

# Comments of the Independent Regulatory Review Commission



## Environmental Quality Board Regulation #7-544 (IRRC #3256)

### Control of VOC Emissions from Oil and Natural Gas Sources

**August 26, 2020**

We submit for your consideration the following comments on the proposed rulemaking published in the May 23, 2020 *Pennsylvania Bulletin*. Our comments are based on criteria in Section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b). Section 5.1(a) of the Regulatory Review Act (71 P.S. § 745.5a(a)) (RRA) directs the Environmental Quality Board (EQB) to respond to all comments received from us or any other source.

#### **1. RRA Section 2 -- Reaching of consensus.**

Section 2 of the RRA (71 P.S. § 745.2) explains why the General Assembly felt it was necessary to establish a regulatory review process. Given the interest this proposal has generated; we believe it is appropriate to highlight the following provision of Section 2(a) of the RRA. The provision states, "To the greatest extent possible, this act is intended to encourage the resolution of objections to a regulation and the reaching of a consensus among the commission, the standing committees, interested parties and the agency."

We have received a significant number of public comments on this proposed rulemaking. The vast majority of comments are from individuals and environmental advocacy organizations in support of the proposal, but also urging the Department of Environmental Protection (Department) to adopt more restrictive requirements in the final rulemaking. There were also numerous comments from parties representing the oil and gas industries. They believe the regulatory mandates for existing sources should not be more stringent than requirements for new or modified sources or the Environmental Protection Agency's (EPA) 2016 Control Technique Guidelines (2016 CTG).

The issues raised by commentators are often in direct conflict with each other. Parties representing environmental concerns request that the EQB eliminate a "step-down" provision that allows operators of producing well sites to reduce the frequency of leak detection and repair (LDAR) inspections if the previous ones do not reveal significant leaks. However, oil and gas industry representatives recommend that the "step-down" provision apply also to gathering or boosting stations. There were also differing views on audio, visual and olfactory (AVO) inspections. Some view AVO inspections as an integral part of a leak detection and repair

(LDAR) inspection program, while others call for their elimination. These are just a few examples of opposing viewpoints expressed by commentators.

The EQB should continue to actively seek input from all interested parties, including lawmakers, as it develops the final version of the rulemaking.

**2. RRA Sections 5.2(b)(3)(v) and (b)(7) - Whether the regulation is supported by acceptable data.**

Section 28 of the RAF relates to the regulatory review criterion of whether the regulation is supported by acceptable data. If data is the basis for a regulation, the section of the RAF asks for a description of the data, how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports studies or research.

The EQB states that the basis for this proposed rulemaking is the federally mandated reasonably available control technology (RACT) requirements found in EPA's 2016 CTG. Commentators representing the oil and gas industry assert that the 2016 CTG are similar to performance standards developed for "new" or "modified" sources and question the appropriateness of applying these standards to existing sources (i.e. conventional oil and gas wells). We ask the EQB to explain how it determined that the proposed standards are appropriate for both the conventional and unconventional oil and gas industries in Pennsylvania.

**3. RRA Section 5.2(a) - Statutory authority.**

Section 7(b) of Act 52 of 2016 (Act) requires any rulemaking concerning conventional oil and gas wells that is considered by the EQB must "be undertaken separately and independently of unconventional wells or other subjects and shall include a regulatory analysis form submitted to the Independent Regulatory Review Commission that is restricted to the subject of conventional oil and gas wells."

Lawmakers and commentators state that the EQB has violated clear legislative directives by proposing a VOC emissions rule that includes requirements for conventional oil and gas well owners and operators, along with, not "separately and independently" from requirements for unconventional well operations. Also, the EQB has not prepared or submitted an RAF restricted to the need and impact of the rulemaking on the conventional oil and gas industry. Lawmakers request that the provisions that apply to the conventional oil and gas industry be withdrawn from the rulemaking. We ask the EQB to explain how it has and will comply with the legislative directives of the Act.

**4. RRA Section 5.2(b)(2) - Protection of the public health, safety and welfare and the effect on this Commonwealth's natural resources.**

As noted above, this proposal has generated a substantial amount of public comments from varied interests and organizations. Our comments reflect our review of the numerous issues raised by commentators and how those issues pertain to the review criteria in the RRA. While

we ask the EQB to further clarify or justify certain provisions that have been raised as concerns by representatives of the oil and gas industry, we remain concerned that the final-form regulation fulfill the EQB's obligation to protect the quality and sustainability of the Commonwealth's natural resources. To that end, we ask the EQB explain how the standards set forth in the regulation meet the criterion under Section 5.2(b)(2) of the RRA (71 P.S. § 745.5b(b)(2)) pertaining to the protection of the public health, safety and welfare and the effect on the Commonwealth's natural resources while imposing reasonable requirements upon the oil and natural gas industry.

#### **5. RRA Section 5.2(b)(1) - Economic or fiscal impacts.**

The fiscal analysis provided by the EQB estimates that the proposed regulation will cost operators approximately \$35.3 million (based on 2012 dollars) without consideration of the economic benefit of the saved natural gas. The value of the saved natural gas, in 2012 dollars, will yield a savings of approximately \$9.9 million, resulting in a total net cost of \$25.4 million. These figures were based on 2012 EPA cost estimates contained in the 2016 CTG.

Commentators question the accuracy of the fiscal analysis because the supporting data is outdated and is not specific to Pennsylvania's oil and gas industry. We agree with the concerns raised by interested parties. In order for this Commission to determine whether this rulemaking is in the public interest, the EQB must submit a revised estimate of the costs and/or savings to the regulated community using data that is current and Pennsylvania industry-specific.

#### **6. RRA Section 5.2(b)(1)(v) and (b)(3)(i) - The impact on the public interest of exempting or setting lesser standards of compliance for individuals or small business; and Possible conflict with statutes or existing regulations.**

##### *In-house engineer vs. Qualified Professional Engineer*

The Department states that it "concurred with EPA's proposal to allow in-house engineers to certify the determination of technical infeasibility to route pump emissions to a control and the design and capacity of a closed vent system, **regardless of professional licensure.**" [Emphasis added]

The proposed regulation defines "in-house engineer" as an individual who is qualified by education, technical knowledge and experience to make an engineering judgment and the required specific technical certification. Since there is no requirement that the individual be employed by the facility, we ask the EQB to clarify the intent of this provision. What problem or situation is being addressed? Why is it needed?

Should the term "in-house engineer" be retained or, as some commentators have suggested, replaced with "qualified engineer," we ask the EQB to explain how the term is consistent with the "Engineer, Land Surveyor, and Geologist Registration Law" (Act of May 23, 1945, P.L. 913, No. 367, Cl. 63) and the regulations governing professional qualified engineers and engineers-in-training. (Title 49 Chapter 37) A fiscal analysis should be included that compares the costs of using an "in-house engineer" versus a "qualified professional engineer" under these sections.

Finally, the EQB should explain how setting lesser standards for compliance (i.e. permitting an unlicensed individual to certify the system he or she may have designed) is in the public interest.

**7. RRA Sections 5.2(b)(3)(i)(ii) and (iv) - Clarity and lack of ambiguity; Reasonableness of requirements, implementation procedures and timetables for compliance; and Possible conflict with statutes or regulations.**

*Scope of the rulemaking*

Commentators representing the conventional oil and gas industry are uncertain whether the proposed regulation applies to conventional oil and gas operations in Pennsylvania. They say, the regulation includes some equipment which can be utilized in conventional oil and gas operations, but were informed that this regulation would not apply to their sector of the industry. We ask the EQB to clarify, which provisions, if any apply to the conventional oil and gas industry and how that the proposal is consistent with Act 52 of 2016.

*Effective date and timeframes*

The effective date of the proposed regulation is immediately upon publication as a final-form rulemaking in the *Pennsylvania Bulletin*. Commentators suggest that a minimum of a 60-day effective date would give owners and operators additional time to reasonably transition into the new requirements so that existing facilities are not required to immediately implement and comply with the new rules. Others suggest that owners and operators will need considerably more time to determine if their sources are required to comply with the rulemaking, as well as mobilize the necessary resources to perform the required inspections.

In addition, interested parties representing the oil and gas industry request that time periods between inspections be extended or made consistent with current CTG timeframes to avoid duplicate compliance activities. We encourage the EQB to work with the regulated community to resolve issues pertaining to inspection timeframes and recommend revising the effective date of the rulemaking to give sufficient time to the regulated community to implement and comply with requirements or explain why it is unnecessary to do so.

*Permitting program*

The *Benefits, Costs and Compliance* section of the Preamble, describes how the VOC RACT requirements established by this proposed rulemaking will be incorporated into “an existing permit.” How will this process to incorporate an existing permit be implemented based on the compliance schedule in Section 29F of the RAF (pertaining to expected date by which permits, licenses or other approvals must be obtained)? The EQB should provide a more detailed explanation of the process contained in this section and how it will be implemented.

*Alternative leak detection methods*

Interested parties representing environmental concerns commend the EQB for including alternative leak detection methods in the rulemaking. What is the approval process for

alternative leak detection methods? Will alternative leak detection methods be required to achieve equivalent emission reductions as currently allowed devices or methods? We ask the EQB to describe the requirements and approval process for alternative leak detection methods in the Preamble to the final-form rulemaking.

*EPA's proposed withdrawal of the 2016 CTG and review of 2016 NSPS*

The EQB states that "Even though a finalized withdrawal of the 2016 CTG would relieve the state of the requirement to address RACT for existing oil and gas sources, the Department is still obligated to reduce ozone and VOC emissions to ensure that NAAQS is attained and maintained under section 110 of the CAA. 42 U.S.C.A. § 7410." (Section 9 of the RAF) Commentators have asked the EQB to consider another public comment period should the federal regulations or guidelines be significantly changed before the final promulgation of the rulemaking. We ask the EQB to explain how it will proceed if there are significant changes made to 2016 CTG or 40 CFR Part 60 Subparts OOOO and OOOOa prior to the promulgation of the final-form rulemaking.

**8. RRA Section 5.2(b)(3)(iii) - Need for the regulation.**

Section 5.2 of the RRA (71 P.S. § 745.5b) directs this Commission to determine whether a regulation is in the public interest. When making this determination, the Commission considers criteria such as economic or fiscal impact and reasonableness. To make that determination, the Commission must analyze the text of the proposed regulation and the reasons for the new or amended language. The Commission also considers the information a promulgating agency is required to provide under Section 5 of the RRA in the Regulatory Analysis Form (RAF) (71 P.S. § 745.5(a)).

The Preamble and the RAF do not adequately describe the rationale or need for certain requirements or exclusions. Commentators representing environmental concerns identify two key provisions that they say are contrary to the goals of this rulemaking. The first is the exemption of low-producing wells from the requirements of LDAR inspections. The second one is the "step down" provision that allows owners and operations to decrease the frequency of LDAR inspections if the percentage of leaking components is less than 2 percent for two consecutive quarterly inspections. Owners and operators would have the option to reduce the inspection frequency to semi-annually. Opponents of these two measures say it is "faulty and risky" for the Department to assume that conventional operations don't emit at levels high enough to have a significant impact on air quality and climate.

Representatives from the oil and gas industry observe that no analysis has been shared by the EQB to support the Department's conclusion that the proposed requirements that are more stringent than EPA's 2016 CTG "are reasonably necessary" to achieve or maintain the National Ambient Air Quality Standards (NAAQS). Commentators question the need to exceed the 2016 CTG when Pennsylvania is near universal compliance with the 1997, 2008 and 2013 ozone standards. They explain that the state is not required to rely on the recommendations of the 2016 CTG to establish the proposed rulemaking. Instead it could make RACT determinations for a particular source on a case-by-case basis considering the technological and economic feasibility

of the individual source. Section 11 of the RAF also states that the Department determined that owners and operators must conduct quarterly LDAR inspections at their facilities, as opposed to the recommended semiannual frequency in the 2016 CTG.

We ask the EQB, with each of the examples above, to explain the need for each provision and how determinations were made, as well what data was used to justify the exemptions or more stringent regulations.

**9. RRA Sections 5(a)(12.1) and 5.2 (b)(8) -- Whether a less costly or less intrusive alternative method of achieving the goal of the regulation has been considered for regulations impacting small business.**

Section 5(a)(12.1) of the RRA (71 P.S. § 745.5(a)(12.1)) requires promulgating agencies to provide a regulatory flexibility analysis and to consider various methods of reducing the impact of the proposed regulation on small business. Commentators do not believe that the EQB has met its statutory requirement of providing a regulatory flexibility analysis or considering various methods of reducing the impact the proposed regulation will have on small business in its responses to various sections and questions on the RAF.

It is unclear from the RAF, whether the 303 conventional wells subject to LDAR inspections are owned by small businesses. However, commentators believe most, if not all, are small businesses and strongly disagree that they will incur minimal costs as a result of the proposed rulemaking.

Section 15 of the RAF, states that "further analysis is required to determine if any of the affected sources are owned or operated by small businesses." If it is unknown whether any of the affected sources are owned by small businesses, how was it determined that costs would be minimal? We agree that further analysis is needed to determine the financial impact on small businesses. We ask the EQB to provide the required regulatory flexibility analysis when it submits the final-form rulemaking.

## **CHAPTER 129. STANDARDS FOR SOURCES**

### **Control of VOC Emissions from Oil and Natural Gas Sources**

**10. Section 129.121. General provisions and applicability. – Clarity and lack of ambiguity.**

Subsection (a) provides that the proposed rulemaking would apply to the owner or operators of storage vessels in all segments except natural gas distributions; natural gas-driven pneumatic controller; natural gas driven diaphragm pump; reciprocating compressor; centrifugal compressor; or fugitive emissions component which were in existence on or before the effective date of the final-form rulemaking.

Commentators ask how “existing” will be interpreted under this rulemaking since there may be facilities that have initiated construction but are not yet operational on the effective date of the rule. We ask the EQB to explain, in Preamble to the final-form regulation, how “existing” will be interpreted under this chapter.

#### **11. Section 129.122. Definitions, acronyms and EPA methods. – Clarity.**

##### *“Deviation”*

Subparagraph (iii) of this definition includes a failure to meet an emission limit, operating limit, or work practice standard during start-up, shutdown or malfunction as a “deviation” regardless of whether a failure is permitted by these rules. Commentators ask the EQB to make clear that failure to meet a limit or standard should not be considered a “deviation” if permit conditions are met. We ask the EQB to clarify this definition.

##### *“First attempt at repair”*

For consistency, the definition should be revised to replace “organic material” with “VOCs.”

##### *“In-house engineer”*

What is meant by “an engineering judgment?” The EQB should define this term or explain why it is unnecessary to do so.

##### *“Leak”*

Subparagraph (i) reads “A positive indication, whether audible, visual or odorous, determined during an AVO inspection.” It has been suggested by commentators that this subparagraph be amended for clarity in the following way “A positive indication of a leak...” We agree with this suggestion.

##### *“TOC –Total organic compounds”*

The phrase “For purposes of this section, §§ 129.121 and 129.123-129.130” is unnecessary and should be deleted in the final-form rulemaking.

##### *“Qualified professional engineer”*

Subparagraph (ii) provides that “The individual making this certification must be currently licensed in this Commonwealth or another **state in which the responsible official, as defined in § 121.1 (relating to definitions), is located** and with which the Commonwealth offers reciprocity.” [Emphasis added.] What is the need for this provision?

**12. Section 129.123. Storage vessels. – Clarity; Reasonableness of requirements; and Implementation procedures.**

The definitions of “conventional well” and “unconventional well” as defined in 25 Pa. Code 78.1 and 78a.1 should be included by reference in § 129.122(a).

*Subsection (a)*

§ 129.123 (a)(2)(i) requires that potential VOC emissions for conventional, unconventional, gathering and boosting station and at a facility in the natural gas transmission and storage segment use a generally accepted model or calculation methodology, based on the maximum average daily throughput prior to the effective date of the rulemaking. Commentators ask the Department to revise this section to allow all generally accepted models or calculation methodologies and request the language referencing historical data be deleted. Use of past maximum averages that are no longer representative of the facilities throughputs, they say, will not provide an accurate emissions profile to justify the proposed compliance requirements. The EQB should explain its rationale for and the reasonableness of the provision relating to historical data.

§ 129.123(a)(2)(ii) provides that the determination of potential VOC emission must consider requirements under a legally and practically enforceable limit established in an operating permit or plan approval approved by the Department. The EQB should explain in the Preamble to the final-form regulation whether state permitting programs such as the GP5, GP5a, and existing Exemption 38 programs will be considered satisfactory for this requirement.

*Subsection (b)*

§ 129.123(b)(1)(iii) requires routing emissions to a control device or process that meets the applicable requirements of § 129.129. Commentators note that § 129.129 contains requirements specific only to “control devices” and not to “processes.” The EQB should explain the intent of the proposed language and revise it if necessary. Similar language appears in §§ 129.125(b)(1)(ii), 129.126(c)(2), 129.128(a)(2)(ii) and 129.128(b)(1).

**13. Section 129.124. Natural gas-driven pneumatic controller. – Reasonableness of requirements.**

*Subsection (d)*

This subsection requires the owner or operator to tag each affected natural-gas driven pneumatic controller with the date the controller is required to comply with the requirements of this section and an identification number that ensures traceability to the records for that controller. We ask the EQB to explain the rationale for this requirement, including why it believes it is reasonable.

**14. Section 129.125. Natural gas driven diaphragm pumps.**

*Subsection (c)*

Please refer to comments in section pertaining to “*In-house engineers.*”

**15. Section 129.127. Fugitive emission components. --Determining whether a regulation is in the public interest; Protection of the public health, safety and welfare and the effect on this Commonwealth's natural resources; Reasonableness of requirements, implementation procedures and timetables for compliance; and Whether the regulation is supported by acceptable data.**

*Subsections (a)*

We ask the EQB to specify a timeframe that will be used to determine per-day average production figures, or explain why it is unnecessary to do so.

*Subsection (b)*

We ask the EQB to clarify whether these adjustments to the LDAR inspection intervals are required under subsection § 129.127(e) (relating to requirements for extension of the LDAR inspection interval).

*Subsection (e)*

Subsection (e) permits the owner or operator of an affected facility to request, in writing, an extension of the LDAR inspection interval. We ask the EQB to explain the need for an extension. Under what conditions or circumstances may an owner or operator request an extension? If certain conditions or requirements are needed to request an extension, how will owners or operators be informed about those conditions or requirements? What is the maximum amount of time that an extension may be granted?

**16. Section 129.128. Covers and closed vent systems.**

*Subsection (c)*

Please refer to comments in the section regarding “*In-house engineers.*”

**17. Section 129.129. Control devices. – Clarity.**

*Subsection (b)*

§ 129.129(b)(5)(ii) refers to an “inspection and maintenance plan” in § 129.129(b)(1) that does not exist. We ask the EQB to clarify the intent of this subparagraph and revise, if necessary.

*Subsection (c)*

We ask the EQB to delete the reference to “(c)(1)(ii)” in § 129.129(k)(5) since “(c)(1)(ii)” does not require or refer to a weigh-percent VOC emission reduction requirement.

*Subsection (j)*

§§ 129.129(j)(1)(v)(D) and 129.129 (j)(1)(vi)(B) provides for requests for extension of initial performance test reports. Please refer to our comments regarding the LDAR inspection interval extension requests in §129.127 (e) as the questions apply also to this subsection.

**18. Section 129.130. Recordkeeping and reporting. – Clarity.**

*Subsection (d)*

§ 129.130(d)(1) requires the records for each natural gas-driven diaphragm pump to include the date, location and manufacturer specifications for each pump. What “date” is required under this subsection? The EQB should revise this section to make clear the date to which it is referring.

*Subsection (g)*

§ 129.130(g)(2)(ii)(G)(II) requires the “instrument reading of each fugitive emission component” that meets the definition of a leak under the rulemaking. Should this subsection be revised for consistency to account for leaks that are detected with OGI equipment.?

**19. Miscellaneous. – Clarity.**

We recommend the following clarifications:

- Section 15 of the RAF indicates that the table in Section 23 provides a breakdown of the cost data for the industry? The figures provided in the table in Section 23 of the RAF represent industry-wide cost and savings estimates. The RAF in the final-form regulation should include the chart as described, or remove this statement if one does not exist;
- § 121.1 under the term “Responsible official” subparagraph (iv) clause (B) after “or Chapter 129” parentheses containing a description of what the chapter is relating to should be included;
- § 129.122(a) states that “the following words and terms, when used in this section, §§ 129.121 and 129.123-120.130, **have** the following meaning . . .” [Emphasis added] We would suggest inserting “shall” before “have” and revising “section” to “chapter;” Additionally, “section” should be deleted and replaced with “chapter” in “*Deviation*” and “*TOC –Total organic compounds*” definitions;
- The following terms and definitions appear § 129.122 (a) but are not used in the text of the Annex: “*completion combustion device,*” “*fuel gas,*” “*fuel gas system,*” “*natural gas and oil production segment,*” “*natural gas processing segment,*” “*transmission compression station,*” and “*underground storage vessel.*” These terms and definitions should be deleted;
- For consistency, § 129.128 (d), a reference to the recordkeeping and reporting requirements found § 129.130(i)(2) should be included in this subsection; and
- § 129.130(k) we recommend replacing “can” with “may.”