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Remarks for Public Comment

Virtual Public Hearing Environmental Quality Board P.O. Box 8477 Harrisburg, PA 17105-8477

Submitted via email to: RegComments@pa.gov

Ref. Testimony for CO2 Budget Trading Program Regulation

Dear Members of the Pennsylvania Environmental Quality Board:

Thank you for holding this hearing. I appreciate the opportunity to comment on the proposed rule, *CO2 Budget Trading Program*, involving the Commonwealth's participation in the Regional Greenhouse Gas Initiative (RGGI), as published in 50 Pa.B. 6212, Saturday, November 7, 2020.

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 42 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.

The Breathe Project supports the Commonwealth's participation in RGGI because of the program's health, climate, and economic benefits.

The RGGI program will reduce climate and air pollution. It will improve the health of Southwestern Pennsylvania's 2.6 million residents. It will reduce Nitrogen oxides (NOx), sulfur dioxide (SO2), and particulates (PM 2.5), resulting in fewer cases of respiratory diseases and deaths, as has been documented with past experiences with the program.^{1,2}

¹ Frederica Perera, David Cooley, Alique Berberian, David Mills, and Patrick Kinney (2020). "Co-Benefits to Children's Health of the U.S. Regional Greenhouse Gas Initiative," Environmental Health Perspectives, 29 July 2020. DOI: https://doi.org/10.1289/EHP6706.

² Abt Associate, "The Regional Greenhouse Gas Initiative Analysis", Available Online: https://www.abtassociates.com/rggi, accessed December 9, 2020.

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, including power plants, facilities that will operate under the RGGI program, is the largest contributor to our region's pollution, accounting for approximately two-thirds of our region's pollution.³ 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.⁴

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 40th percentile nationally.⁵ On average, the Pittsburgh region's air ranks at the bottom 11.5th percentile when compared with monitored regions across the U.S.⁶

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.⁷

The American Lung Association's (ALA) annual "State of the Air" (SOTA) report for 2020 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 (8th overall) and retains the dubious distinction for being the only metropolitan region east of the Mississippi River to be ranked in the top 25 most polluted cities.⁸

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 the 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

³ Breathe Project, "Air Pollution Sources," Available Online, https://breatheproject.org/resources/air-pollution-sources/, accessed December 9, 2020.

⁴ US EPA Air Data, Available online, https://www.epa.gov/air-data, accessed July 14, 2020.

⁵ Analysis completed by Clean Air Task Force, 2020.

⁶ Breathe Project, "Breathe Meter," Available Online, https://breatheproject.org/breathe-meter/, accessed December 9, 2020.

⁷ Breathe Project, "Air Pollution Sources," Available Online, https://breatheproject.org/app/uploads/2018/03/18-02-26 health facts.pdf, accessed December 9, 2020.

⁸ ALA SOTA 2020, Available online: http://www.stateoftheair.org/city-rankings/states/pennsylvania/allegheny.html, accessed December 9, 2020.

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. 9

Moreover, a review of science literature affirms PM 2.5 exposure levels and <u>chronic</u> health effects with no apparent lower bound.¹⁰ and <u>acute</u> health effects with no apparent lower bound.¹¹ 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. The environmental justice concerns are clear, substantial, and should not be ignored. Ignoring the risks to vulnerable people will be a shame on our region and state.

Our state clearly needs to join RGGI because of the health benefits of reducing pollution. The Breathe Project encourages Pennsylvania to move forward aggressively to reduce climate and air pollution with RGGI. Let's save lives, reduce burdens on vulnerable people, preserve future generations' rights to clean air and a healthy climate, and take action that makes everyone proud. We can do all of this while growing Pennsylvania's economy and jobs with RGGI. The path to future prosperity can begin with RGGI.

Thank you for your time and consideration.

Sincerely,

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

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⁹ 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.

¹⁰ 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. ¹¹ Schwartz et al, "The Concentration Response Relation between PM 2.5 and Daily Deaths," Environ Health Perspect. 2002 Oct; 110(10): 1025–1029.

¹² ALA SOTA 2020, Available online: http://www.stateoftheair.org/city-rankings/states/pennsylvania/allegheny.html, accessed December 9, 2020.