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### **Remarks for Public Comment**

EPA Virtual Listening Session: Regulations for the Oil and Natural Gas Industry, Climate Change, Air Pollution and Public Health

June 17, 2021

Session: 5:00 pm – 5:30 pm

Ref. Docket ID No. EPA-HQ-OAR-2021-0295

Thank you for holding this listening session. I appreciate the opportunity to comment on the EPA's consideration of regulations for the oil and natural gas industry to combat climate change, address air pollution and protect public health.

The Breathe Project is a Southwestern Pennsylvania organization that avails itself of top-level health, epidemiological, and air quality science and public health information. We are a collaboration of over 48 organizations working to improve air quality, eliminate climate pollution and make our region a healthy and prosperous place to live. We are public health professionals, academics, environmental advocates, and citizens. We use the best available science and technology to better understand the quality of the air we breathe and provide opportunities for citizens to engage and take action.

Based on our experiences in Southwestern Pennsylvania involving the expansion of the oil, gas, and petrochemical industries over the past decade, the Breathe Project recommends that the EPA take action to address major gaps in regulatory and enforcement issues related to this industry. In a nutshell this industry has run rampant across Pennsylvania and the Ohio Valley region for at least a decade. The health, environmental, and governance impacts have been significant.

One year ago Pennsylvania's Attorney General, Josh Shapiro, released a grand jury report<sup>1</sup> documenting indictments of companies and systemic failures of state environmental and public health agencies to protect the health of residents of the Commonwealth of Pennsylvania from fracking companies and the oil and gas industry. This report foregrounds the "initial failure" of more than a dozen years ago of the state Department of Environmental Protection to respond to and regulate the shale gas industry. The results have been devastating with extensive, documented evidence of damage to people, families, livestock, water, air, and land.<sup>2</sup>

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<sup>1</sup> "Report 1 of the Forty-Third Statewide Investigating Grand Jury," Online: <https://www.attorneygeneral.gov/wp-content/uploads/2020/06/FINAL-fracking-report-w-responses-with-page-number-V2.pdf>, viewed June 17, 2021.

<sup>2</sup> Don Hopy and Laura Legere, "State AG Shapiro: Grand jury report reveals Pa.'s systemic failure to regulate shale gas industry," Pittsburgh Post-Gazette, June 25, 2020. Online: <https://www.post-gazette.com/news/environment/2020/06/25/Grand-jury-report-Pennsylvania-systemic-failure-regulation-fracking-shale-gas-industry-oil-Josh-Shapiro/stories/202006250132>, viewed June 17, 2021.

I would add that the failures go back even further—to U.S. Congress’s 2005 fateful decision to prohibit the Environmental Protection Agency from safeguarding air, drinking water, and land and reducing human health risks from toxic substances by granting exemptions to key U.S. statutes:

- Clean Air Act Section 112(n)(4) – 42 US Code Section 7412(n)(4)

As result of this exemption, oil and gas wells and related facilities do not have to report aggregate totals of hazardous air pollutants, increasing the risks to the public because the total impact from oil and gas infrastructure is not documented and no limits are established.

- Clean Water Act Section 402(1)(2) – 33 US Code Section 1342(1)(2)

As result of this exemption, oil and gas production sites do not have to show measures they will use to protect surface water, such as streams and wetlands, as part of planning and permitting requirements. This exemption increases the risks of pollution to surface water and drinking water for millions of people.

- Resource Conservation and Recovery Act – 42 US Code Section 6921(b)(2)

As result of this exemption, Congress and the EPA has designated oil and gas waste as non-hazardous, exempting industry from mandatory safeguards for disposal of hazardous and non-hazardous waste. This exemption was granted despite an EPA report documenting numerous radiological and hazardous substances in drill cuttings and flowback water from fracking waste.<sup>3</sup>

These three exemptions, often designated as the “Haliburton Loophole,” have been the root of many of the issues experienced across the country, especially in Pennsylvania, over the past decade and a half.

And our Commonwealth has paid the price in terms of a massive expansion of oil and gas infrastructure, including unconventional wells, impoundments, disposal pits, injection wells, pipelines, compressor stations, cryogenic fractionator plants, and massive plastic manufacturing plants, such as ethane crackers. This expansion was resulted in spills, significant emissions of hazardous air pollutants, stream contamination, water supply destruction, killing of livestock, increases in rare cancers, pipeline explosions, wetlands destruction, extra deaths, increases in disease, and risks to climate.<sup>4</sup>

Our region suffers from some of the worst air pollution in the United States. According to an analysis of our region’s pollution sources from the National Emissions Inventory, particle pollution from stationary industrial point sources is the largest contributor to our region’s pollution, accounting for

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<sup>3</sup> Neela Banerjee/Inside Climate News, “Special report: How the U.S. government hid fracking’s risks to drinking water,” State Impact Pennsylvania, Nov. 22, 2017. Online: <https://stateimpact.npr.org/pennsylvania/2017/11/22/special-report-how-the-u-s-government-hid-frackings-risks-to-drinking-water/>, viewed June 17, 2021.

<sup>4</sup> Mayfield, E.N., Cohon, J.L., Muller, N.Z. et al. Cumulative environmental and employment impacts of the shale gas boom. *Nat Sustain* 2, 1122–1131 (2019). <https://doi.org/10.1038/s41893-019-0420-1>

approximately two-thirds of our region’s pollution.<sup>5</sup> Air quality ranks “not good” two thirds of all days in our region from the EPA Air Quality Index ratings for at least the past 5 years.<sup>6</sup>

An analysis of data from one of our region’s monitors in Allegheny County, Liberty (which has a 2017 – 2019 annual design value of 12.4 ug/m3), indicates measurements that rank worse than 97 percent of data from all 774 monitors throughout the U.S. and exceeds the current standard. Data from two other nearby monitors (Braddock, Parkway) exceed the world health standards and rank worse than 93 percent of all monitors in the U.S. Across Allegheny County, data from seven out of eight PM monitors have been in the worst 30 percent of all monitors nationally with the one “best” monitor ranking at the 40<sup>th</sup> percentile nationally.<sup>7</sup> On average, the Pittsburgh region’s air ranks at the bottom 11.5<sup>th</sup> percentile when compared with monitored regions across the U.S.<sup>8</sup>

Allegheny County also ranks in the top 2 percent of counties in the U.S. for cancer risk from point source air pollution. Our air poses a significant threat to public health with an increased risk of heart and lung disease, asthma, diabetes, cancer and premature death.<sup>9</sup>

The American Lung Association’s (ALA) annual “State of the Air” (SOTA) report for 2021 again put the Pittsburgh region on notice. Allegheny County once again received straight Fs for daily particulate matter levels, long-term particulate matter levels, and ozone. The region still ranks in the top 10 worst regions in the country (9<sup>th</sup> overall).<sup>10</sup>

A recent study of 1,200 children in schools in proximity to point source pollution sources in Allegheny County, 70% were exposed to PM 2.5 fine particle pollution at an annual mean level greater than 10 ug/m3, which is the World Health Organization’s recommended upper limit of annual average exposure. This compares with 3.1% rate of exposure nationally at this same level. This rate of exposure is alarmingly high. Additionally, children exposed to pollution levels above this 10ug/m3 threshold increased their odds of having asthma by 58% as compared with children exposed to pollution below this WHO recommended limit. Of this same sample, 38.9% of the participating children were exposed to PM 2.5 fine particle pollution at an annual mean level greater than 12 ug/m3, which is the U.S. EPA’s compliance limit (averaged over three years) prescribed in the Clean Air Act and enforced locally by the Allegheny County Health Department (ACHD). Many of the children lived in environmental justice communities with a high percentage of low income and African American families. The overall prevalence of asthma in the study was highest among African Americans (26.8%) and those 10-12 years of age (26.7%) on public health insurance.<sup>11</sup>

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<sup>5</sup> Breathe Project, “Air Pollution Sources,” Available Online, <https://breatheproject.org/resources/air-pollution-sources/>, accessed December 9, 2020.

<sup>6</sup> US EPA Air Data, Available online, <https://www.epa.gov/air-data>, accessed July 14, 2020.

<sup>7</sup> Analysis completed by Clean Air Task Force, 2020.

<sup>8</sup> Breathe Project, “Breathe Meter,” Available Online, <https://breatheproject.org/breathe-meter/>, accessed December 9, 2020.

<sup>9</sup> Breathe Project, “Air Pollution Sources,” Available Online, <https://breatheproject.org/resources/air-pollution-sources/> and [https://breatheproject.org/app/uploads/2018/03/18-02-26\\_health\\_facts.pdf](https://breatheproject.org/app/uploads/2018/03/18-02-26_health_facts.pdf), accessed December 9, 2020.

<sup>10</sup> ALA SOTA 2020, Available online: <http://www.stateoftheair.org/city-rankings/states/pennsylvania/allegheny.html>, accessed June 8, 2021.

<sup>11</sup> Deborah A. Gentile, Tricia Morphew, Jennifer Elliott, Albert A. Presto & David P. Skoner (2020), “Asthma prevalence and control among schoolchildren residing near outdoor air pollution sites,” Journal of Asthma, DOI: [10.1080/02770903.2020.1840584](https://doi.org/10.1080/02770903.2020.1840584).

Moreover, a review of science literature affirms PM 2.5 exposure levels and chronic health effects with no apparent lower bound<sup>12</sup> and acute health effects with no apparent lower bound.<sup>13</sup> This means that it is critical to reduce pollution exposures to reduce negative health effects.

Our region's 2.6 million people are at risk until pollution levels can be reduced. This includes vulnerable populations who bear disproportionate risks from current levels of air pollution: 48,000 children with pediatric asthma; 214,000 people with adult asthma; 160,000 people with COPD; 220,000 people with cardiovascular disease; 291,000 people living with low incomes; and 363,000 people who are non-white.<sup>14</sup> The environmental justice concerns are clear and should not be ignored.

Our region clearly needs the EPA to look at the failures of regulatory policies and enforcement actions over the past 15 years using the mounds of accumulated evidence<sup>15</sup> of problems with this industry. Specifically, the EPA should:

- Close the Haliburton loophole so that oil and gas impacts are brought in alignment with the Clean Air, Clean Water, and RCRA Acts
- Require the assessment of infrastructure in terms of total impacts from the full plans of the buildout of oil and gas projects and associated, proximal, supporting infrastructure.
- Address the toxicity issues associated with fracking waste.
- Clarify pipeline project regulatory authorities to ensure greater scrutiny of risks from pipeline development.

Let's save lives, reduce burdens on vulnerable people, preserve future generations' rights to clean air, clean water, productive land, and a healthy climate, and take action that makes everyone proud.

Thank you for your time and consideration.

Sincerely,

Matthew M. Mehalik, Ph.D.  
Executive Director  
Breathe Project

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<sup>12</sup> Cohen, Brauer, et al, "Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: an analysis of data from the Global Burden of Diseases Study 2015," *Lancet* 2017; 389: 1907–18.

<sup>13</sup> Schwartz et al, "The Concentration Response Relation between PM 2.5 and Daily Deaths," *Environ Health Perspect.* 2002 Oct; 110(10): 1025–1029.

<sup>14</sup> ALA SOTA 2020, Available online: <http://www.stateoftheair.org/city-rankings/states/pennsylvania/alleggheny.html>, accessed June 8, 2021.

<sup>15</sup> "Compendium Of Scientific, Medical, And Media Findings Demonstrating Risks And Harms Of Fracking (Unconventional Gas And Oil Extraction)," Seventh Edition, December 2020. Online: <https://www.psr.org/blog/resource/fracking-compendium/>, viewed June 17, 2021.