

**BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

Petition Nos. VIII-2025-23 & VIII-2025-24

In the Matter of

Terra Energy Partners Rocky Mountain, LLC

Mamm Creek Compressor Station
Permit No. 07OPGA293

Bailey Compressor Station
Permit No. 09OPGA339

Issued by the Colorado Department of Public Health and Environment

ORDER DENYING PETITIONS FOR OBJECTION TO TITLE V OPERATING PERMITS

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received two petitions (collectively, the “Petitions”) from the Center for Biological Diversity (the “Petitioner”), pursuant to Clean Air Act (CAA) section 505(b)(2).¹ The first petition, dated May 30, 2025, (the “Mamm Creek Petition”) requests that the EPA Administrator object to operating permit No. 07OPGA293 (the “Mamm Creek Permit”) issued by the Colorado Department of Public Health and Environment (CDPHE) to the Terra Energy Partners Rocky Mountain, LLC (TEP) Mamm Creek Compressor Station (“Mamm Creek”) in Garfield County, Colorado. The second petition, dated May 30, 2025, (the “Bailey Petition”) requests that the EPA Administrator object to operating permit No. 09OPGA339 (the “Bailey Permit”) issued by CDPHE to the TEP Bailey Compressor Station (“Bailey”) in Garfield County, Colorado. The two Permits were issued pursuant to title V of the CAA and CDPHE’s EPA-approved operating permit program rules.² These types of operating permits are also known as title V permits or part 70 permits.

Based on a review of the Petitions and other relevant materials, including the Permits, the permit records, and relevant statutory and regulatory authorities, and as explained

¹ 42 U.S.C. § 7661d(b)(2)

² 42 U.S.C. §§ 7661-7661f; 5 CCR 1001-5, Part C; *see also* 40 C.F.R. part 70 (title V implementing regulations).

in Section IV of this Order, the EPA denies the Petitions requesting that the EPA Administrator object to the Permits.

II. STATUTORY AND REGULATORY FRAMEWORK

A. Title V Permits

CAA section 502(d)(1) requires each State to develop and submit to the EPA an operating permit program to meet the requirements of title V of the CAA and the EPA's implementing regulations at 40 C.F.R. part 70.³ The State of Colorado submitted a title V operating permit program on November 5, 1993. The EPA granted interim approval of Colorado's operating permit program in January 1995 and full approval in August 2000.⁴

All major stationary sources of air pollution and certain other sources are required to apply for and operate in accordance with title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable implementation plan.⁵ One purpose of the title V operating permit program is to "enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements."⁶ Title V operating permits compile and clarify, in a single document, the substantive air quality control requirements derived from numerous provisions of the CAA. By clarifying which requirements apply to emission units at the source, title V operating permits enhance compliance with those applicable requirements of the CAA. The title V operating permit program generally does not impose new substantive air quality control requirements, but does require that permits contain adequate monitoring, recordkeeping, and reporting requirements to assure the source's compliance with the underlying substantive applicable requirements.⁷ Thus, the title V operating permit program is a vehicle for compiling the air quality control requirements as they apply to the source's emission units and for providing adequate monitoring, recordkeeping, and reporting to assure compliance with such requirements.

B. Review of Issues in a Petition

State and local permitting authorities issue title V permits pursuant to their EPA-approved title V operating permit programs. Under CAA section 505(a) and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), States are required to submit

³ 42 U.S.C. § 7661a(d)(1).

⁴ See 60 Fed. Reg. 4563 (Jan. 24, 1995) (interim approval); 61 Fed. Reg. 56368 (Oct. 31, 1996) (revising interim approval); 65 Fed. Reg. 49919 (Aug. 16, 2000) (full approval). This program is codified in 5 CCR 1001-5, Part C.

⁵ 42 U.S.C. §§ 7661a(a), 7661b, 7661c(a).

⁶ 57 Fed. Reg. 32250, 32251 (July 21, 1992).

⁷ 40 C.F.R. § 70.1(b); see 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1).

each proposed title V operating permit to the EPA for review.⁸ Upon receipt of a proposed permit, the EPA has 45 days to object to final issuance of the proposed permit if the Agency determines that the proposed permit is not in compliance with applicable requirements under the CAA.⁹ If the EPA does not object to a permit on the Agency's own initiative, any person may, within 60 days of the expiration of the EPA's 45-day review period, petition the Administrator to object to the permit.¹⁰

Each petition must identify the proposed permit on which the petition is based and identify the petition claims.¹¹ Any issue raised in the petition as grounds for an objection must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements under 40 C.F.R. part 70.¹² Any arguments or claims the petitioner wishes the EPA to consider in support of each issue raised must generally be contained within the body of the petition.¹³

The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting authority (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period).¹⁴

In response to such a petition, the CAA requires the Administrator to issue an objection to the permit if a petitioner demonstrates that the permit is not in compliance with the requirements of the CAA.¹⁵ Under CAA section 505(b)(2), the burden is on the petitioner to make the required demonstration to the EPA.¹⁶ As courts have recognized, CAA section 505(b)(2) contains both a "discretionary component," under which the Administrator determines whether a petition demonstrates that a permit is not in compliance with the requirements of the CAA, and a nondiscretionary duty on the

⁸ 42 U.S.C. § 7661d(a).

⁹ 42 U.S.C. § 7661d(b)(1); 40 C.F.R. § 70.8(c).

¹⁰ 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

¹¹ 40 C.F.R. § 70.12(a).

¹² 40 C.F.R. § 70.12(a)(2).

¹³ If reference is made to an attached document, the body of the petition must provide a specific citation to the referenced information, along with a description of how that information supports the claim. In determining whether to object, the Administrator will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. *Id.*

¹⁴ 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); *see* 40 C.F.R. § 70.12(a)(2)(v).

¹⁵ 42 U.S.C. § 7661d(b)(2); *see also New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (NYPIRG).

¹⁶ 42 U.S.C. § 7661d(b)(2); *see WildEarth Guardians v. EPA*, 728 F.3d 1075, 1081–82 (10th Cir. 2013); *MacClarence v. EPA*, 596 F.3d 1123, 1130–33 (9th Cir. 2010); *Sierra Club v. EPA*, 557 F.3d 401, 405–07 (6th Cir. 2009); *Sierra Club v. Johnson*, 541 F.3d 1257, 1266–67 (11th Cir. 2008); *Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670, 677–78 (7th Cir. 2008); *cf. NYPIRG*, 321 F.3d at 333 n.11.

Administrator's part to object if such a demonstration is made.¹⁷ Courts have also made clear that the Administrator is only obligated to grant a petition to object under CAA section 505(b)(2) if the Administrator determines that the petitioner has demonstrated that the permit is not in compliance with requirements of the CAA.¹⁸ When courts have reviewed the EPA's interpretation of the ambiguous term "demonstrates" and the Agency's determination as to whether the demonstration has been made, they have applied a deferential standard of review.¹⁹ Certain aspects of the petitioner's demonstration burden are discussed in the following paragraphs. A more detailed discussion can be found in the preamble to the EPA's proposed petitions rule.²⁰

The EPA considers a number of factors in determining whether a petitioner has demonstrated noncompliance with the CAA.²¹ For each claim, the petitioner must identify (1) the specific grounds for an objection, citing to a specific permit term or condition where applicable; (2) the applicable requirement as defined in 40 C.F.R. § 70.2, or requirement under 40 C.F.R. part 70, that is not met; and (3) an explanation of how the term or condition in the permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement or requirement under 40 C.F.R. part 70.²²

If a petitioner does not satisfy these requirements and provide sufficient citations and analysis, the EPA is left to work out the basis for the petitioner's objection, which is contrary to Congress's express allocation of the burden of demonstration to the petitioner in CAA section 505(b)(2).²³ Relatedly, the EPA has pointed out in numerous previous orders that generalized assertions or allegations did not meet the

¹⁷ *Sierra Club v. Johnson*, 541 F.3d at 1265–66 (“[I]t is undeniable [that CAA section 505(b)(2)] also contains a discretionary component: it requires the Administrator to make a judgment of whether a petition demonstrates a permit does not comply with clean air requirements.”); *NYP/RG*, 321 F.3d at 333.

¹⁸ *Citizens Against Ruining the Environment*, 535 F.3d at 677 (stating that CAA section 505(b)(2) “clearly obligates the Administrator to (1) determine whether the petition demonstrates noncompliance and (2) object if such a demonstration is made” (emphasis added)); *see also Sierra Club v. Johnson*, 541 F.3d at 1265 (“Congress's use of the word 'shall' . . . plainly mandates an objection whenever a petitioner demonstrates noncompliance.” (emphasis added)).

¹⁹ *See, e.g., Voigt v. EPA*, 46 F.4th 895, 902 (8th Cir. 2022); *WildEarth Guardians*, 728 F.3d at 1081–82; *MacClarence*, 596 F.3d at 1130–31.

²⁰ When the EPA finalized this rulemaking in 2020, the Agency referred back to (but did not repeat) the proposed rule's extensive background discussion regarding the petitioner's demonstration burden. See 85 Fed. Reg. 6431, 6433, 6439 (Feb. 5, 2020) (final rule). 81 Fed. Reg. 57822, 57829–31 (Aug. 24, 2016) (proposed rule); *see also In the Matter of Consolidated Environmental Management, Inc., Nucor Steel Louisiana*, Order on Petition Nos. VI-2011-06 and VI-2012-07 at 4–7 (June 19, 2013) (*Nucor II Order*).

²¹ *See generally Nucor II Order* at 7.

²² 40 C.F.R. § 70.12(a)(2)(i)–(iii).

²³ *See MacClarence*, 596 F.3d at 1131 (“[T]he Administrator's requirement that [a title V petitioner] support his allegations with legal reasoning, evidence, and references is reasonable and persuasive.”); *see also In the Matter of Murphy Oil USA, Inc.*, Order on Petition No. VI-2011-02 at 12 (Sept. 21, 2011) (denying a title V petition claim in which petitioners did not cite any specific applicable requirement that lacked required monitoring); *In the Matter of Portland Generating Station*, Order on Petition at 7 (June 20, 2007) (*Portland Generating Station Order*).

demonstration standard.²⁴ Also, the failure to address a key element of a particular issue presents further grounds for the EPA to determine that a petitioner has not demonstrated a flaw in the permit.²⁵

Another factor the EPA examines is whether the petitioner has addressed the State or local permitting authority's decision and reasoning contained in the permit record.²⁶ This includes a requirement that petitioners address the permitting authority's final decision and final reasoning (including the State's response to comments) if these documents were available during the timeframe for filing the petition. Specifically, the petition must identify if the permitting authority responded to the public comment and explain how the permitting authority's response is inadequate to address (or does not address) the issue raised in the public comment.²⁷

The information that the EPA considers in determining whether to grant or deny a petition submitted under 40 C.F.R. § 70.8(d) generally includes, but is not limited to, the administrative record for the proposed permit and the petition, including attachments to the petition. The administrative record for a particular proposed permit includes the draft and proposed permits, any permit applications that relate to the draft or proposed permits, the statement required by § 70.7(a)(5) (sometimes referred to as the "statement of basis"), any comments the permitting authority received during the public participation process on the draft permit, the permitting authority's written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit, and all materials available to the permitting authority that are relevant to the permitting decision and that the permitting authority

²⁴ See, e.g., *In the Matter of Luminant Generation Co., Sandow 5 Generating Plant*, Order on Petition No. VI-2011-05 at 9 (Jan. 15, 2013); see also *Portland Generating Station Order* at 7 ("[C]onclusory statements alone are insufficient to establish the applicability of [an applicable requirement]."); *In the Matter of BP Exploration (Alaska) Inc., Gathering Center #1*, Order on Petition Number VII-2004-02 at 8 (Apr. 20, 2007); *In the Matter of Georgia Power Company*, Order on Petitions at 9–13 (Jan. 8, 2007) (*Georgia Power Plants Order*); *In the Matter of Chevron Products Co., Richmond, Calif. Facility*, Order on Petition No. IX-2004-10 at 12, 24 (Mar. 15, 2005).

²⁵ See, e.g., *In the Matter of EME Homer City Generation LP and First Energy Generation Corp.*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 at 48 (July 30, 2014); see also *In the Matter of Hu Honua Bioenergy*, Order on Petition No. IX-2011-1 at 19–20 (Feb. 7, 2014); *Georgia Power Plants Order* at 10.

²⁶ 81 Fed. Reg. at 57832; see *Voigt*, 46 F.4th at 901–02; *MacClarence*, 596 F.3d at 1132–33; see also, e.g., *Finger Lakes Zero Waste Coalition v. EPA*, 734 Fed. App'x *11, *15 (2d Cir. 2018) (summary order); *In the Matter of Noranda Alumina, LLC*, Order on Petition No. VI-2011-04 at 20–21 (Dec. 14, 2012) (denying a title V petition issue in which petitioners did not respond to the State's explanation in response to comments or explain why the State erred or why the permit was deficient); *In the Matter of Kentucky Syngas, LLC*, Order on Petition No. IV-2010-9 at 41 (June 22, 2012) (denying a title V petition issue in which petitioners did not acknowledge or reply to the State's response to comments or provide a particularized rationale for why the State erred or the permit was deficient); *Georgia Power Plants Order* at 9–13 (denying a title V petition issue in which petitioners did not address a potential defense that the State had pointed out in the response to comments).

²⁷ 40 C.F.R. § 70.12(a)(2)(vi).

made available to the public according to § 70.7(h)(2). If a final permit and a statement of basis for the final permit are available during the EPA's review of a petition on a proposed permit, those documents may also be considered when determining whether to grant or deny the petition.²⁸

III. BACKGROUND

A. The Mamm Creek Facility and Permitting History

Mamm Creek is located in Silt, Garfield County, Colorado. The natural gas compressor station gathers gas from surrounding well sites via a gathering pipeline system. Emission units at Mamm Creek include triethylene glycol dehydrators, internal combustion engines, storage tanks, a flare, and natural gas venting activities. Mamm Creek is a title V major source of carbon monoxide (CO).

TEP first obtained a title V permit for Mamm Creek on July 1, 2012, which was renewed in 2017. On January 27, 2023, TEP applied for a title V permit renewal. On December 24, 2024, CDPHE published notice of a draft permit, subject to a public comment period that ended on January 23, 2025. On February 14, 2025, CDPHE submitted a proposed permit, along with its responses to public comments ("Mamm Creek RTC") and technical review document ("Mamm Creek TRD"), to the EPA for the Agency's 45-day review. The EPA's 45-day review period ended on March 31, 2025, during which time the Agency did not object to the proposed permit. On May 1, 2025, CDPHE issued the final Mamm Creek Permit.

B. The Bailey Facility and Permitting History

Bailey is located in Silt, Garfield County, Colorado. The natural gas compressor station gathers gas from surrounding well sites via a gathering pipeline system. Emission units at Bailey include triethylene glycol dehydrators, internal combustion engines, storage tanks, and a facility flare. Bailey is a title V major source of nitrogen oxides (NO_x) and volatile organic compounds (VOC).

TEP first obtained a title V permit for Bailey on June 1, 2012, which was renewed in 2017. On December 27, 2022, TEP applied for a title V permit renewal. On September 16, 2024, CDPHE published notice of a draft permit, subject to a public comment period that ended on October 16, 2024. On February 12, 2025, CDPHE submitted a proposed permit, along with its responses to public comments ("Bailey RTC") and technical review document ("Bailey TRD"), to the EPA for the Agency's 45-day review. The EPA's 45-day review period ended on March 31, 2025, during which time the Agency did not object to the proposed permit. On May 1, 2025, CDPHE issued the final Bailey Permit.

²⁸ 40 C.F.R. § 70.13.

C. Timeliness of Petitions

Pursuant to the CAA, if the EPA does not object to a proposed permit during the Agency's 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object.²⁹ The EPA's 45-day review period for the Permits ended on March 31, 2025. Thus, any petition seeking the EPA's objection to the Permits was due on or before May 30, 2025. The Petitions were submitted via email on May 30, 2025. Therefore, the EPA finds that the Petitioner timely filed the Petitions.

IV. EPA DETERMINATIONS ON PETITION CLAIMS

A. Claim 1: The Petitioner Claims That "The Title V Permit Does Not Ensure Adequate Monitoring to Assure the Dehydrators Comply with Applicable Emission Limits."

The Petitions contain nearly identical claims challenging nearly identical permit terms applicable to similar units across both facilities. The following summary, therefore, cites a single petition—the Mamm Creek Petition—for the majority of the Petitioner's arguments and indicates where and how the Petitions differ.

Petition Claim: The Petitioner presents an overarching claim that the Permits fail to assure compliance with annual VOC, NO_x, and CO emission limits and 95 percent VOC destruction efficiency requirements applicable to enclosed combustion devices (ECDs) controlling emissions from glycol dehydrators at the facilities, raising various issues related to testing requirements in the Permits.³⁰

The Petitioner asserts that all title V permits must set forth monitoring requirements to assure compliance with all permit terms and conditions, and that where a permit fails to do so, it is unenforceable as a practical matter.³¹

The Petitioner identifies the various units and applicable emission limits at issue in each claim—*e.g.*, three dehydrators (TEG01, TEG02, and TEG03) and an associated ECD at Mamm Creek subject to annual VOC, NO_x, and CO emission limits and a 95 percent VOC destruction efficiency requirement.³² The Petitioner claims that the Permits do not set forth sufficient monitoring of the ECDs controlling emissions from the dehydrators to assure compliance with the applicable emission limits and destruction efficiency

²⁹ 42 U.S.C § 7661d(b)(2).

³⁰ *See, e.g.*, Mamm Creek Petition at 4–9.

³¹ *E.g.*, *id.* at 4 (citing 42 U.S.C. § 7661c(a), (c); 40 C.F.R. § 70.6(a)(3)(i)(B), (c)(1)).

³² The Petitioner similarly identifies dehydrators and an associated ECD at Bailey subject to annual VOC, NO_x, and CO emission limits and a 95 percent VOC destruction efficiency requirement. Bailey Petition at 4.

requirements.³³ The Petitioner then supplies two distinct reasons why, in its opinion, the monitoring in the Permits is deficient.³⁴

Testing Frequency

The Petitioner notes that its public comments pointed out that the draft permits did not require any periodic testing of emissions to assure compliance with the emission limits or VOC destruction efficiency requirements. The Petitioner asserts that CDPHE “agreed” that the monitoring in the draft permits was inadequate and, therefore, added periodic performance testing of the ECDs.³⁵

The Petitioner claims that the frequency of testing—once every five years, in both cases—is insufficient to assure compliance with the applicable emission limits and destruction efficiency requirements.³⁶

In support, the Petitioner argues that the need for more frequent testing is clearly evident in CDPHE’s “own policies, regulations, and in other permits issued in Colorado.”³⁷ The Petitioner specifically references a permit for a different oil and gas production facility in Colorado that requires semiannual testing of an ECD that is required to achieve 98 percent VOC destruction efficiency.³⁸ The Petitioner also references a memorandum that it claims establishes a policy requiring at least annual testing of ECDs whenever a permittee requests a VOC control efficiency greater than 95 percent.³⁹

The Petitioner argues that there is no support for the idea that more frequent testing is only necessary at VOC control efficiencies greater than 95 percent. The Petitioner characterizes this cutoff as an arbitrary threshold and contends that ECDs required to meet either 95 percent or greater than 95 percent VOC control efficiency are just as likely to fail to achieve the required control efficiency.⁴⁰

Specifically regarding the NO_x and CO emission limits, the Petitioner claims that “[f]or NO_x and CO emissions, the Title V Permit itself indicates that more frequent testing is reasonable and necessary to assure compliance with applicable limits” because the

³³ E.g., Mamm Creek Petition at 4.

³⁴ See, e.g., *id.* at 4–9.

³⁵ E.g., *id.* at 5 (citing Mamm Creek RTC at PDF p. 2).

³⁶ E.g., *id.* at 5, 6, 8–9. The Petitioner identifies relevant performance testing requirements in Condition 5.5.4 of the Mamm Creek Permit and in Condition 4.6.4 of the Bailey Permit. *Id.* at 5; Bailey Petition at 5. All permit conditions referenced in this Order are in Section II of each Permit.

³⁷ E.g., Mamm Creek Petition at 6; *see id.* at 6–7.

³⁸ E.g., *id.* at 6–7 (citing Mamm Creek Petition Ex. 6, *Air Pollution Control Division Colorado Operating Permit No. 17OPJA401* at Section II, Condition 2.8 (Jan. 1, 2020)).

³⁹ E.g., *id.* at 7 (citing Mamm Creek Petition Ex. 7, *Oil and Gas Industry Enclosed Combustion Device Overall Control Efficiency Greater than 95%, Permitting Section Memo 20-02* at 4–5 (Feb. 4, 2020)).

⁴⁰ E.g., *id.*

Permits require “quarterly testing of NO_x and CO emissions from the Mamm Creek Compressor Station’s compressor engines using a portable flue gas analyzer.”⁴¹

The Petitioner claims that the parametric monitoring in the Permits—specifically referring to pilot light and visible emissions monitoring—cannot substitute for more frequent testing because the parametric monitoring “does not yield data representative of the source’s compliance with applicable quantitative limits, contrary to 40 C.F.R. § 70.6(a)(3)(i)(B).”⁴² The Petitioner also asserts that its comments on the draft permits identified numerous examples of ECDs failing to achieve required destruction efficiencies, even where such parametric monitoring was in place, and argues that these examples reveal the deficiency of the parametric monitoring in the Permits.⁴³ Further, the Petitioner claims that the EPA has previously “generally rejected” reliance on this kind of parametric monitoring to assure compliance with quantitative limits.⁴⁴

The Petitioner claims that CDPHE’s RTCs did not resolve these issues but merely provided general responses asserting that the Permits’ monitoring requirements were sufficient.⁴⁵

Additionally and relatedly, the Petitioner alleges that CDPHE’s failure to justify the testing frequency in the permit records is grounds for objection to the Permits.⁴⁶ The Petitioner claims that even though its comments on the draft permits addressed the subject of testing frequency and declared that the Permits “must require monthly stack testing,” CDPHE did not respond or provide a rationale to support the five-year testing frequency.⁴⁷

Stringency of Applicable Destruction Efficiency Requirements

The Petitioner claims that, although the Permits require 95 percent destruction efficiency of VOC emissions from the dehydrators at the facilities, underlying construction permits for both facilities require the ECDs to meet 95 percent control efficiency.⁴⁸ The Petitioner notes that control and destruction efficiency are not always equal and argues:

⁴¹ E.g., *id.* at 7 (citing Mamm Creek Permit, Condition 9 at 124).

⁴² E.g., *id.* at 7–8.

⁴³ E.g., *id.* (citing Mamm Creek Petition Ex. 3 at 2–5).

⁴⁴ E.g., *id.* at 8 (citing *In the Matter of Bonanza Creek Operating Company, LLC*, Order on Petition No. VIII-2023-11 (Jan. 30, 2024) (*Bonanza Creek Order*); *In the Matter of DCP Operating Company LP, Platteville Natural Gas Processing Plant*, Order on Petition No. VIII-2023-14 (Apr. 2, 2024) (*DCP Platteville I Order*); *In the Matter of HighPoint Operating Corporation, Anschutz Equus Farms 4-62-28*, Order on Petition No. VIII-2024-6 (July 31, 2024) (*HighPoint Equus Farms Order*)).

⁴⁵ E.g., *id.*

⁴⁶ E.g., *id.* at 5–6 (citing 40 C.F.R. § 70.7(a)(5); *In the Matter of CITGO Refining and Chemicals Company, L.P.*, Order on Petition No. VI-2007-01 at 7–8 (May 28, 2009) (*CITGO Order*)).

⁴⁷ E.g., *id.* at 6 (citing Mamm Creek Petition Ex. 3 at 7–8).

⁴⁸ E.g., *id.* at 4 n.1 (citing Mamm Creek Petition Ex. 5 at 4–5).

To assure compliance with the applicable 95% VOC control efficiency, the flare controlling emissions from the tanks and dehydrators would have to achieve a minimum destruction efficiency higher than 95% due to the fact that process efficiency could not possibly be 100%. This raises concerns that the Title V Permit, in requiring compliance with only a 95% destruction efficiency, does not assure compliance with the applicable 95% control efficiency requirement.⁴⁹

EPA Response: For the following reasons, the EPA denies the Petitioner's requests for objection on this claim.

All title V permits must "set forth . . . monitoring . . . requirements to assure compliance with the permit terms and conditions."⁵⁰ Determining whether monitoring is adequate in a particular circumstance is generally a context-specific determination made on a case-by-case basis.⁵¹ The EPA has previously found that periodic stack testing alone is insufficient to assure compliance with short-term emission limits.⁵² The EPA has also found that periodic stack testing in combination with other parametric monitoring or inspection and maintenance requirements may be sufficient to assure compliance with short-term emission limits.⁵³

Here, the monitoring requirements are designed to assure compliance with the emission limits and VOC destruction efficiency requirements applicable to the dehydrators and ECDs. They include, generally, initial and periodic (once every five years) testing requirements to demonstrate that the ECDs achieve the required 95 percent VOC destruction efficiency, operating the ECDs with a pilot light present and auto-igniter, daily visual inspections to verify pilot light presence and auto-igniter functionality, daily visible emissions observations, and operation and maintenance of the ECDs consistent with manufacturer specifications.

The Petitioner never holistically considers this combined approach to compliance assurance and thereby fails to demonstrate that the Permits overall do not assure compliance with the emission limits and VOC destruction efficiency requirements.

⁴⁹ *E.g., id.*

⁵⁰ 42 U.S.C. § 7661c(c); see 40 C.F.R. § 70.6(c)(1).

⁵¹ CITGO Order at 7.

⁵² See e.g., *In the Matter of Oak Grove Management Company, Oak Grove Steam Electric Station*, Order on Petition No. VI-2017-12 at 25–26 (Oct. 15, 2021); *In the Matter of Owens-Brockway Glass Container Inc.*, Order on Petition No. X-2020-2 at 14–15 (May 10, 2021).

⁵³ See, e.g., *In the Matter of Public Service of New Hampshire, Schiller Station*, Order on Petition No. VI-2014-04 at 15 (July 28, 2015); *In the Matter of Xcel Energy, Cherokee Station*, Order on Petition No. VIII-2010-XX at 11–12 (Sept. 29, 2011).

Testing Frequency

In particular, the Petitioner's subclaim about testing frequency lacks any arguments specific to the facilities, ECDs, and emissions at issue. Instead, the Petitioner relies almost entirely on what it describes as CDPHE's "policy" of requiring more frequent (annual) testing when applicants request VOC control efficiencies greater than 95 percent. The memorandum cited by the Petitioner appears to be non-binding guidance and, as such, could not conclusively establish the necessary testing frequency in any particular case.⁵⁴ Moreover, the guidance does not directly apply to the ECDs at these facilities since they are not required to achieve a VOC control efficiency greater than 95 percent. In characterizing this threshold as "arbitrary," the Petitioner appears to suggest, without support, that the guidance should be revised or extended, and then used as a basis to impose similarly frequent annual testing for lower control efficiencies.⁵⁵ To the extent the memorandum could be informative here, the Petitioner does not relate any substantive details or technical analysis from the memorandum or any other relevant technical analysis that would indicate why certain testing frequencies are more or less appropriate for certain levels of destruction efficiency. That is, the Petitioner fails to present any evidence as to why the annual testing frequency recommended in the memorandum should be applied to the ECDs at these facilities.

It is unclear how the Petitioner's arguments concerning testing frequency for the engines at the facilities are relevant to compliance assurance for the ECDs and dehydrators, and the Petitioner does not explain why they would be relevant.

Determining the adequacy of monitoring in a particular circumstance is generally a fact-based, context-specific determination. To guide this determination, the EPA has previously explained:

Variability of emissions is a key factor in determining the appropriate frequency of monitoring. If emissions are relatively invariable and well-understood (e.g., PM₁₀ emissions from an uncontrolled natural gas-fired boiler), frequent monitoring may not be necessary. However, the more variable or less well-understood the emissions, the less likely that a single stack test will reflect the operating conditions (and emissions) between stack tests, and the greater the need for more frequent stack testing or parametric monitoring between stack tests.⁵⁶

The Petitioner does not provide any evidence or make any arguments related to the variability of emissions from the ECDs. The examples of ECDs that have been found to

⁵⁴ Oil & Gas Section, Colorado Air Pollution Control Division, *Permitting Section Memo 20-02, Oil & Gas Industry Enclosed Combustion Device Overall Control Efficiency Greater than 95%* (Feb. 4, 2020).

⁵⁵ E.g., Mamm Creek Petition at 7.

⁵⁶ *In the Matter of BP Products North America, Inc., Whiting Business Unit, Order on Petition No. V-2021-9* at 20 (Mar. 4, 2022).

operate below required efficiencies that the Petitioner provided in its public comments on the draft permits do not necessarily evince emissions variability in between tests. The Petitioner offers no other analysis or evidence that would suggest emissions from an ECD that has been shown via testing to meet a certain destruction efficiency would vary significantly on timescales shorter than the five-year interval between tests required by the Permits.

Notably, the Permits' testing requirements are designed to function in concert with parametric monitoring requirements. The Petitioner's cursory dismissal of the Permits' parametric monitoring requirements is predicated on the assumption that their purpose is to provide quantitative information about VOC destruction efficiency and that the EPA previously rejected similar parametric monitoring requirements for that purpose. However, this is a mistaken assumption and a mischaracterization of the EPA's prior orders.⁵⁷

Those orders objected to permits with similar parametric monitoring requirements in a context in which the permits at issue did not require any periodic testing to quantitatively validate control or destruction efficiency. For example, in the *DCP Platteville I Order*, the EPA wrote of similar parametric monitoring requirements:

The Petitioner provides a detailed, condition-by-condition refutation of these monitoring requirements, explaining for each permit condition how, in its opinion, the monitoring is unrelated to achieving a specific control efficiency. The Petitioner persuasively argues that these monitoring requirements may ensure the ECD is not malfunctioning, and that combustion is actually occurring. Therefore, they may also ensure that the ECD maintains a certain, initial control efficiency. It is unclear to the EPA, however, how the monitoring requirements assure that the ECD continually achieves the specific 95 percent control efficiency required in the Permit.⁵⁸

Contrary to the Petitioner's implications, the EPA did not find that the parametric monitoring requirements were more generally deficient or that they could not serve a useful function in the context of a permit that requires periodic testing and quantitative validation of VOC destruction efficiency. Parametric monitoring need not always or exclusively provide additional quantitative information on destruction efficiency to contribute to compliance assurance for such a requirement. By the Petitioner's own admission, the information that the parametric monitoring supplies is relevant to ECD performance and emissions. The EPA previously indicated that similar parametric monitoring may ensure that an ECD functions properly and maintains destruction efficiency in between the tests that provide quantitative information on such

⁵⁷ *Bonanza Creek Order*; *DCP Platteville I Order* at 7–13; *HighPoint Equus Farms Order* at 7–11.

⁵⁸ *DCP Platteville I Order* at 11.

destruction efficiency.⁵⁹ Here, the Petitioner does not allege, much less demonstrate, that the parametric monitoring requirements in the Permits are ineffective for such a purpose or insufficient to assure compliance when combined with periodic testing requirements.

In summary, the Petitioner fails to demonstrate that five-year testing is insufficiently frequent to assure compliance with 95 percent VOC destruction efficiency requirements or emission limits applicable to the dehydrators and ECDs.

The Petitioner also claims that CDPHE failed to provide a sufficient rationale for the testing frequency in violation of 40 C.F.R. § 70.7(a)(5). As the Petitioner points out, 40 C.F.R. § 70.7(a)(5) requires States to prepare “a statement that sets forth the legal and factual basis for the draft permit conditions.” The EPA’s regulations do not dictate the specific content or level of detail that must be contained in such a statement, which the EPA often calls a “statement of basis.”

The EPA generally evaluates permit record-focused claims under 40 C.F.R. § 70.7(a)(5) by evaluating whether the permit record as a whole—not only the statement of basis, but also the response to comments and potentially other parts of the permit record—supports the terms and conditions of the permit.⁶⁰

The EPA has granted title V petitions in which a permitting authority failed to explain the basis for its monitoring decisions in response to public comments. In so doing, the EPA clarified:

EPA is not suggesting that [the State] must go out of its way to explain the technical basis for every condition of every permit it has issued to a source each time it renews a title V permit. However, when a state receives public comments raising legitimate challenges to the sufficiency of [a] monitoring provision, the EPA expects [the State] to engage with these comments and explain the basis for its decisions (or specifically identify where any prior justification may be found).⁶¹

In these cases, the obligation for a permitting authority to explain the basis for individual permit terms is inextricably tied to the prompting of public comments. The

⁵⁹ See, e.g., *id.*

⁶⁰ See, e.g., *In the Matter of US Steel Seamless Tubular Operations, LLC, Fairfield Works Pipe Mill*, Order on Petition No. IV-2021-7 at 8–9 (June 16, 2022) (US Steel Fairfield Order).

⁶¹ *In the Matter of Valero Refining-Texas, Valero Houston Refinery*, Order on Petition No. VI-2021-8 at 62 (June 30, 2022); see *In the Matter of BP Amoco Chemical Company, Texas City Chemical Plant*, Order on Petition No. VI-2017-6 at 18 (July 20, 2021) (same).

EPA has never interpreted 40 C.F.R. § 70.7(a)(5) to require permitting authorities to proactively justify every permit term or monitoring requirement.⁶²

Additionally, the EPA’s evaluation of petition claims under 40 C.F.R. § 70.7(a)(5) considers whether “the petitioner has demonstrated that the permitting authority’s alleged failure resulted in, or may have resulted in, a deficiency in the content of the permit.”⁶³ Where petitioners have failed to demonstrate a flaw in a permit resulting from permit record-focused concerns, the EPA has denied related claims alleging a deficiency with the permit record with respect to 40 C.F.R. § 70.7(a)(5).⁶⁴

Here, CDPHE’s RTCs primarily address the focus of the Petitioner’s public comments—the lack of periodic testing in the draft permits—and assert that the added five-year testing requirements, in combination with parametric monitoring requirements, assure compliance with the emission limits and destruction efficiency requirements.⁶⁵ Additionally, as previously explained, the Petitioner has failed to demonstrate any flaw in the Permits with respect to testing frequency. The EPA, therefore, denies the Petitioner’s requests for objection on this subclaim.

Stringency of Applicable Destruction Efficiency Requirements

As a threshold matter, a “petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency.”⁶⁶

Here, public comments on the draft permits raised no concerns regarding the incorporation of 95 percent VOC control efficiency requirements from underlying construction permits. The subclaim alleging a discrepancy between destruction and control efficiency requirements was not raised with reasonable specificity during the public comment periods on the draft permits. The Petitioner also does not allege that it was impracticable to do so or that the grounds for objection arose after the public comment period. The EPA, therefore, denies the Petitioner’s requests for objection on this subclaim.⁶⁷

⁶² See *In the Matter of Suncor Energy (U.S.A.), Inc., Commerce City Refinery, Plant 2 (East)*, Order on Petition Nos. VIII-2022-13 & VIII-2022-14 at 28–34 (July 31, 2023).

⁶³ *US Steel Fairfield Order* at 8.

⁶⁴ See, e.g., *In the Matter of Waelz Sustainable Products, LLC*, Order on Petition No. V-2021-10 at 18–19 (Mar. 14, 2023); *US Steel Fairfield Order* at 8–10; *In the Matter of U.S. Dep’t of Energy, Hanford Operations*, Order on Petition Nos. X-2014-01 & X-2013-01 at 25–26 (May 29, 2015); *In the Matter of Tesoro Refining and Marketing Co., Martinez, California Facility*, Order on Petition No. IX-2004-6 at 25, 44 (Mar. 15, 2005); *In the Matter of Sirmos Division of Bromante Corp.*, Order on Petition No. II-2002-03 at 15–16 (May 24, 2004).

⁶⁵ E.g., *Mamm Creek RTC* at PDF p. 2.

⁶⁶ 42 U.S.C. § 7661d(b)(2), 40 C.F.R. § 70.8(d); see also 40 C.F.R. § 70.12(a)(2)(v).

⁶⁷ 42 U.S.C. § 7661d(b)(2), 40 C.F.R. §§ 70.8(d), 70.12(a)(2)(v).

B. Claim 2: The Petitioner Claims That “The Title V Permit Does Not Assure Compliance With Applicable VOC Emission Limits for Gas Venting” Because it Is Unclear Which Specific Activities Are Authorized to Emit.

This claim is only present in the Mamm Creek Petition; therefore, the following summary and response only applies to the Mamm Creek Petition and Mamm Creek Permit.

Petition Claim: The Petitioner first asserts that emission limitations and standards within a title V permit must be “enforceable” and, to be enforceable, the limits must be enforceable as a practical matter.⁶⁸ The Petitioner further contends that the title V permit must be unambiguous, understandable, and capable of informing regulators and the public as to what is required.⁶⁹

The Petitioner then claims that Condition 6 of the Mamm Creek Permit, titled “Routine or Predictable Gas Venting Emissions,” sets four different limits on VOC emissions from four different activities. The Petitioner asserts that Permit Condition 6 is not enforceable as a practical matter because it is not clear what the term “routine or predictable” means and how that differs from venting that is not “routine or predictable.”⁷⁰ The Petitioner also contends that despite Permit Conditions 6.1.1–6.1.4 identifying the four activities subject to these VOC emission limits, it is not clear what these activities “specifically encompass, what they entail, and how they can be reliably identified in order to assure compliance with the applicable limits.”⁷¹ The Petitioner claims that the Mamm Creek Permit does not provide any specific description of the four activities and instead lists the activities in terms of ambiguous phrases.

The Petitioner points to Activity 01, which is designated as “emission release through thief hatches or blowdown valves from (5) liquid manifold condensate storage vessels for less than one (1) hour.”⁷² The Petitioner asserts that it is not clear what thief hatches or blowdown valves are and where the emission points are located. The Petitioner also states that it is not clear whether this activity refers to all openings, a subset of openings, or the number of thief hatches or blowdown valves. The Petitioner then claims for Activities 02 and 03, which are designated as “Pig (12 in) blowdown events” and “Pig (24 in) blowdown events,” it is unclear whether this refers to pig launcher emissions, pig receiver emissions, or to all blowdown emission from pigging.⁷³ The Petitioner also contends that it is unclear whether “12 in” and “24 in” refer to pipe size

⁶⁸ Mamm Creek Petition at 9 (citing *In the Matter of Plains Marketing LP, et al.*, Order on Petition Nos. IV-2023-1 and IV-2024-3 at 30 (Sept. 18, 2023)).

⁶⁹ *Id.* (citing *In the Matter of West Elk Coal Mine*, Order on Petition No. VIII-2024-3 at 33 (May 24, 2024)).

⁷⁰ *Id.*

⁷¹ *Id.* at 9–10.

⁷² *Id.* at 10.

⁷³ *Id.*

or pig size.⁷⁴ The Petitioner claims that for Activity 04, which is designated as “compressor blowdown events from six (6) compressors,” it is unclear whether this refers to any and all instances of venting from the compressor engines or if it defined by more specific criteria.⁷⁵

The Petitioner then states that in responding to comments, CDPHE asserts that these “common operations and pieces of equipment do not need to be more explicitly defined,” pointing to the EPA’s July 10, 1995 “White Paper for Streamlined Development of Part 70 Permit Applications” (“White Paper 1”).⁷⁶ The Petitioner contests this statement, arguing that this guidance is applicable to permit applications only, not permits themselves. The Petitioner also concludes that White Paper 1 appears at odds with the Mamm Creek RTC because White Paper 1 indicates that grouping of activities can occur if the units subject to the requirement can be unambiguously defined in a generic manner and if enforceability of that requirement does not require a specific listing of subject units or activities.⁷⁷ The Petitioner claims that in the case of the Mamm Creek Permit, the activities are not unambiguously defined and the “effective enforceability of Condition 6 requires that more specificity be provided to enable reliable identification and enforcement of applicable limits.”⁷⁸ The Petitioner also states that in responding to comments, CDPHE notes that many of the processes are defined and clarified in Permit Section Memo 20-04 (PS Memo 20-04), titled “Routine or Predictable Gas Venting Emissions Calculation and Instructions on Permitting for Oil and Natural Gas Operations.”⁷⁹ The Petitioner claims that this response is also inadequate as the Mamm Creek Permit does not reference or incorporate the PS Memo 20-04 and PS Memo 20-04 is not a federally enforceable document.

EPA Response: For the following reasons, the EPA denies the Petitioner’s request for objection on this claim.

The EPA has confronted the issue of allegedly unclear permit terms in numerous previous orders. The EPA has clarified that “[p]ermits typically do not include a list of all relevant definitions, nor is that required by any applicable requirement.”⁸⁰ Generally, the petitioner must show that the vagueness or ambiguity resulting from an undefined term leads directly to a flaw in the permit to demonstrate grounds for an EPA objection. For example, the EPA has granted a petition claim in which ambiguity rendered

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.* (quoting Mamm Creek RTC at PDF p. 2-3).

⁷⁷ *Id.* at 11 (citing White Paper 1 at 10).

⁷⁸ *Id.*

⁷⁹ *Id.* (citing Mamm Creek RTC at PDF p. 3)

⁸⁰ *In the Matter of Louisville Gas and Electric Company, Trimble County, Order on Petition at 24* (Sept. 10, 2008).

monitoring conditions insufficient to assure compliance with emission limits.⁸¹ The EPA has also denied petition claims in which the undefined term is a “commonly used regulatory term, and the plain meaning of the term is clear” or in which the petitioner failed to explain why a term was so vague or subject to multiple interpretations as to render a permit condition unenforceable as a practical matter.⁸²

Regarding the Petitioner’s claim that the term “routine or predictable” is unclear and therefore the VOC emission limit is unenforceable as a practical matter, the Petitioner fails to demonstrate that it is necessary to define these terms to identify what operations are subject to this permit term or the limits contained therein. The term “routine or predictable” is used in the title of Permit Condition 6. But, as the Petitioner concedes, the Permit goes on to identify the four specific operations that are addressed by Permit Condition 6, each of which is subject to separate limits. Therefore, the Petitioner has not demonstrated that any ambiguity in the phrase “routine or predictable” within the title to Permit Condition 6 renders the limits on specific activities unenforceable.

Regarding the Petitioner’s assertion that it is not clear what “thief hatches” or “blowdown valves” are and where the emission points are located, these terms are commonly used in relation to the operation of compressor stations and their meanings in the context of Mamm Creek are sufficiently clear. For example, a “thief hatch” is defined in PS Memo 20-04 as “a closable aperture in a storage vessel, which allows access to the contents of the vessel for sampling, level gauging, and/or maintenance” and a “blowdown valve” is referred to throughout PS Memo 20-04. Because the terms are clear enough on their faces, there is not any ambiguity about what operations are subject to the limits on “[e]missions release[s] through thief hatches or blowdown valves from five (5) liquid manifold condensate storage vessels.” Additionally, the Petitioner does not explain why understanding the precise location of these venting points is necessary to assure compliance with applicable requirements. Therefore, the Petitioner has not demonstrated it is necessary for the Mamm Creek Permit to include (or incorporate by reference) a definition of these terms or the physical location of these venting points to assure compliance with the underlying applicable requirement.

Regarding the terms “12 inch” and “24 inch,” the Petitioner has failed to demonstrate that any difference in the meaning of the term “inch” could have any meaningful impact on understanding which activities are subject to the VOC limits at issue. The Mamm Creek Permit clearly lists two different pigging processes of differing sizes. These activities are related to specific pieces of equipment with fixed physical dimensions that

⁸¹ See *In the Matter of Mountain Coal Co., LLC, West Elk Mine*, Order on Petition No. VIII-2024-3 at 31-34 (May 24, 2024).

⁸² *In the Matter of Midwest Generation, LCC, Crawford Generating Station*, Order on Petition No. V-2004-2 at 19 (Mar. 25, 2005); *In the Matter of South 32 Hermosa Inc., South32 Hermosa Project*, Order on Petition No. IX-2024-20 at 12 (May 30, 2025); *In the Matter of Piedmont Green Power, LLC*, Order on Petition No. IV-2015-2 at 25 (Dec. 13, 2016).

Mamm Creek could reasonably distinguish for purposes of compliance. The Petitioner has failed to demonstrate the terms “12 inch” or “24 inch” are so vague as to render the relevant Permit Conditions unenforceable as a practical matter.

Regarding the term “compressor blowdown events,” this term is commonly used in relation to the operation of compressor stations and its meaning in the context of Mamm Creek is sufficiently clear. For example, Colorado Regulation No. 7, Part B, Section II.A.4 defines “blowdown” as “the depressurization of equipment or piping to reduce system pressure.”⁸³ Here, it is clear that the equipment that is being depressurized are Mamm Creek’s six turbine compressors and that “event” means an instance of venting during such a blowdown. Because the term is clear enough on its face, there is not any ambiguity about what operations are subject to this limit on blowdowns.

The EPA, therefore, denies the Petitioner’s request for objection on this claim .

C. Claim 3: The Petitioner Claims That “The Title V Permit Does Not Assure Compliance with Applicable VOC Emission Limits for Gas Venting” Because the Permit Fails to “Set Forth Sufficient Monitoring to Assure Compliance with Applicable Limits.”

This claim is only present in the Mamm Creek Petition; therefore, the following summary and response only applies to the Mamm Creek Petition and Mamm Creek Permit.

Petition Claim: The Petitioner first asserts that title V permits must set forth monitoring requirements to assure compliance with permit terms and conditions and that monitoring must be “sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit.”⁸⁴ The Petitioner also states that where a title V permit fails to require sufficient monitoring to assure compliance, the permit cannot provide the information necessary to determine whether a source is in compliance and, therefore, is unenforceable as a practical matter.⁸⁵

The Petitioner then claims that the Mamm Creek Permit fails to set forth sufficient monitoring to assure compliance with VOC limits on routine or predictable venting emissions set forth in Permit Condition 6. The Petitioner contends that Permit Condition 6 requires Mamm Creek to calculate VOC emissions based on assumed “pound per

⁸³ The EPA notes that this definition is contained within the State-only enforceable portion of the Colorado regulations and is not federally enforceable. That fact is immaterial to the EPA’s response. Regardless of whether this definition is federally enforceable, it illustrates that there is no ambiguity or reasonable dispute regarding the meaning of this term used throughout both federally enforceable and State-only enforceable portions of the Mamm Creek Permit.

⁸⁴ Mamm Creek Petition at 12 (citing 42 U.S.C. § 7661c(c), 40 C.F.R. § 70.6(a)(3)(i)(B) and (c)(1)).

⁸⁵ *Id.* (citing 42 U.S.C. § 7661c(a)).

event” emission factors and, while these emission factors must be verified annually, the Mamm Creek Permit does not set forth methods to reliably ensure Mamm Creek will accurately verify the emission factors.⁸⁶ The Petitioner raises particular concern that the Mamm Creek Permit does not assure accurate measurement of the volume of gas vented, arguing that this volume is necessary to calculate accurate VOC emissions.

The Petitioner asserts that Permit Condition 6.5 does not require any actual monitoring or measurement of the volume of gas vented during Activities 01–04 and instead only requires Mamm Creek to “review the physical dimensions of the equipment vented during routine or predictable emission activities annually to identify any physical modifications to equipment.”⁸⁷ The Petitioner assumes that the Mamm Creek Permit intends for Mamm Creek to review physical dimensions to calculate the volume of the equipment from which gas is vented; however, the Mamm Creek Permit does not require a calculation of the volume of equipment. The Petitioner states that while the data may be important, it is unclear how the data inform the calculation of VOC emissions. The Petitioner also claims that the Mamm Creek Permit does not limit venting from only fixed physical dimensions of specific equipment.⁸⁸

Additionally, the Petitioner asserts that for venting from Activity 01, Permit Condition 6.5.1 simply states “If the changes in physical dimensions result in the addition of tanks for Activity 01,” Mamm Creek must apply for a permit modification.⁸⁹ The Petitioner concludes that for tanks, a review of “physical dimensions” is irrelevant unless new tanks are added. The Petitioner states that for venting from Activities 02–04, Permit Condition 6.5.1 states that “If the changes in physical dimension result in [] a greater volumetric-based emission factor than those listed in Condition 6.5.2 for activities 02–04 only,” Mamm Creek must also apply for a permit modification.⁹⁰ The Petitioner raises particular concern that Permit Condition 6.5.1 states that a permit modification is required only if changes in physical dimensions result in a greater volumetric-based emission factor. The Petitioner asserts that this indicates that changes in the physical dimensions of the equipment vented may not lead to higher volumetric-based emission factors, which means the Mamm Creek Permit contemplates that physical dimensions could increase without affecting volumetric-based emission factors.⁹¹

The Petitioner concludes that the Mamm Creek Permit does not set forth sufficient monitoring to assure compliance with applicable limits because it does not set forth methodologies for accurately converting “physical dimensions” of equipment vented into the volume of gas vented for purposes of verifying emission factors.⁹²

⁸⁶ *Id.*

⁸⁷ *Id.* at 13.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.* at 13–14.

⁹² *Id.* at 14.

Additionally, the Petitioner contends that while the volume of gas released is dependent on the volume of the equipment from which it is vented, it also depends on the temperature and pressure of the gas vented. The Petitioner claims that the Mamm Creek Permit requires no monitoring of temperature and pressure, which means “a calculation of the volume of equipment from which gas is vented does not and cannot accurately translate into the actual volume of gas vented.”⁹³

The Petitioner then claims that CDPHE was not responsive to comments as CDPHE stated that the Mamm Creek Permit’s current emission factors were accurate and that the Mamm Creek Permit includes the requirement to calculate emissions using annual site-specific test data, but did not address the sufficiency of periodic monitoring of vented VOC emissions or collection of site-specific data. The Petitioner also asserts that CDPHE did not respond to comments regarding the monitoring of temperature and pressure, only responding that a “20% emission buffer” was applied to account for composition, temperature, and pressure variability, which the Petitioner claims is insufficient to assure compliance.⁹⁴

The Petitioner asserts that “to assure compliance with applicable requirements, the Title V Permit for the Mamm Creek Compressor Station must also require monitoring of unique physical volume between isolation valves, monitoring of temperature, and monitoring of pressure during venting events.”⁹⁵

The Petitioner lastly states that the EPA has “objected to virtually identical Title V permits setting forth gas venting limits at other oil and gas processing facilities.”⁹⁶ The Petitioner claims that the EPA held that because the title V permits did not require permittees to follow any particular monitoring or recordkeeping methodology related to measuring the volume of vented gas, the permits did not “set forth” monitoring

⁹³ *Id.* at 13.

⁹⁴ *Id.* at 14 (citing Mamm Creek RTC at 3).

⁹⁵ The Petitioner asserts that in other CDPHE-issued title V permits CDPHE has “established federally enforceable limits and monitoring of volume, temperature, and pressure to assure accurate monitoring of VOC emissions associated with gas venting at oil and gas production and processing facilities.” *Id.* The Petitioner specifically references a title V permit issued by CDPHE for another gas compressor station (the REX Cheyenne Hub compressor station), in which CDPHE established VOC limits for a number of blowdown events. *Id.* The Petitioner states that to assure compliance with the applicable limits, the REX Cheyenne Hub title V permit established federally enforceable limits on the “unique physical volume between isolation valves” and required monitoring of temperature and pressure during each blowdown event. *Id.* (citing REX Cheyenne Hub Compressor Station Title V Permit at 48–51, Section II, Conditions 3.1, 3.2, 3.3, and 3.4).

⁹⁶ *Id.* at 15 (citing *In the Matter of Lucid Energy Delaware, LLC, Frac Cat Compressor Station and Big Lizard Compressor Station*, Order on Petition Nos. VI-2022-05 and VI-2022-11 at 15–19 (Nov. 16, 2022); *In the Matter of XTO Energy Inc., Wildcat Compressor Station*, Order on Petition No. VI-2023-4 at 19–21 (Aug. 7, 2023) (Wildcat Order)).

sufficient to assure compliance.⁹⁷ The Petitioner concludes that here, for the same reasons, the EPA must object to the issuance of the Mamm Creek Permit.

EPA Response: For the following reasons, the EPA denies the Petitioner's request for objection on this claim.

To assure compliance with the VOC limits on routine or predictable venting emissions, Condition 6 of the Mamm Creek Permit requires Mamm Creek to utilize per-event emission factors to calculate monthly VOC emissions. Additionally, Condition 1.3 of the Mamm Creek Permit incorporates the requirements of Construction Permit 21GA0354, which includes information and justifications for the establishment of the per-event emission factors.

In the "Notes to Permit Holder" section of Construction Permit 21GA0354, the VOC emission factor for Activity 01 was obtained by multiplying the number of condensate storage vessels by the approved emission factors found in PS Memo 20-04, Section 4.2.1.⁹⁸ PS Memo 20-04 indicates that the emission factor "can be used at a fixed-roof storage vessel of up to 600-barrel capacity (total shell volume) to estimate uncontrolled VOC emission caused by releasing emissions through a thief hatch, blowdown valve, or other venting point until the storage vessel approaches atmospheric pressure."⁹⁹ The VOC emission factors for Activities 02–04 were based on a site-specific inlet gas sample and a displacement equation (equation 10.4-3) from the EPA Emission Inventory Improvement Program Publication: Volume II, Chapter 10.¹⁰⁰ That calculation includes variables for volume flow rate or volume of gas processed and the molar volume of ideal gas at 60 degrees Fahrenheit and 1 atmosphere of pressure.¹⁰¹ More importantly, this document specifies that the "use of a displacement equation is the preferred method for estimating VOC, HAP, and CH₄ emissions from emergency and process vents, gas actuated pumps, pressure/level controllers, blowdown, well blowouts, and well testing."¹⁰²

The Petitioner argues that the aforementioned assumptions underlying the pound per event emission factors should be limited or individually monitored. The Petitioner fails to identify a legal authority that compels either of these approaches in the present situation. In general, emission factors used to calculate emissions need to be sufficiently representative of the facility's actual emissions to assure compliance with emission limits. There is no legal requirement that emission factors used for this purpose must, in all cases, reflect absolute maximum values or require the facility to measure the actual volume of gas vented during one of these activities. The same holds true for variables

⁹⁷ *Id.* (citing 42 U.S.C. § 7661c(c) and *Wildcat Order* at 20).

⁹⁸ Construction Permit 21GA0354 at 8–9.

⁹⁹ PS Memo 20-04 at 15.

¹⁰⁰ Construction Permit 21GA0354 at 9–10.

¹⁰¹ EPA Emission Inventory Improvement Program Publication: Volume II, Chapter 10 at 10.4-10.

¹⁰² *Id.*

underlying an emission factor or an emission calculation methodology. Here, the Petitioner provides no fact-specific reasons why the individual variables underlying the Mamm Creek Permit's emission calculation methodology need to be limited or individually monitored to assure compliance with the applicable VOC limits. The Petitioner makes no attempt to demonstrate that the values of the emission factors identified in the Mamm Creek Permit—or the assumptions underlying those values—are incorrect or not representative of Mamm Creek's operations.

The closest the Petitioner comes to critiquing the technical basis of the emission calculation methodology is its concern that the assumptions used to establish the "pound per event" emission factor are dependent upon the physical dimensions of the equipment and that the Mamm Creek Permit does not include limits related to these fixed physical dimensions of specific equipment. This concern is misplaced. The Mamm Creek Permit and Construction Permit 21GA0354 clearly indicate that these emission factors and calculation methodologies for each process are based on unique fixed volumes of gas vented or volume flow rates, or, in the case of the tanks, based on a maximum tank size (which the tanks at Mamm Creek appear to fall under at 400 barrels).¹⁰³ The Mamm Creek Permit further requires the review of the physical dimensions of equipment vented to verify the accuracy of emission factors and requires permit modifications if changes to on-site equipment result in higher emission factors than those specified in the Permit. The Petitioner has not demonstrated that these measures are insufficient.

Finally, the Petitioner's assertions regarding the EPA's previous objections are not relevant to the Mamm Creek Petition, which involves materially different facts. In the permits underlying those other orders, the facilities relied on calculation methodologies that were purportedly contained in the title V permit application and, in reality, were either absent from those applications or it was unclear if those calculations included all relevant emissions.¹⁰⁴ Those positions taken by the EPA are irrelevant to the facts in the Mamm Creek Petition since the Mamm Creek Permit clearly identifies the method for calculating VOC emissions from venting activities.

The EPA, therefore, denies the Petitioner's request for objection on this claim.

V. CONCLUSION

For the reasons set forth in this Order and pursuant to CAA section 505(b)(2) and 40 C.F.R. § 70.8(d), I hereby deny the Petitions as described in this Order.

¹⁰³ See Mamm Creek Permit at 16.

¹⁰⁴ *In the Matter of Lucid Energy Delaware, LLC, Frac Cat Compressor Station and Big Lizard Compressor Station, Order on Petition Nos. VI-2022-05 and VI-2022-11 at 17-19 (Nov. 16, 2022); Wildcat Order.*

Dated: December 10, 2025

Lee Zeldin
Lee Zeldin
Administrator