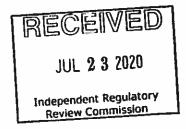
June 23, 2020

Honorable Patrick McDonnell
Secretary, Department of Environmental Protection
Krishnan Ramamurthy
Deputy Secretary for Air, Waste and Radiation
Rachel Carson State Office Building
PO Box 2063
Harrisburg, PS 17105-2063



**RE: Proposed Rulemaking for Control of VOC Emissions from Oil and Natural Gas Sources** 

(Title 25, PA Code Chapters 121 and sections 129.121 – 129.130)

I am Nancy F Parks of Aaronsburg village, Centre County, PA and I am testifying as a private citizen at this Thursday June 25, 2020 electronic hearing on the above proposed regulation.

## The Case for Controlling Existing Sources of Methane Directly

- Within the last year we have the financial news that hydro-fracking is a boon and bust practice; Reaping generous financial reward the first year but dropping off as early as the second year. Fracking damage to natural resources is permanent and human health is dangerously affected. We should ban all future new hydro-fracking permits in Pennsylvania.
- Health implications: Inside Climate News¹ reported on November 27, 2019 that a new Harvard University study described identified links between hospital admissions and kidney, blood and skin disease, linked to fine soot/PM 2.5 particles such as are found in natural gas. The WHO (World Health Organization) estimates these same tiny particles are drawn deeply into the lungs, causing inflammation and exacerbating respiratory disease such as asthma. Estimates expect regular exposure to outdoor

<sup>&</sup>lt;sup>1</sup> Inside Climate News. November 27, 2019. Study Links Short-Term Air Pollution Exposure to Hospitaizations for Growing List of Health Problems. Neela Banerjee.

- PM2.5 to create 3.7 million pre-mature deaths worldwide annually and tens of thousands in the USA.
- Inside Climate News reports on June 3, 2020 that the Beaver County, western PA natural gas & Ethane Cracker under construction by Royal Shell Oil has become a risky proposition.<sup>2</sup> The Institute for Energy Economy & Financial Analysis reports that Shell's Beaver County facility using natural gas & its byproduct ethane will make less plastic pellets than expected and less monetary return to investors. Increased competition will mean less union jobs and less money to pour into the local economy. Certainly not the return expected from the 1.6 million metric tons of plastic pellets that had been promised. "It will be a distressed asset for years to come." This failure is the future of the over-supply of natural gas and its byproducts. A failure that extends to those that promised an economic re-birth of a regional petrochemical buildup. We should certainly stop construction of this un-needed air polluting facility and concentrate on bringing renewable energy resources to PA for our future.
- Pennsylvania Greenhouse Gas (GHG) Emissions Inventory 2016 cites voluntary reports of 305.75 MMtCO2e for total GHG Gross Emissions (Prod), including carbon dioxide (CO2), Methane (CH4) and nitrous oxide (N2O) (2013 data). The 2019 Inventory released December 2019 uses 2016 data to describe the GHG problem: "In 2016, (the most recent data available for the 2019 Inventory) Pennsylvania applicable sources voluntarily reported that they were responsible for 264 million metric tons of carbon dioxide equivalent (MMTCO2e) being emitted into the atmosphere. Production and consumption of energy accounted for nearly 90 percent of these emissions. Pennsylvania's forestry and land use sector sequestered nearly 30 MMTCO2e in 2016. "A major portion of these emissions are from methane. These numbers from voluntary submissions by applicable polluters are in sharp contrast to a 2018 study by EDF.

<sup>&</sup>lt;sup>2</sup> Inside Climate News. June 3, 2020. "Shell's Plastics Plant Outside Pittsburgh has Suddenly become a Riskier Bet, a study concludes". By James Brugger.

- November 21, 2018 letter to Governor Wolf and PADEP from 4 members of AQTAC (including myself) who cite the need for targeting emissions of methane from a broad mix of existing sources that are covered within the EPA CTG (Control Technology Guidance document) plus existing emissions not covered by the federal CTG (citing non-applicable de minimus sources), and which would regulate methane theoretically through VOC emissions reductions. This same letter expressed confidence that PADEP and the state of PA has substantial authority under the PA Air Pollution Control Act and the federal Clean Air Act to control, reduce and limit methane emissions directly.
- EDF Analysis, 2018. https://www.edf.org/media/report-estimates-pennsylvania-oil-and-gas-methane-emissions-nearly-five-times-higher-states.
- This EDF 2018 analysis "... based on peer-reviewed scientific research estimated that oil and gas facilities in Pennsylvania emit over 520,000 tons of methane annually. That figure is five times higher than what industry self-reports to the Pennsylvania Department of Environmental Protection (DEP). "
- EDF's updated analyses of Pennsylvania's methane in May 2020 form a fact driven, data updated, expanded study analysis<sup>3</sup>
- "EDF researchers found that in 2020 oil and gas operators emit upwards of 1.1 million short tons of (fugitive) methane annually. This is more than 15 times higher than what oil and gas companies reported to the Pennsylvania Department of Environmental Protection (DEP)."
- EDF's reports continues, that "Methane is a potent greenhouse gas,
  human-made emissions of which account for a quarter of the global
  warming we are currently experiencing. Climate change can contribute to
  extreme weather events from floods to longer and hotter summers, which
  exacerbate air pollution and ozone problems, along with the risk of vectorborne diseases such as Lyme disease and West Nile virus. Pennsylvania has

<sup>&</sup>lt;sup>3</sup> https://www.edf.org/media/edf-analysis-finds-pennsylvania-oil-and-gas-methane-emissions-are-double-previous-estimate

the highest incidence of Lyme disease in the nation. ... Methane is also the primary component of natural gas. The 1.1 million short tons of methane emitted in Pennsylvania equates to 57 billion cubic feet of natural gas that could otherwise be brought to market."

- These problems indicate that :
- Methane reporting should be mandatory & according to strict state guidelines.
- Methane should be controlled directly, not as a co-benefit of VOC emissions reductions;
- All the information that we have here in Pennsylvania indicates that we MUST control methane.
- The preamble to the proposed rulemaking expects VOC emission reductions of 4,404TPY and methane emission reductions of 75,603 TPY; a vastly lower number than the 1.1 million TPY that we know are being emitted through updated analyses.
- There are 89,320 unconventional and conventional total wells known, and 8403 unconventional wells known. Current production yields 71,229 known conventional wells in production, including 435 midstream compressors, 120 transmission compressor stations and 10 natural gas processing facilities.
- All the information that we have here in Pennsylvania indicates that we CAN control methane directly;
- Research and analyses over the last years that we have been arguing about methane controls are informed by the successes of other states.
- With rapidly increasing events of methane fugitive emissions being documented, PADEP/BAQ must take into account that any presumption that it would be reasonable to designate de minimus levels of methane production that can be ignored as included in this proposed regulation, is wrong. See Preamble for proposed regulation.
- <u>Section 129.127 Fugitive Emission Components</u>: This section attempts to establish two de minimus triggers. "... a fugitive emissions component at a

- well site with a well that produces less than 15 barrels of oil equivalent per day is not subject to this section". (Subsection a)
- PADEP provides no data on the number of wells that this would apply to. Please provides number of applicable wells, Etc. At the same time, what would be the implication of and number of tons of fugitive methane emissions from each well that is allowed to go uncontrolled? This is a case of cumulative emissions from many sources that would have an exceptional affect on people living nearby to a natural gas well or production or transit facility. It would have an exceptional affect on climate disruption here in PA.
- I oppose any attempt to ignore lower producing wells and that will cause massive and persistent total fugitive emissions from cumulative multiple sources. Ignoring significant fugitive emission leakage is a dis-benefit to your expected methane reduction numbers that the public can expect.

- <u>Sections 129.127 Fugitive Emission Components:</u> Subsection (b): Here,
  Owners/operators of the well site that achieves "... 300scf of gas per barrel
  of oil must implement monthly AVO (auditory, visual and olfactory)
  inspections and quarterly LDAR inspections. If the owner/operator of well
  sites do track the percentage of leaking components to be fixed, and if
  successful they can lower the LDAR frequency to semiannually if less than
  2% of those components are leaking."
- I oppose this provision and any attempts to reduce inspection frequencies.
  This creates a significant dis-benefit for emissions reductions.
- Both of these two de minimus regulatory proposals in section 129.127 will cause unacceptable cumulative emissions of methane, leading to an unacceptable human health exposure and a very adverse effect on climate disruption conditions here in PA.
- I support PADEP/BAQ efforts to expand stringent methods used to control both existing VOC and existing methane emissions, and am supportive of tightening of requirements to all sources of existing methane.

Thank you for the opportunity to testify.
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