

August 16, 2023

The Honorable Michele Brooks, Chair Senate Health & Human Services Committee 168 Main Capitol Building Harrisburg, PA 17120

The Honorable Art Haywood, Democratic Chair Senate Health & Human Services Committee 10 East Wing Harrisburg, PA 17120 The Honorable Dan Frankel, Chair House Health Committee 326 Main Capitol Building Harrisburg, PA 17120

The Honorable Kathy Rapp, Republican Chair House Health Committee 150 Main Capitol Building Harrisburg, PA 17120

Dear Honorable Committee Chairs:

Yesterday, academic researchers from the University of Pittsburgh Graduate School of Public Health (University of Pittsburgh) released several public health studies aimed at correlating public health issues within southwestern Pennsylvania with unconventional natural gas development.

The members of the Marcellus Shale Coalition (MSC), which represent industry operations that account for more than 95% of Pennsylvania's shale gas production, processing and transmission, take seriously their obligation to undertake activities that protect both the environment and public health of the communities in which they operate. These communities, after all, are home to the dedicated employees of this industry, along with their families, friends and colleagues. The industry has long supported and advocated for independent and unbiased research regarding public health and environmental protection and works closely with agencies such as the PA Department of Environmental Protection and PA Department of Health to provide data, information and site access regarding industry operations necessary to further these goals.

The studies released by the University of Pittsburgh, however, are long on speculation and short on substantive conclusions underpinned by facts. The researchers outline several of many important limitations of these types of studies. The studies infer conclusions that are, at best, correlations which fail to consider other potential causes that may have an impact on public health and the environment.

Fundamental to the credibility of independent and unbiased research is that the researchers themselves are, in fact, independent and unbiased. It is worth noting that one of the lead researchers for these studies publicly advocated for increasing mandatory setbacks from shale gas activities during a 2021 public forum. Unfortunately, the researcher drew conclusions well before finalizing these studies and chose to advocate for a public policy that is being pushed by anti-energy activists seeking to ban Pennsylvanians from developing their property rights. One of the final reports appears to bear this out (see page 61 of the Birth Outcomes study related to the discussion regarding mandatory setbacks of up to 2 miles, or more than 10,500 feet).

With this background in mind, the following represent some of the concerns we have identified regarding this particular research effort:

• In a Question-and-Answer document regarding these research studies, the Pennsylvania Department of Health cautioned¹:

"Establishing cause-effect relationship in environmental studies is very difficult. In many cases, it is also not generally feasible to be able to gather information on or understand all the possible factors that may impact health such as genetics, other exposures over a lifetime and lifestyle factors that may impact the health outcome in question.

Specifically, for an individual there is:

- Difficulty in estimating the exposure levels precisely or the timing of these exposures.
- There are likely multiple sources of exposures and an inability to pinpoint the source(s).
- There is limited ability of epidemiological studies to gather information on or control for study parameters such as genetics, lifestyle differences, and other lifetime exposures."
- The impetus of undertaking these studies and spending more than \$2.5 million in taxpayer funds does not appear to be in response to quantifiable data demonstrating that residents in the study region are experiencing any greater occurrence of childhood cancer, adverse birth outcomes or respiratory ailments than is seen in the population at large across the state and region. For example, prior assertions that oil and gas activity was responsible for incidents of Ewing sarcoma were countered by Department of Health data that showed there was no statistical significance compared to the rest of the state.
- To our knowledge, little if any new, empirical research was conducted to inform the studies released by the University of Pittsburgh. Of the \$2.584 million in taxpayer funds spent on these studies, \$1.5 million went to pay salaries and benefits of the researchers, while another \$932,000 went for various, unspecified administrative fees.
- The University of Pittsburgh researchers failed to adhere to the provisions of the taxpayerfunded contract, which required it to conduct a public forum on at least an annual basis² to advise on the status of the ongoing studies and, by extension, gain valuable input from all

² "On at least an annual basis, the Principal Investigator(s) and study team shall present study progress to date in a public forum in conjunction with the Department." Section E.2.B (Work Plan) of Attachment 1; Contract number 4400018535



¹ Q&A: October 5, 2022 Meeting with University of Pittsburgh –

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stakeholders affected by the studies. Despite claiming³ that it would "*welcome open and collaborative conversations with the board (External Advisory Board) when we have data to share*," it appears that no open or collaborative conversations were ever actually held – either with the External Advisory Board or interested public stakeholders.

- To our knowledge, the researchers failed to take into consideration the many statutory and regulatory changes which have been adopted since the dawn of the shale gas era, or the many innovations and advancements of technology and operations instituted by industry over the last fifteen plus years. Unfortunately, the research team chose to ignore offers to discuss these changes and inform their understanding of industry operations and its evolution over time, despite utilizing timeframes that clearly preceded legislative and regulatory enhancements, let alone significant operational advancements.
- The studies looked specifically at proximity to only one potential exposure unconventional natural gas wells rather than taking a holistic approach of examining whether other activities or exposures may have contributed to adverse health impacts. For example, the study region hosts two <u>uranium disposal sites</u> which have been demonstrated to have uranium concentrations in groundwater that are 22x higher than the U.S. EPA's maximum concentration limits. Additionally, pesticide exposure has been linked to the development of some cancers, leading credible researchers to examine the presence of treated croplands in proximity to incidents of cancer. Yet, the cancer study did not adequately factor in these or other potential exposures, as well as personal genetic or lifestyle factors that may influence health outcomes.
- With respect to asthma, University of Pittsburgh researchers excluded residents of the city of Pittsburgh from their study population despite the fact that Pittsburgh is within the eight-county study region and that some residents live within proximity to shale gas wells. No rational reason is offered for excluding residents from a study population that happen to live within an artificial political boundary. Well-established research has shown that the rate of asthma in urban areas is meaningfully higher than the rate in rural settings. By removing Pittsburgh's population from the study group including a control population that would be expected to have statistically higher asthma rates the study artificially skews the findings by failing to draw from the control population in a consistent manner across the study region.
- To our knowledge, the lead University of Pittsburgh researchers and their assistants have never visited an unconventional well site, nor talked directly to industry professionals regarding operations. It seems prudent, if not a pre-requisite, that researchers who seek to draw conclusions regarding critical public health issues tied to development within the community should at a minimum be familiar with the actual operations that they are analyzing particularly when the opportunities to do so are so abundantly available right in their own region.

³ Dr. Maureen Lichtveld, Public Health Dean, University of Pittsburgh – Pittsburgh Business Times: <u>https://www.bizjournals.com/pittsburgh/news/2022/09/30/ewing-sarcoma-childhood-cancer-cluster-meeting.html</u> (September 30, 2022)



• On behalf of several operators, the MSC attempted to facilitate a site tour of unconventional operations for the University of Pittsburgh researchers. After numerous offers, researchers finally accepted the invitation and agreed to its value. However, despite repeated attempts throughout the spring and summer of 2022 to coordinate and schedule such a tour, the University of Pittsburgh researchers cut off all communications and refused to respond to both phone and email outreach.

Significant and credible research has been conducted over the years to examine the potential impacts of shale gas development. I encourage you to consult this <u>Fact Sheet</u> for specific examples of such research, along with the MSC's <u>blog</u> responding to the University of Pittsburgh health studies.

With the long-term effort by anti-fossil-fuel activist organizations and foundations to fund biased research denigrating responsible natural gas development, Pennsylvanians deserve credible, unbiased, and scientific-based research that addresses suspected health issues raised by members of our communities. The MSC, its member companies, and the countless Pennsylvanians they employ and who live in those same communities support such unbiased research. Unfortunately, in key aspects of these reports, the University of Pittsburgh's research fails to meet this bar.

Sincerely,

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David E. Callahan President

 cc: Honorable Josh Shapiro Governor of Pennsylvania
Honorable Gene Yaw, Chair Senate Environmental Resources & Energy Committee
Honorable Carolyn Comitta, Democratic Chair Senate Environmental Resources & Energy Committee
Honorable Greg Vitali, Chair House Environmental Resources & Energy Committee
Honorable Marty Causer, Republican Chair House Environmental Resources & Energy Committee

