DEPARTMENT OF ENVIRONMENTAL QUALITY SUMMARY OF COMMENTS AND STAFF RESPONSES FOR PROPOSED REVISIONS TO CHAPTER 100. AIR POLLUTION CONTROL RULES, SUBCHAPTER 7

COMMENTS RECEIVED PRIOR TO AND DURING THE APRIL 24, 2024 AIR QUALITY ADVISORY COUNCIL MEETING

Written Comments

The Petroleum Alliance of Oklahoma – Submitted as an attachment to an email received on April 10, 2024 from Mr. Howard L. (Bud) Ground, Director of Regulatory Affairs.

1. **COMMENT:** The Petroleum Alliance of Oklahoma (hereafter "the Alliance") requested clarity on how the enforceable limits will be set and asked, "Will the limits be based on monthly or annual average through-puts and pressures?" The Alliance stated that the Permit By Rule (PBR) may be of limited benefit if the potential to emit (PTE) calculation is not allowed to be based on an annual average.

RESPONSE: Ultimately, the final answer to this question could depend on written guidance from EPA and DEQ's interpretation of that guidance. However, until said written guidance is received, DEQ will proceed with our current interpretation as described below.

Annual volatile organic compound (VOC) and methane legally and practicably enforceable (LPE) limits for tank batteries are established in proposed new Subsection (d) of the PBR (OAC 252:100-7-60.5). The PBR is set up to require compliance with the tons per year limits based on 12-month rolling totals demonstrated monthly using monthly throughputs. The applicant is required to document pressures used in the calculations. This is consistent with past permitting policies.

In response to the concern expressed by the Alliance over PTE calculations, applications for registration under the PBR should be based on applicant's best projection of emissions which will demonstrate compliance with the limits requested. Compliance with the limits must then be demonstrated as stated above.

DEQ received informal verbal feedback from EPA (expanding on the concepts in the preamble of the Subpart OOOOb rule and further clarifying EPA's Response to Comments in the preamble) stating that tank battery applicability must be based on the "maximum average daily throughput" determined during the first 30 days that the individual tank or tank battery receives fluids as defined in 40 CFR § 60.5430b. This "maximum average daily throughput," annualized to tons per year, would then be used to determine whether the individual storage tank or tank battery will *not* meet the definition of "storage vessel affected facility" as defined in 40 CFR § 60.5365b(e). Assuming an owner/operator collects throughput data every day, a simplified way of looking at this calculation is to think about the LPE limits as limits of less than 0.5 tons of VOCs and less than 1.67 tons of methane in the first 30 days of operation. This is a new interpretation of how to demonstrate initial compliance.

It is important to note that the emergency rule language, as written, can accommodate either interpretation. Future guidance will be provided as necessary to finalize DEQ's policy, if/when EPA provides an official written position on this matter. Further, the future permanent version of this rule would be able to provide further clarification, if needed.

2. COMMENT: The Alliance referenced proposed OAC 252:100-7-60.5(d)(1)(A)(iii) and asked whether DEQ anticipates there will be different calculation methods for tank working, breathing, and flashing emissions than what is currently used under the PBR.

RESPONSE: At this time, DEQ does not anticipate that there will be different calculation methods than those currently used under the PBR. Please see DEQ guidance – in particular the "Guidance on Estimating Flashing Losses and Guidance on Determining Representative Process Stream Composition Data for Oil and Gas Facilities" and the "Representative Sampling Guidance" – for additional information. See response to Comment #3, below, with regard to methane emissions calculations. Additional guidance or amendments to existing guidance may be necessary to address methane emissions calculations performed using methods *other* than process simulators.

3. COMMENT: The Alliance referenced proposed OAC 252:100-7-60.5(d)(1)(A)(v) and asked what calculation methods should be used to show compliance with the methane limits.

RESPONSE: The focus of DEQ's guidance has been the calculation of VOC emissions, but process simulators (discussed in the guidance) also calculate methane emissions. In addition, the owner/operator may use any generally acceptable model or calculation methodology that accounts for flashing, working, and breathing losses to determine methane emissions.

4. **COMMENT:** The Alliance stated that during periods when operators are not utilizing a Vapor Recovery Unit (VRU) due to maintenance, the operators need the ability to permit a flare as a back-up control device. The Alliance asked whether this can be accomplished under the proposed PBR.

RESPONSE: The revised PBR as proposed can accommodate the use of a flare as a backup control device when a facility conducts the required monitoring of the flare to document operation. The PBR provides sufficient context for such an approach, but DEQ will issue additional guidance as necessary.

5. COMMENT: The Alliance stated that flow meters on low pressure streams to flares are not very accurate, and asked if operators will be able to estimate those low flows to flares.

RESPONSE: The proposed PBR revision was written to limit the use of combustion control to unassisted flares and unassisted enclosed combustors as a control option to demonstrate compliance with LPE limits. Air-assisted or steam-assisted flares will require an individual facility permit or a modified version of the Oil & Gas General Permit (currently in development) to specify additional requirements to demonstrate compliance

with LPE limits where those types of combustion devices are used as the control device. While determination of the flow of vapors emitted by storage vessels and directed by a closed vent system to an unassisted flare is helpful, as long as a pilot light is maintained (and confirmed), the PBR does not require measurement of the volumetric rate of vapor flow to the flare.

6. COMMENT: The Alliance requested confirmation that an existing facility that is covered by a PBR would not be required to have an LPE to stay under its current PBR. The Alliance also requested confirmation that facilities constructed after December 6, 2022, and before the emergency rules are in place, will not have the option to use LPEs (to exempt storage tank batteries from being regulated as "storage vessel affected facilities" under NSPS Subpart OOOOb) in a PBR. Finally, the Alliance requested confirmation that new facilities constructed after the emergency rules are in effect will need to obtain a PBR with LPEs if they do not want to be subject to the tank battery requirements of Subpart OOOOb.

RESPONSE: The Alliance's understanding is correct. Note that a facility with an uncontrolled PTE based on the first 30 days of operation that was less than the VOC and methane thresholds in NSPS Subpart OOOOb could still request LPE limits.

7. COMMENT: The Alliance asked if the existing PBR can be used to allow new facilities that are subject to 40 CFR Part 60, Subpart OOOOb to be constructed and operated without LPE limits.

RESPONSE: Yes, the current PBR could be used to allow new facilities subject to NSPS Subpart OOOOb to be constructed and operated without LPE limits.

8. COMMENT: The Alliance requested confirmation that existing facilities that want federally enforceable limits in their PBR to exempt tanks from the requirements of NSPS Subpart OOOO or Subpart OOOOa will not be affected by the emergency rule but in the future may need to address Subpart OOOOc requirements for methane.

RESPONSE: DEQ confirms that existing facilities do not need to make any changes to their current PBR if they have already taken a 6 TPY limit to exempt their tanks from the requirements of NSPS Subparts OOOO/OOOOa. DEQ also confirms that the existing facilities may need to address Subpart OOOOc requirements for methane in the future.

9. COMMENT: The Alliance asked if air-assisted flares will be allowed under the new PBR.

RESPONSE: Air-assisted flares, as a control option to demonstrate compliance with LPE limits, are not allowed under the new PBR. However, an air-assisted flare may be used under the PBR to control emissions from "storage vessel affected facilities" subject to the requirements of §60.5395b or to control emissions from other units subject to NSPS, Subpart OOOOb, as long as the operation of the air-assisted flare complies with the requirements of that subpart.

10. COMMENT: The Alliance asked if the PBR registration form referenced in OAC 252:100-7-60.5(d) has been developed.

RESPONSE: DEQ has not yet developed a revised PBR registration form. This form will be developed after the PBR language is finalized, and before the emergency rule goes into effect if it is approved.

11. COMMENT: The Alliance requested that the method referenced in proposed OAC 252:100-60.5(d)(1)(C)(III) be changed from 40 CFR § 60.18(f)(3) to include the use of the GPA 2261 method. The Alliance stated that the oil and natural gas industry commonly uses the GPA method and believes that it is more appropriate and less expensive.

RESPONSE: Since GPA 2261 is an approved method under 40 CFR Part 75, DEQ concurs with the use of this method as an alternative to the ASTM method to determine net heating value specified in 40 CFR § 60.18(f)(3). The proposed rule language has been modified to add "GPA Method 2261, or other approved method" and now reads as follows:

(III) perform an initial, and semi-annually thereafter, determination of the net heating value of the gasses combusted using the equation in 40 CFR § 60.18(f)(3), GPA Method 2261, or other approved method.

12. COMMENT: The Alliance requested the following rule language change in proposed OAC 252:100-7-60.5(d)(1)(E). The Alliance stated that the change would eliminate a duplication of requirements:

(E) Recordkeeping updated monthly and maintained for a period of five (5) years, including:

(i) Records of contents stored,

(ii) Monthly and 12-month rolling total throughputs, <u>or monthly and 12-month rolling total</u> emissions calculations used to demonstrate compliance,

(iii) Records of parameters monitored as required in subparagraphs (A) and (B) above, (iv) Monthly and 12 month rolling total emissions calculations used to demonstrate compliance,

(v)(iv) Times and emissions when the system used to comply with the LPE limits is not operating in accordance with the requirements established in this subsection, and (vi)(v) Records of all periods of uncontrolled venting.

(vii)(vi) Equipment specifications, manuals, and/or maintenance records, as appropriate.

RESPONSE: The EPA rule establishes certain minimum requirements to demonstrate continuous compliance with the LPE limits. Due to the generic nature of the PBR, establishing a quantitative production limit as the *exclusive* method of demonstrating continuous compliance and creating such a limit in advance of construction would be problematic. Therefore, DEQ believes that an individual facility permit is a more appropriate vehicle for establishing such a limit, due to the complicated, facility-specific conditions that allow a throughput limit (on its own) to demonstrate compliance with an emission limit. Due to the more generic nature of a PBR, a cap on emissions (with compliance demonstrated through monthly and 12-month total calculations of emissions

to show compliance with the cap) is required when demonstrating compliance with a tons per year emission limit, per long-standing EPA guidance. To demonstrate continuous compliance with the cap, monthly throughput quantities need to be recorded *and* emissions (both monthly and 12-month rolling totals) need to be calculated. This is the same policy currently used for the Oil & Gas General Permit. If necessary, DEQ will issue guidance to update, clarify, or modify the policies described in this Response to Comments document. No revision to the rule proposal has been made based on the requested change.