implications. It also creates longer and more intense allergy seasons, increased risks from water-borne and vector-borne diseases like Lyme Disease, worsens air quality and damages mental health¹. The methane that this rule addresses is a highly potent greenhouse gas with a heat-trapping capacity that is more than 80 times that of carbon dioxide over its first 20 years in the atmosphere. If we want to avoid catastrophic tipping points in the climate system, we must reduce emissions of methane and of other greenhouse gases dramatically and immediately.

Climate change is a health emergency, but it is also a health opportunity. Reducing climate pollution will result in immediate and long-term health benefits, particularly as it applies to addressing leaks from gathering lines. Besides accelerating climate change, oil and gas production generates pollution that has direct effects on the health of those working in or living near oil and gas operations or the gathering lines that carry unprocessed gas, outlined below. We therefore appreciate PHMSA's proposal to expand leak survey and repair requirements to more gathering lines, but urge you to go further and expand these standards to all gathering pipelines.

The public health need for these standards is clear. Air pollutants emitted alongside methane include volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons, carbon monoxide, toxic heavy metals and soot and include several known human carcinogens, notably benzene and formaldehyde. Ethylbenzene, another hazardous pollutant from oil and gas emissions, is a probable carcinogen.

In addition to these dangers, VOCs also interact with other emissions in the presence of sunlight to form ground-level ozone pollution. Ozone, or smog, can worsen asthma, increase hospital visits and lead to premature death. According to the American Lung Association's "State of the Air" 2023 report, around 103 million people live in counties with failing grades for ozone.ⁱⁱ This includes 23.6 million children, 15.4 million people aged 65 or older, and millions of others at higher risk of harm from ozone's health impacts.

Additional health impacts are associated with oil and gas production, and are also therefore of particular concern for people who live near gathering lines. One is greater risk of preterm birth. A 2020 study of pregnant women living in the Eagle Ford Shale area of Texas found that exposure to oil and gas emissions was associated with a 50 percent increase in the risk of preterm birth. ⁱⁱⁱ Preterm birth is a leading contributor in the United States to infant death. Children are also particularly vulnerable to health impairment from both VOCs and ozone due to their faster breathing rate, proportion of time spent outside and developing lungs. A Yale School of Public Health study found that children living near unconventional oil and gas developments at birth were two to three times more likely to be diagnosed with leukemia between the ages of 2 and 7 than those who did not live near an oil and gas facility.^{iv}

Further, the communities near oil and gas operations are often low-wealth, rural and/or communities of color and are already bearing the brunt of exposure to air pollution from fossil fuels.^{v,vi} A 2019 analysis of socio-demographic characteristics of people living close to drilling and fracking operations in the states of Colorado, Oklahoma, Pennsylvania, and Texas found strong evidence that people of color, especially African Americans, disproportionately live near fracking wells.^{vii} Our organizations are concerned about similar environmental injustices in the location of gathering lines. For

all of these reasons, we urge PHMSA to expand coverage of the rule's leak survey and repair requirements to all U.S. onshore gas gathering pipelines.

Our organizations appreciate the additional measures PHMSA is proposing to improve leak detection and repair, reduce venting and other releases of methane, and improve the public's access to information about methane leaks. We urge you to reduce exemptions in the final rule that could allow leaks to continue for years while pipes are awaiting replacement and to improve reporting requirements so that all gathering pipelines are required to report to the National Pipeline Mapping System.

We further urge PHMSA to require improved transparency when hydrogen is mixed into natural gas pipeline systems. Our organizations are concerned about the potential of hydrogen blending to pose additional threats to public safety beyond those of the household use of methane gas alone. Ensuring the public knows when such blending occurs is a critical step toward addressing these issues.

The health community has long advocated for rules to clean up methane emissions. In comments to the U.S. Environmental Protection Agency (EPA) on their supplemental methane proposal for the oil and gas industry earlier this year, 86 national, state and local health, medical and nursing organizations urged EPA to strengthen and then quickly finalize the standards.^{viii} Hundreds of health professionals have signed comments to EPA on methane rules as well.^{ix}

We appreciate PHMSA's work to better address leaks that drive climate change and cause immediate health harm. We urge PHMSA to strengthen these proposed requirements, particularly as they apply to covering the nation's full network of gathering pipelines, and then finalize them.

Signed,

Allergy & Asthma Network Alliance of Nurses for Healthy Environments American Lung Association American Public Health Association American Thoracic Society Asthma and Allergy Foundation of America Children's Environmental Health Network Climate Psychiatry Alliance Medical Society Consortium on Climate and Health National Association of Nurse Practitioners in Women's Health National Association of Pediatric Nurse Practitioners National Hispanic Medical Association Physicians for Social Responsibility ^{iv} Cassandra J. Clark, Nicholaus P. Johnson, Mario Soriano Jr, Joshua L. Warren, Keli M. Sorrentino, Nina S. Kadan-Lottick, James E. Saiers, Xiaomei Ma, and Nicole C. Deziel 2022. "Unconventional Oil and Gas Development Exposure and Risk of Childhood Acute Lymphoblastic Leukemia: A Case–Control Study in Pennsylvania, 2009–2017" *Environmental Health Perspectives* doi.org/10.1289/EHP11092

^v Tessum, C. W., Apte, J. S., Goodkind, A. L., Muller, N. Z., Mullins, K. A., Paolella, D. A., . . . Hill, J. D. (2019). Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure. PNAS, 116(13), 6001-6006. doi: 10.1073/pnas.1818859116

^{vi} Johnston, J., & Cushing, L. (2020). Chemical exposures, health, and environmental justice in communities living on the fenceline of industry. Current Environmental Health Reports, 7, 48-57. doi: 10.1007/s40572-020-00263-8

^{vii} Zwickl, K. (2019). The demographics of fracking: A spatial analysis for four U.S. states. Ecological Economics, 161, 202-215. doi: 10.1016/j.ecolecon.2019.02.001

viii <u>https://www.lung.org/getmedia/902467f0-7239-4401-b4f0-a87bfe3ff3b5/Health-Orgs-Comments-on-</u> Supplemental-Oil-and-Gas-Proposal.pdf;

https://www.lung.org/getmedia/f439f9ca-f064-4306-86ee-b25720d7f23e/State-and-Local-Health-Orgs-Comment-on-Supplemental-Oil-and-Gas.pdf

^{ix} <u>https://www.lung.org/getmedia/560c0c1e-d8ad-4e08-a49e-2676e7acab82/Health-Professionals-Letter-Methane-Supplemental-2-13-23.pdf; <u>https://www.lung.org/getmedia/676d1adb-2818-454b-acc6-8ba725cb02e1/Health-Professionals-Comment-to-EPA-on-Methane-Proposal-1-31-22</u></u>

ⁱ Lawrance, E. L., Thompson, R., Newberry Le Vay, J., Page, L., & Jennings, N. (2022). The impact of climate change on mental health and emotional wellbeing: a narrative review of current evidence, and its implications. International Review of Psychiatry, 34(5), 443-498.

ⁱⁱ https://www.lung.org/research/sota/key-findings/ozone-pollution

^{III} Cushing, L. J., Vavra-Musser, K., Chau, K., Franklin, M., & Johnston, J. E. (2020). Flaring from unconventional oil and gas development and birth outcomes in the Eagle Ford Shale in South Texas. Environmental Health Perspectives, 128(7). doi: 10.1289/EHP6394