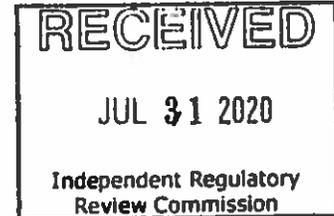




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July 27, 2020



VIA EMAIL: regcomments@pa.gov
Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477

Re: Proposed Rulemaking re: Control of VOC Emissions from Oil and Natural Gas Sources

Dear Sir or Madam:

Please accept these comments regarding the above-referenced Proposed Rulemaking, which I am submitting on behalf of the Group Against Smog and Pollution ("GASP"). According to the Notice published in the May 23, 2020 Pennsylvania Bulletin, the Environmental Quality Board is accepting comments submitted on or before July 27, 2020.

Thank you for your attention to these comments.

Very truly yours,

/s

John K. Baillie
Senior Attorney

**COMMENTS OF THE GROUP AGAINST SMOG AND POLLUTION
REGARDING THE ENVIRONMENTAL QUALITY BOARD'S
PROPOSED RULES FOR THE CONTROL OF VOC EMISSIONS FROM
OIL AND NATURAL GAS SOURCES**

The Environmental Quality Board (the “EQB”) has proposed to amend Pennsylvania’s air pollution control regulations to impose limits on emissions of volatile organic compounds (“VOCs”) from existing sources in the oil and natural gas industry.¹ More specifically, the proposed regulations will limit VOC emissions from storage vessels, natural gas-driven pneumatic controllers, natural gas-driven diaphragm pumps, reciprocating and centrifugal compressors at oil and natural gas industry sites. The Proposed Rulemaking will also impose limits on fugitive emissions from such sources.²

VOCs are a precursor to the formation of ground-level ozone,³ which is a defined as a criteria pollutant pursuant to section 108 of the Clean Air Act.⁴ The United States Environmental Protection Agency (“EPA”) first promulgated National Ambient Air Quality Standards (“NAAQS”) for ground-level ozone in 1997,⁵ and revised those standards in 2008⁶ and again in 2015.⁷ All areas of Pennsylvania have attained the 2008 ozone NAAQS;⁸ all areas of

¹ Environmental Quality Bd., *Proposed Rulemaking – Control of VOC Emissions from Oil and Nat. Gas Sources*, 50 PA. BULL. 2633 (May 23, 2020) (the “Proposed Rulemaking”).

² *See id.*, at 2633.

³ *See id.*

⁴ 42 U.S.C. § 7408.

⁵ *See National Ambient Air Quality Standards for Ozone*, 62 Fed. Reg. 38856 (July 18, 1997).

⁶ *See National Ambient Air Quality Standards for Ozone*, 73 Fed. Reg. 16436 (March 27, 2008).

⁷ *See National Ambient Air Quality Standards for Ozone*, 80 Fed. Reg. 65291 (Oct. 26, 2015).

⁸ *See Determination of Attainment by the Attainment Date for the 2008 Ozone Standard; Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE Nonattainment Area*, 82 Fed. Reg. 50814 (Nov. 2, 2017).

Pennsylvania except for Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties have been designated as “attainment” or “unclassifiable” for the 2015 ozone NAAQS.⁹

The Clean Air Act requires that each state promulgate a State Implementation Plan (“SIP”) that specifies how the NAAQS will be achieved and maintained in the state.¹⁰ A state having an area that does not attain the NAAQS must revise its SIP to require “all reasonably available control measures ... including such reductions in emissions from existing sources in the area as may be obtained through the adoption ... of reasonably available control technology [(“RACT”)].¹¹ RACT is “the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.”¹² To determine “economic feasibility ... EPA gives significant weight to economic efficiency and relative cost-effectiveness.”¹³

Section 184 of the Act expands the RACT requirement for Pennsylvania and other states in the Ozone Transport Region; each state in the Ozone Transport Region must revise its SIP to require that RACT be implemented by all sources of VOCs in the state that are covered by a “control techniques guideline” (“CTG”) published by EPA,¹⁴ not just such sources in a nonattainment area. A CTG provides guidance to the states as to what constitutes RACT for the

⁹ See Additional Air Quality Designations for the 2015 National Ambient Air Quality Standards, 83 Fed. Reg. 25776, 25828-30 (June 4, 2018). EPA designated Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties as “marginal nonattainment.”

¹⁰ 42 U.S.C. § 7407(a).

¹¹ 42 U.S.C. § 7502(c)(1).

¹² Anna Marie Wood, Air Qual. Policy Div., EPA, Memo to Regional Air Directors re: Implementing Reasonably Available Control Technology Requirements for Sources in the Oil and Natural Gas Industry, at 2 (Oct. 20, 2016), available at https://www.epa.gov/sites/production/files/2016-10/documents/implementing_reasonably_available_control_technology_requirements_for_sources_covered_by_the_2016_control_techniques_guidelines_for_the_oil_and_natural_gas_industry.pdf.

¹³ *Id.*

¹⁴ 42 U.S.C. § 7511c(h)(2)(B).

sources covered by the CTG, but is not a regulation itself.¹⁵ The states are not bound by a CTG in how they implement RACT, and are free to “implement other technically-sound approaches that are consistent with the CAA, the EPA’s implementing regulations, and policies on interpreting RACT.”¹⁶ Nevertheless, “[t]he recommended controls in the Oil and Gas CTG are the ‘presumptive norm’ based on general industry parameters and published assumptions.”¹⁷

Section 4.2(a) of Pennsylvania’s Air Pollution Control Act precludes the EQB from adopting regulations that are not necessary to attain or maintain the NAAQS or satisfy other requirements that are imposed by the Clean Air Act or specifically authorized or required by the Air Pollution Control Act.¹⁸ Section 4.2(b) of the Air Pollution Control Act provides that control measures or other requirements in regulations adopted by the EQB “be no more stringent than those required by” the Clean Air Act or Air Pollution Control Act.¹⁹

Accordingly, for the EQB to impose emission limitations by regulation, it must establish that those limitations: 1) are necessary to attain or maintain the NAAQS, are otherwise required by the Clean Air Act, or are specifically authorized or required by the Air Pollution Control Act; **and** 2) are not more restrictive than necessary to comply with the Clean Air Act or Air Pollution Control Act.

¹⁵ Control Techniques Guidelines for the Oil and Natural Gas Industry, at 1-1 (Oct. 2016), *available at* <https://www.epa.gov/sites/production/files/2016-10/documents/2016-ctg-oil-and-gas.pdf>.

¹⁶ *Id.*, at 1-1 – 1-2.

¹⁷ Wood, *supra* note 12, at 2.

¹⁸ See 35 P.S. § 4004.2(a).

¹⁹ 35 P.S. § 4004.2(b).

I. OIL AND NATURAL INDUSTRY SOURCES IN ALL AREAS OF PENNSYLVANIA MUST IMPLEMENT RACT

Section 184 of the Clean Air Act requires that all sources of VOCs that are: 1) in a state within the Ozone Transport Region, and 2) covered by a CTG published by EPA must implement RACT. Pennsylvania is in the Ozone Transport Region,²⁰ and EPA published a CTG for the oil and natural gas industry on October 27, 2016 (the “2016 O&G CTG”).²¹ EPA proposed to withdraw the 2016 O&G CTG on March 9, 2018,²² but has not yet done so.

Accordingly, sources of VOCs in the oil and natural gas industry in Pennsylvania must implement RACT.

II. THE EQB SHOULD PROVIDE A COMPARISON OF THE REQUIREMENTS OF THE PROPOSED RULEMAKING AND THE PRESUMPTIVE RACT RECOMMENDATIONS MADE IN THE 2016 O&G CTG AND DEMONSTRATE THAT EMISSION LIMITS IN THE PROPOSED RULEMAKING THAT DIFFER FROM THEIR COUNTERPARTS IN THE CTG ARE RACT

The EQB’s Proposed Rulemaking is single-spaced and takes up more than twenty pages in the Pennsylvania Bulletin; the 2016 O&G CTG is almost 340 pages long. The EQB does not compare the emission limits in Proposed Rulemaking to those recommended by the 2016 O&G CTG. The sheer length and complexity of the Proposed Rulemaking and the 2016 O&G CTG make it difficult to determine which limits in the Proposed Rulemaking are more (or less) restrictive than the presumptive RACT established by the CTG.

²⁰ 42 U.S.C. § 7511c(a).

²¹ *See id.*

²² *See* Notice of Proposed Withdrawal of the Control Techniques Guidelines for the Oil and Nat. Gas Indus., 83 Fed. Reg. 10478 (March 9, 2018).

Notwithstanding the omission of a comparison between the requirements of the Proposed Rulemaking and the 2016 O&G CTG's recommendations, it appears that several emission limits in the Proposed Rulemaking are more stringent than their counterpart recommendations in the 2016 O&G CTG:

- The Proposed Rulemaking requires that storage vessels installed before August 10, 2013 with a potential to emit 6.0 tons per year VOCs and storage vessels installed after August 10, 2013 with a potential to emit 2.7 tons per year VOCs control VOC emissions with 95 % efficiency.²³ The 2016 O&G CTG does not recommend imposing the 95 % control requirement on storage vessels with a potential to emit of less than 6.0 tons per year VOCs.²⁴
- The Proposed Rulemaking requires that emission controls be installed and operated at all natural gas-driven diaphragm pumps located at well sites and requires 95% control efficiency of VOC emissions from such pumps,²⁵ unless a particular pump shares more than one well.²⁶ The 2016 O&G CTG recommends similar requirements as a general rule, but recommends exemptions for existing control devices that are unable to meet the 95% efficiency requirement and for sites without existing control devices.²⁷
- The leak detection and repair (“LDAR”) requirements in the Proposed Rulemaking apply to all producing well sites with a gas-to-oil ratio of at least 300 standard cubic feet of gas per barrel of oil.²⁸ The 2016 O&G CTG does not recommend RACT for such sites if they produce less than 15 barrel of oil equivalents per day on average.²⁹
- At all natural gas gathering and boosting stations and natural gas processing plants, the Proposed Rulemaking requires: 1) monthly audio-visual-olfactory inspections; and 2) quarterly leak detection and repair inspections using optical gas imaging.³⁰ The 2016 O&G CTG recommends an LDAR program equivalent

²³ See 50 Pa. Bull., at 2648 (proposed § 129.123(b)).

²⁴ See 2016 O&G CTG, § 4.4.

²⁵ See 50 Pa. Bull., at 2650 (proposed § 129.126(b)).

²⁶ See *id.* (proposed § 129.126(d)(2)).

²⁷ See 2016 O&G CTG, § 5.4.

²⁸ See 50 Pa. Bull., at 2651 (proposed § 129.127(b)(1)(ii)).

²⁹ See 2016 O&G CTG, § 9.4.

³⁰ See 50 Pa. Bull., at 2651 (proposed § 129.127(b)(1)(ii)(A) and (B)).

to one described by 40 C.F.R. Part 60 Subpart VVa for equipment in VOC service.³¹

A. The EQB Must Demonstrate that More Stringent Pennsylvania Emission Limits are RACT

By determining that the recommended emission limits in the 2016 O&G CTG were presumptive RACT, EPA necessarily determined that those limits were both technically feasible and cost effective. To the extent that emission limits in the Proposed Rulemaking are more stringent than those in the 2016 O&G CTG, they may not be technically feasible, cost effective, or both. Consequently, the more stringent Pennsylvania limits would not qualify as RACT. If emission limits imposed by the Proposed Rulemaking are more stringent than their counterpart recommendations in the 2016 O&G CTG and are not RACT, the Pennsylvania limits presumably would be prohibited by subsection 4.2(a) and(b) of Pennsylvania's Air Pollution Control Act.

The 2016 O&G CTG demonstrates that the emission limits that it recommends are RACT by establishing the technical feasibility and cost effectiveness of each recommended limit individually. The Proposed Rulemaking notably omits any similar demonstrations for individual emission limits, even for those emission limits that are more stringent than their counterpart recommendations in the 2016 O&G CTG. It is therefore not at all clear that the more stringent³² emission limits in the Proposed Rulemaking are RACT. In order to avoid the prohibition imposed by section 4.2 of the Air Pollution Control Act and secure the environmental and public health benefits that the Proposed Rulemaking would provide, the EQB must establish that each

³¹ See 2016 O&G CTG, § 8.4.

³² To the extent emission limits in the Proposed Rulemaking mirror their counterpart recommendations in the 2106 O&G CTG, the RACT determinations performed by EPA should be sufficient to establish that the Pennsylvania limits are RACT.

individual emission limit in the Proposed Rulemaking that is more stringent than its counterpart recommendation in the 2016 O&G CTG is RACT.

Accordingly, the EQB should identify all of the emission limits in the Proposed Rulemaking that are more stringent than their counterpart recommendations in the 2016 O&G CTG, and demonstrate that each of the more stringent Pennsylvania limits are both technically feasible and cost effective (and, therefore, RACT).

B. The Proposed Rulemaking Should Cite All Provisions of the Clean Air Act that Require More Stringent Emission Limits than those in the 2016 O&G CTG

The Proposed Rulemaking asserts – in two instances – that any of emission limits that it would impose that are more stringent than their counterpart recommendations in the 2016 O&G CTG are “reasonably necessary” to satisfy Clean Air Act requirements, but does not identify which Clean Air Act requirements those might be.³³ To the extent that any more stringent emission limits in the Proposed Rulemaking are necessary to satisfy requirements of the Clean Air Act (other than the RACT requirement imposed by section 172 and 184 of the Act), the Proposed Rulemaking should cite the Clean Air Act provisions that impose those requirements. Such citations would help establish that the Proposed Rulemaking is consistent with the limits on the EQB’s rulemaking authority that are set forth in subsection 4.2(a) of the Air Pollution Control Act.

³³ See 50 Pa. Bull. at 2634 and 2640.

C. The EQB Must Identify Any Emission Limits in the Proposed Rulemaking that are not as Stringent as Their Counterpart Recommendations in the 2016 O&G CTG, and Demonstrate that the Pennsylvania Limits are RACT

Conversely, to the extent that emission limits in the Proposed Rulemaking are not as stringent as their counterparts in the 2016 O&G CTG, the Pennsylvania limits would seem to violate the Clean Air Act requirement that the states impose “all reasonably available control measures” on sources covered by a CTG.³⁴ The EQB must also identify any emission limits in the Proposed Rulemaking that are not as stringent as their counterparts in the 2016 O&G CTG, demonstrate that the more stringent CTG limits are not technically feasible or cost effective for sources in Pennsylvania, and establish that the less stringent Pennsylvania limits are technically feasible and cost effective.

III. IF EMISSION LIMITS IN THE PROPOSED RULEMAKING DO NOT QUALIFY AS RACT, THE EQB MUST DEMONSTRATE THAT THE LIMITS ARE NECESSARY TO ATTAIN OR MAINTAIN THE NAAQS

Even if the emission limits in the Proposed Rulemaking do not qualify as RACT, they may still be permissible under section 4.2 of Pennsylvania’s Air Pollution Control Act if the EQB demonstrates that the limits are required to attain or maintain the NAAQS.³⁵

Although the Proposed Rulemaking states that one ozone sampler in Pennsylvania (specifically, the one in Bristol, Bucks County) currently does not monitor attainment of the 2008 ozone NAAQS,³⁶ EPA has determined that Bucks County (and the rest of the Philadelphia

³⁴ 42 U.S.C. § 7502(c)(1) (emphasis added).

³⁵ See 35 P.S. § 4004.2(a) (authorizing the adoption of regulations that are required “to achieve and maintain the air quality standards”).

³⁶ See 50 Pa. Bull., at 2634.

area) have attained that standard.³⁷ Only five counties in the southeastern corner of Pennsylvania have been classified as “nonattainment” for the 2015 ozone NAAQS, with all other areas of the Commonwealth classified as “attainment/unclassifiable.”³⁸

The Proposed Rulemaking repeatedly asserts that the emission limits that it would impose are required or necessary to attain or maintain the 2008 and/or 2015 ozone NAAQS:

Adoption of the VOC emission [sic] control measures in this proposed rulemaking would allow the Commonwealth to continue its progress in attaining and maintaining the 2008 8-hour ozone NAAQS.³⁹

To the extent that any of the requirements in this proposed rulemaking are more stringent than any provisions of the 2016 O&G CTG, the Board has determined that the proposed requirements are reasonably necessary to attain and maintain the health-based and welfare based 8-hour ozone NAAQS in this Commonwealth and to satisfy related CAA requirements.⁴⁰

The Board has determined that these more stringent requirements are reasonably necessary to achieve or maintain the NAAQS.⁴¹

Adoption of the VOC emission control measures and other requirements in this proposed rulemaking would allow the Commonwealth to make substantial progress in achieving and maintaining the 1997, 2008 and 2015 8-hour ozone NAAQS Statewide. Implementation of and compliance with the proposed VOC emission reduction measures would also assist the Commonwealth in reducing the levels of ozone precursor emissions that contribute to potential nonattainment of the 2015 ozone NAAQS. As a result, the VOC emission control measures are reasonably necessary to attain and maintain the health-based and welfare-based 8-hour ozone NAAQS in this Commonwealth and to satisfy related CAA requirements.⁴²

³⁷ See Determination of Attainment by the Attainment Date for the 2008 Ozone Standard; Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE Nonattainment Area, 82 Fed. Reg. 50814 (Nov. 2, 2017).

³⁸ See Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards, 83 Fed Reg. 25776, 25828-30 (June 4, 2018).

³⁹ 50 Pa. Bull., at 2634.

⁴⁰ *Id.*

⁴¹ *Id.*, at 2636.

⁴² *Id.*, at 2640.

The Proposed Rulemaking does not support these assertions with any evidence or analysis. It is not self-evident that attainment of the 2008 and 2015 ozone NAAQS at the Bristol monitor specifically and the five-county Philadelphia nonattainment area generally depend on reducing VOC emissions from oil and natural gas industry sources in other, usually remote, parts of Pennsylvania. The EQB should bolster its determinations by providing the evidence or analysis that it relied on to make them. Such evidence or analysis would help counter any assertion that the Proposed Rulemaking's emission limits are not required to attain or maintain the NAAQS and are thus impermissible under section 4.2(a) of the Air Pollution and Control Act.

IV. THE EQB SHOULD INCLUDE CRITERIA FOR CASE-BY-CASE RACT DETERMINATIONS FOR SOURCES IN THE PROPOSED RULEMAKING

The Proposed Rulemaking states:

If the owner or operator cannot meet the provisions of this proposed rulemaking, then they have the option to demonstrate to the Department's satisfaction that it is economically or technically infeasible to meet the applicable VOC RACT emission limitation in a case-by-case RACT permit application.⁴³

Notwithstanding this statement, neither the Proposed Rulemaking nor the existing provisions of Chapter 129 identify the criteria that would be used to evaluate a permit application for a case-by-case RACT determination.⁴⁴ To prevent such determinations from being made arbitrarily or capriciously, the Proposed Rulemaking must be amended to include the criteria that will be used to make case-by-case RACT determinations for sources of VOCs in the oil and natural gas industry.

⁴³ *Id.*, at 2642.

⁴⁴ The criteria for case-by-case RACT determinations in 25 Pa. Code §§ 129.93 and 129.98 purportedly only apply to determinations for major sources of NO_x or VOCs.