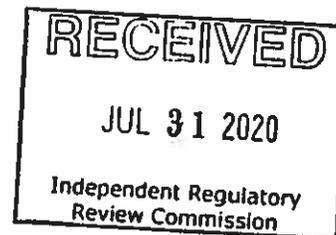


3256

Robert Altenburg  
Director, PennFuture Energy Center  
610 N. Third St.  
Harrisburg, PA 17101

July 27, 2020

Hon. Patrick McDonnell  
Secretary, PA Dept. of Environmental Protection  
400 Market St. – 16th Fl.  
Harrisburg, PA 17101



**Re: Proposed Rulemaking, Control of VOC Emissions from Oil and Natural Gas Sources (#7-544)**

Citizens for Pennsylvania's Future (PennFuture) is a membership-based, non-profit, environmental organization whose activities include advocating and advancing legislative action on a state and federal level; providing education for the public; and assisting citizens in public advocacy and enforcement. PennFuture's mission is to aid the transition to a clean energy economy in Pennsylvania and beyond; to protect our air, water and land; and to empower citizens to build sustainable communities for future generations.

PennFuture thanks the Pennsylvania Department of Environmental Protection (Department) and the Environmental Quality Board (EQB) for their efforts in promulgating the proposed rulemaking for the Control of VOC Emissions from Oil and Natural Gas Sources published at 50 Pa.B. 2633 (May 23, 2020). We agree that finalization of this rulemaking would bring significant environmental and public health benefits from controlling ozone precursors such as VOCs, and we further recognize that the proposed rulemaking would provide the additional co-benefits of reducing methane emissions.

In the more than four years since Governor Wolf announced his framework for methane reductions from the oil and gas industry it is more important than ever to finalize stringent regulations without further delay. The recent enactment of Act 66 of 2020 (formerly HB 732) providing massive subsidies for petrochemical plants could, alone, subsidize the purchase of almost 57 billion cubic feet of natural gas. Considering the leakage rate at these plants has been found to be as high as 0.34%,<sup>1</sup> this single program will be responsible for thousands of tons of excess methane emissions every year.

Furthermore, a report published on May 20th by the Environmental Defense Fund found that methane pollution is estimated to be twice what it was only two years ago, now 1,100,000 tons

---

<sup>1</sup> Zhou, et al, *Estimation of Methane Emission From the Ammonia Fertilizer Industry Using a Mobile Sensing Approach*, Elementia (May, 2019), <https://www.elementascience.org/articles/10.1525/elementa.358/>

annually from oil and gas operators<sup>2</sup>—significantly more than what oil and gas operators reported to the Department. If Pennsylvania is going to reach its carbon goals and, further, reach net-zero carbon emissions by 2050 as identified as necessary by the Intergovernmental Panel on Climate Change<sup>3</sup> to have a reasonable chance at keeping global warming below 1.5°C, we must aggressively move forward with this rulemaking package and other controls on carbon pollution.

With these points in mind, PennFuture submits the following comments:

**The Department must proceed with these regulations in spite of federal attempts to withdraw the underlying 2016 Control Techniques Guidelines (CTG)**

PennFuture agrees with the Department that “even though a finalized withdrawal of the 2016 O&G CTG would relieve this Commonwealth of the requirement to address RACT for existing oil and gas sources, the Department is still obligated to reduce ozone and VOC emissions as a precursor under section 110 of the CAA.”<sup>4</sup> The EPA, in its proposed withdrawal of the underlying CTG, confirms that the CTG itself is “provided only as guidance” and the RACT recommendations therein only provide “recommendations for air agencies to consider in determining RACT [based on] information currently available to the EPA.”<sup>5</sup>

We note that while establishing a CTG presumptively defines RACT, the EPA’s proposed withdrawal of the rulemaking does not change the agencies underlying RACT analysis. It notes that the “RACT recommendations for storage vessels, compressors, pneumatic controllers, and equipment leaks from natural gas processing plants are based on the 2012” New Source Performance Standards Technical Support Documents (NSPS TSDs) and the “RACT recommendations for pneumatic pumps and fugitive emissions from well sites and compressor stations were based on the 2016 NSPS TSDs.”<sup>6</sup> The EPA further notes that it is reconsidering the 2016 NSPS and “because the 2016 NSPS and CTG share certain key pieces of data and information, the EPA believes it is prudent to withdraw the CTG in its entirety.”<sup>7</sup>

Since EPA reconsidering the 2012 TSDs it used as a basis for RACT recommendations for storage vessels, compressors, pneumatic controllers, and equipment leaks from natural gas processing plants, the withdrawal of the CTG should have no effect on the analysis for those sources. Furthermore, while EPA may revise the underlying 2016 TSD related to pneumatic pumps and fugitive emissions from well sites and compressor stations at some point in the

---

<sup>2</sup>

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

<sup>3</sup> IPCC, *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels* (2018).

<sup>4</sup> 50 Pa.B. 2636

<sup>5</sup> 83 F.R. 10478, *et. seq.* (Mar. 9, 2018).

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

future, until new data is presented it is appropriate for the Department to consider the existing TSD in making its own determination regarding RACT. Nothing in the EPA actions presents a cause for delay by the Department.

**The Department has the authority and responsibility to directly regulate methane emissions**

PennFuture is concerned that the proposed rulemaking does not directly regulate methane emissions, but instead achieves reductions only as a consequence mandated VOC reductions.

Methane emissions meet the definition of "air pollution" under section 1 of Pennsylvania's Air Pollution Control Act (APCA)<sup>8</sup> and nothing in that act restricts the Department from moving forward and establishing control measures. In fact, the Department has a trust responsibility under the Pennsylvania Constitution to "conserve and maintain" our public natural resources, including air quality.<sup>9</sup> Under that article, Pennsylvania's public natural resources are the corpus of the trust and the Commonwealth has a fiduciary duty to manage those assets for the benefit of the people. Our State Supreme Court has held that before state "agencies approve use of trust resources, they must consider effect of use upon public trust interests and attempt, so far as feasible, to avoid or minimize any harm to those interests."<sup>10</sup>

With respect to VOCs, the Department may determine based on the record that the "reasonably available" controls required by the Clean Air Act meet Pennsylvania's constitutional requirement of minimizing harms "so far as feasible." Given that reductions in methane emissions are addressed only as a co-benefit to VOC emissions, this action does not establish a record indicating the harms from methane emissions have been minimized so far as feasible.

While the EPA's attempt to withdraw the CTG is predicated on a cost-benefit analysis that fails to monetize the costs and benefits related to the social cost of methane emissions, the Department can not ignore those costs. A 2016 report of the Interagency Working Group on the Social Cost of Greenhouse Gasses<sup>11</sup> found a social cost of CO<sub>2</sub> in 2020 at \$42/ton (2007 dollars). Given that methane has a global warming potential of between 28 and 86 times that of CO<sub>2</sub><sup>12</sup>, a single ton of methane can create significantly more than \$1000 in negative impacts.

It is appropriate to consider the co-benefits from reductions in methane and other pollutants when evaluating the benefits of the proposed rulemaking, but that does not relieve the department of its responsibility to independently consider the effects of the remaining methane

---

<sup>8</sup> Air Pollution Control Act, Act of Jan 8, 1960, P.L. 2119, No. 787, *as amended*

<sup>9</sup> Pa. Const. Art. I § 27

<sup>10</sup> *Robinson v. Commonwealth*, 83 A.3d 901, 958 (Pa. 2013).

<sup>11</sup> Interagency Working Group, Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis (Aug, 2016).

<sup>12</sup> IPCC, AR5 Fifth Assessment Report, Anthropogenic and Natural Radiative Forcing (2013)

emissions and mitigate those harms. For that reason, the Department should develop additional measures to directly regulate methane.

**Exemption for low-producing wells.**

The Department must also revise the proposed rule to close the exemption of low-producing wells from leak detection and repair (LDAR). As discussed above, the relevant Constitutional requirement is that the Department seek to minimize pollution “so far as feasible.”

Considering an LDAR program consisting of a monthly audible, visual and olfactory (AVO) test and a quarterly instrument-based inspection requires little more than a brief monthly visit to the site to see if any leakage is readily apparent, it is unclear under what grounds this would not be considered feasible. This is especially true given the testimony the Department has heard that these wells are responsible for more than half of the methane emissions.

While the Department presented an analysis of the of the emissions benefits from fugitive emissions controls, it should be noted that significant parts of this data likely rely on a calculation methodology published by the US EPA in 1995<sup>13</sup> that not only pre-dates the unconventional natural gas industry, it does not consider well production as a factor in leak estimation. The EPA as well, when developing the 2016 CTG for these sources, did not review data for sources producing less than 15 barrel equivalents per day and consequently made no recommendation regarding RACT.<sup>14</sup> To the extent that the Department relies on either of these sources, it can have no basis to determine the control of leakage from low producing wells is not feasible. Barring an actual analysis to the contrary, the Department should immediately close the loophole for low-producing wells.

Thank you for your consideration of these comments.

Sincerely,



Robert Altenburg

Director, PennFuture Energy Center

---

<sup>13</sup> US EPA, Protocol for Equipment Leak Emission Estimates, EPA 453/R-95-017, (Nov. 1995).

<sup>14</sup> US EPA, Control Techniques Guidelines for the Oil and Natural Gas Industry, 9-38 (Oct. 2016).