BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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| IN THE MATTER OF | ) | PETITION NOS. VI-2022-5 & VI-2022-11 |
| LUCID ENERGY DELAWARE, LLC<br>FRAC CAT COMPRESSOR STATION<br>LEA COUNTY, NEW MEXICO<br>PERMIT NO. P288 | ) | ORDER RESPONDING TO PETITIONS REQUESTING OBJECTION TO THE ISSUANCE OF TITLE V OPERATING PERMITS |
| LUCID ENERGY DELAWARE, LLC<br>BIG LIZARD COMPRESSOR STATION<br>LEA COUNTY, NEW MEXICO<br>PERMIT NO. P289 | ) | |
| ISSUED BY THE NEW MEXICO ENVIRONMENT DEPARTMENT AIR QUALITY BUREAU | ) | |

# ORDER GRANTING IN PART AND DENYING IN PART PETITIONS FOR OBJECTION TO PERMIT

## I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received two petitions dated June 15, 2022, and September 26, 2022 (collectively, the Petitions) from WildEarth Guardians (the Petitioner), pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 United States Code (U.S.C.) § 7661d(b)(2). The Petitions request that the EPA Administrator object to operating permit No. P288 issued by the New Mexico Environment Department's Air Quality Bureau (AQB) to the Lucid Energy Delaware, LLC Frac Cat Compressor Station (Lucid Frac Cat) as well as operating permit No. P289 issued by AQB to the Lucid Energy Delaware, LLC Big Lizard Compressor Station (Big Lizard). Both facilities are located in Lea County, New Mexico. The operating permits were issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and New Mexico Administrative Code (NMAC) 20.2.70. *See also* 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also referred to as a title V permit or part 70 permit.

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 in Section IV of this Order, EPA grants in part and denies in part the Petitions requesting that the EPA Administrator object to the permits. Specifically, EPA grants Claims II and III of both Petitions, and denies Claim I of both Petitions.

## II. STATUTORY AND REGULATORY FRAMEWORK

### A. Title V Permits

Section 502(d)(1) of the CAA, 42 U.S.C. § 766la(d)(1), requires each state to develop and submit to EPA an operating permit program to meet the requirements of title V of the CAA and EPA's implementing regulations at 40 C.F.R. part 70. The state of New Mexico submitted a title V program governing the issuance of operating permits on November 15, 1993. EPA granted interim approval to the title V operating permit program submitted by New Mexico on December 19, 1994. EPA granted full approval of New Mexico's title V operating permit program in 1996 and approved a revision to the program in 2004. 61 Fed. Reg. 60032, 60034 (November 26, 1996) and 69 Fed. Reg. 54244, 54247 (September 8, 2004). This program, which became effective on December 26, 1996, is codified in 20.7.70 NMAC.

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. 42 U.S.C. §§ 7661a(a), 7661b, 7661c(a). The title V operating permit program generally does not impose new substantive air quality control requirements, but does require permits to contain adequate monitoring, recordkeeping, reporting, and other requirements to assure compliance with applicable requirements. 57 Fed. Reg. 32250, 32251 (July 21, 1992); *see* 42 U.S.C. § 7661c(c). One purpose of the title V 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." 57 Fed. Reg. at 32251. 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 programs. Under CAA § 505(a) and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), states are required to submit each proposed title V operating permit to EPA for review. 42 U.S.C. § 7661d(a). Upon receipt of a proposed permit, EPA has 45 days to object to final issuance of the proposed permit if EPA determines that the proposed permit is not in compliance with applicable requirements under the Act. 42 U.S.C. § 7661d(b)(1); *see also* 40 C.F.R. § 70.8(c). If EPA does not object to a permit on its own initiative, any person may, within 60 days of the expiration of EPA's 45-day review period, petition the Administrator to object to the permit. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

Each petition must identify the proposed permit on which the petition is based and identify the petition claims. 40 C.F.R. § 70.12(a). 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 part 70. 40 C.F.R. § 70.12(a)(2). Any

arguments or claims the petitioner wishes EPA to consider in support of each issue raised must generally be contained within the body of the petition.[1] *Id.*

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). 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).

In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1).[2] Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to EPA.[3] The petitioner's demonstration burden is a critical component of CAA § 505(b)(2). As courts have recognized, CAA § 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 Act, and a nondiscretionary duty on the Administrator's part to object where such a demonstration is made. *Sierra Club v. Johnson*, 541 F.3d at 1265–66 ("[I]t is undeniable [that CAA § 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."); *NYPIRG*, 321 F.3d at 333. Courts have also made clear that the Administrator is only obligated to grant a petition to object under CAA § 505(b)(2) if the Administrator determines that the petitioner has demonstrated that the permit is not in compliance with requirements of the Act. *Citizens Against Ruining the Environment*, 535 F.3d at 677 (stating that § 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)).[4] When courts have reviewed EPA's interpretation of the ambiguous term "demonstrates" and its determination as to whether the demonstration has been made, they have applied a deferential standard of review. *See, e.g.*, *MacClarence*, 596 F.3d at 1130–31.[5] Certain aspects of the petitioner's demonstration burden are discussed in the following paragraph. A more detailed discussion can be found in the preamble to EPA's proposed petitions rule. *See* 81 Fed. Reg. 57822, 57829–31 (August 24, 2016); *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*).

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[1] 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*.

[2] *See also New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (*NYPIRG*).

[3] *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.

[4] *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)).

[5] *See also Sierra Club v. Johnson*, 541 F.3d at 1265–66; *Citizens Against Ruining the Environment*, 535 F.3d at 678.

EPA considers a number of criteria in determining whether a petitioner has demonstrated noncompliance with the Act. *See generally Nucor II Order* at 7. For example, one such criterion is whether a petitioner has provided the relevant analyses and citations to support its claims. 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 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 part 70. 40 C.F.R. § 70.12(a)(2)(i)–(iii). If a petitioner does not identify these elements, EPA is left to work out the basis for the petitioner's objection, contrary to Congress's express allocation of the burden of demonstration to the petitioner in CAA § 505(b)(2). *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.").[6] Relatedly, EPA has pointed out in numerous previous orders that general assertions or allegations did not meet the demonstration standard. *See, e.g.*, *In the Matter of Luminant Generation Co., Sandow 5 Generating Plant*, Order on Petition Number VI-2011-05 at 9 (January 15, 2013).[7] Also, the failure to address a key element of a particular issue presents further grounds for EPA to determine that a petitioner has not demonstrated a flaw in the permit. *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).[8]

Another factor EPA examines is whether the petitioner has addressed the state or local permitting authority's decision and reasoning contained in the permit record. 81 Fed. Reg. at 57832; *see Voigt v. EPA.* 46 F.4th 895, 901–02 (8th Cir. 2022); *MacClarence,* 596 F.3d at 1132–33. [9] This includes a requirement that Petitioners address the permitting authority's final decision and final reasoning (including the state's response to comments) where these documents were available during the timeframe for filing the petition. 40 C.F.R. § 70.12(a)(2)(vi). Specifically, the petition must identify where 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. *Id*.

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[6] *See also In the Matter of Murphy Oil USA, Inc.*, Order on Petition No. VI-2011-02 at 12 (September 21, 2011) (denying a title V petition claim where 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*).

[7] *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 (April 20, 2007); *In the Matter of Georgia Power Company*, Order on Petitions at 9–13 (January 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 (March 15, 2005).

[8] *See also In the Matter of Hu Honua Bioenergy*, Order on Petition No. IX-2011-1 at 19–20 (February 7, 2014); *Georgia Power Plants Order* at 10.

[9] *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 (December 14, 2012) (denying a title V petition issue where 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 where 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 where petitioners did not address a potential defense that the state had pointed out in the response to comments).

The information that 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. 40 C.F.R. § 70.13. 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 made available to the public according to § 70.7(h)(2). *Id.* If a final permit and a statement of basis for the final permit are available during the agency's review of a petition on a proposed permit, those documents may also be considered when determining whether to grant or deny the petition. *Id*.

If EPA grants a title V petition, a permitting authority may address EPA's objection by, among other things, providing EPA with a revised permit. *See, e.g.*, 40 C.F.R. § 70.7(g)(4); *see generally* 81 Fed. Reg. 57822, 57842 (August 24, 2016) (describing post-petition procedures); *Nucor II Order* at 14–15 (same). In some cases, the permitting authority's response to an EPA objection may not involve a revision to the permit terms and conditions themselves, but may instead involve revisions to the permit record. For example, when EPA has issued a title V objection on the ground that the permit record does not adequately support the permitting decision, it may be acceptable for the permitting authority to respond only by providing an additional rationale to support its permitting decision.

When the permitting authority revises a permit or permit record in order to resolve an EPA objection, it must go through the appropriate procedures for that revision. The permitting authority should determine whether its response is a minor modification or a significant modification to the title V permit, as described in 40 C.F.R. § 70.7(e)(2) and (4) or the corresponding regulations in the state's EPA-approved title V program. If the permitting authority determines that the modification is a significant modification, then the permitting authority must provide for notice and opportunity for public comment for the significant modification consistent with 40 C.F.R. § 70.7(h) or the state's corresponding regulations.

In any case, whether the permitting authority submits revised permit terms, a revised permit record, or other revisions to the permit, and regardless of the procedures used to make such revision, the permitting authority's response is generally treated as a new proposed permit for purposes of CAA § 505(b) and 40 C.F.R. § 70.8(c) and (d). *See Nucor II Order* at 14. As such, it would be subject to EPA's 45-day review per CAA § 505(b)(1) and 40 C.F.R. § 70.8(c), and an opportunity for the public to petition under CAA § 505(b)(2) and 40 C.F.R. § 70.8(d) if EPA does not object during its 45-day review period.

When a permitting authority responds to an EPA objection, it may choose to do so by modifying the permit terms or conditions or the permit record with respect to the specific deficiencies that EPA identified; permitting authorities need not address elements of the permit or the permit

record that are unrelated to EPA's objection. As described in various title V petition orders, the scope of EPA's review (and accordingly, the appropriate scope of a petition) on such a response would be limited to the specific permit terms or conditions or elements of the permit record modified in that permit action. *See In The Matter of Hu Honua Bioenergy, LLC*, Order on Petition No. VI-2014-10 at 38–40 (September 14, 2016); *In the Matter of WPSC, Weston*, Order on Petition No. V-2006-4 at 5–6, 10 (December 19, 2007).

### C. New Source Review

The major New Source Review (NSR) program is comprised of two core types of preconstruction permit requirements for major stationary sources. Part C of title I of the CAA establishes the Prevention of Significant Deterioration (PSD) program, which applies to new major stationary sources and major modifications of existing major stationary sources for pollutants for which an area is designated as attainment or unclassifiable for the national ambient air quality standards (NAAQS) and for other pollutants regulated under the CAA. 42 U.S.C. §§ 7470–7479. Part D of title I of the Act establishes the major nonattainment NSR (NNSR) program, which applies to new major stationary sources and major modifications of existing major stationary sources for those NAAQS pollutants for which an area is designated as nonattainment. 42 U.S.C. §§ 7501–7515. EPA has two largely identical sets of regulations implementing the PSD program. One set, found at 40 C.F.R. § 51.166, contains the requirements that state PSD programs must meet to be approved as part of a state implementation plan (SIP). The other set of regulations, found at 40 C.F.R. § 52.21, contains EPA's federal PSD program, which applies in areas without a SIP-approved PSD program. EPA's regulations specifying requirements for state NNSR programs are contained in 40 C.F.R. § 51.165.

While parts C and D of title I of the Act address the major NSR program for major sources, section 110(a)(2)(C) addresses the permitting program for new and modified minor sources and for minor modifications to major sources. EPA commonly refers to the latter program as the "minor NSR" program. States must also develop minor NSR programs to, along with the major source programs, attain and maintain the NAAQS. The federal requirements for state minor NSR programs are outlined in 40 C.F.R. §§ 51.160 through 51.164. These federal requirements for minor NSR programs are less prescriptive than those for major sources, and, as a result, there is a larger variation of requirements in EPA-approved state minor NSR programs than in major source programs.

EPA has approved New Mexico's PSD, NNSR, and minor NSR programs as part of its SIP. *See* 40 C.F.R. § 52.1640 (identifying EPA-approved regulations in the New Mexico SIP). New Mexico's major and minor NSR provisions, as incorporated into New Mexico's EPA-approved SIP, are contained in portions of 20.2.72 NMAC.

## III. BACKGROUND

### A. The Lucid Frac Cat Facility

The Lucid Frac Cat Compressor Station, owned by Lucid Energy Delaware, LLC, is a natural gas compressor station located in Lea County, New Mexico. This facility is part of a localized

gas gathering system that collects gas from multiple wells in the area and includes 13 compressor engines, two dehydration units, two dehydration unit reboilers, an amine system, an amine system reboiler, four atmospheric storage tanks, and one process flare. The facility is a title V major source of nitrogen oxides ($NO_x$), carbon monoxide (CO), greenhouse gases (GHGs), and volatile organic compounds (VOCs). The facility also emits sulfur dioxide ($SO_2$), particulate matter (PM), and several hazardous air pollutants (HAPs). Emission units within the facility are also subject to various New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and preconstruction permitting requirements.

EPA conducted an analysis using EPA's EJScreen[10] to assess key demographic and environmental indicators within a 5-kilometer radius of the Lucid Frac Cat facility. This analysis showed a total population of approximately three residents within a 5-kilometer radius of the facility. In addition, EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with 12 environmental indicators. All of the Environmental Justice Indices in this 5-kilometer area fall below the 60th percentile when compared to the rest of the state of New Mexico.

### B. Permitting History: Lucid Frac Cat

On August 19, 2020, Lucid Energy Delaware, LLC submitted an application for an initial title V permit. New Mexico published notice of a draft permit on December 29, 2021, subject to a 30-day public comment period. On March 1, 2022, New Mexico submitted a proposed permit (the Lucid Frac Cat Proposed Permit), along with its responses to public comments (RTC), to EPA for its 45-day review. EPA's 45-day review period ended on April 15, 2022, during which time EPA did not object to the Lucid Frac Cat Proposed Permit. New Mexico issued the final title V renewal permit (the Lucid Frac Cat Final Permit) for the Frac Cat Compressor Station on April 16, 2022.

### C. Timeliness of Petition: Lucid Frac Cat

Pursuant to the CAA, if EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. 42 U.S.C § 7661d(b)(2). EPA's 45-day review period expired on April 15, 2022. EPA's website indicated that any petition seeking EPA's objection to the Lucid Frac Cat permit would be due on or before June 15, 2022. The Lucid Frac Cat Petition was dated June 15, 2022, and, therefore, EPA finds that the Petitioner timely filed the Lucid Frac Cat Petition.

[10] EJScreen is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. *See https://www.epa.gov/ejscreen/what-ejscreen*.

### D. The Big Lizard Facility

The Big Lizard Compressor Station, owned by Lucid Energy Delaware, LLC, is a natural gas compressor station located in Lea County, New Mexico. This facility is part of a localized gas gathering system that collects gas from multiple wells in the area and includes 10 compressor engines, three dehydration units, three dehydration unit reboilers, an amine system, two amine system reboilers, and four atmospheric storage tanks. The facility is a title V major source of $NO_x$, CO, GHGs, and VOCs. The facility also emits $SO_2$, PM, and several HAPs. Emission units within the facility are also subject to various NSPS, NESHAP, and preconstruction permitting requirements.

EPA conducted an analysis using EPA's EJScreen to assess key demographic and environmental indicators within a five-kilometer radius of the Big Lizard Compressor Station. This analysis did not reveal any residents within a five-kilometer radius of the facility.

### E. Permitting History: Big Lizard

On September 10, 2020, Lucid Energy Delaware, LLC submitted an application for an initial title V permit. New Mexico published notice of a draft permit on March 29, 2022, subject to a 30-day public comment period. On June 10, 2022, New Mexico submitted a proposed permit (the Big Lizard Proposed Permit), along with its responses to public comments (RTC), to EPA for its 45-day review. EPA's 45-day review period ended on July 25, 2022, during which time EPA did not object to the Big Lizard Proposed Permit. New Mexico issued the final title V permit (the Big Lizard Final Permit) for the Big Lizard Compressor Station on July 29, 2022.

### F. Timeliness of Petition: Big Lizard

Pursuant to the CAA, if EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. 42 U.S.C § 7661d(b)(2). EPA's 45-day review period expired on July 25, 2022. EPA's website indicated that any petition seeking EPA's objection to the Lucid Big Lizard permit would be due on or before September 26, 2022. The Big Lizard Petition was dated September 26, 2022, and, therefore, EPA finds that the Petitioner timely filed the Big Lizard Petition.

## IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONER

### Claim I: The Petitioner Claims That "The Final Permit Fails to Assure Compliance with Applicable Title V Permitting Requirements."

***Petitioner's Claim:*** The Petitioner claims that the Final Permits fail to ensure the facilities comply with title V permitting regulations set forth in 20.2.70 NMAC and 40 C.F.R. part 70. Petitions at 4. The Petitioner asserts that under federal and state title V permitting requirements, an operating permit expires "five years" after issuance, at which point the source's right to operate is terminated. *Id*. (citing 40 C.F.R. §§ 70.6(a)(2), 70.7(c)(1)(ii); 20.2.70.302.D NMAC; 20.2.70.201.B NMAC). The Petitioner further claims that to avoid this expiration, a source must

submit a "timely and complete" application for permit renewal, and under New Mexico's title V program, a "timely" renewal application is "one submitted at least twelve (12) months prior to the date of permit expiration." *Id.* (quoting 40 C.F.R. § 70.5(a); 20.2.70.300.A NMAC; 20.2.70.300.B(2) NMAC). Lastly, the Petitioner asserts that the submission of a "timely and complete" renewal application allows a source to continue operation after permit expiration. *Id.* (citing 40 C.F.R. § 70.7(b) and (c)(1)(ii); 20.2.70.400.D NMAC).

The Petitioner claims that, in practice, AQB has not implemented a permit condition correctly, allowing issuance of permits and continued operation of facilities that do not submit timely ***and*** complete permit renewal applications. *Id*. The Petitioner specifically points to Permit Condition A101.B in both permits, which states that the title V permit will not expire if the facility submits a "timely and complete application renewal [] consistent with 20.2.70.300 NMAC[.]" *Id.*

The Petitioner details two examples of other sources in New Mexico (Harvest Four Corners, LLC's Trunk N Compressor Station and Portales Dairy Products, LLC's Portales Plant), alleging those renewal permits were not timely submitted and subsequently should have expired. *Id.* at 4–5. In each case, a title V renewal application was timely submitted, determined incomplete by AQB, subsequently revised, and determined complete by AQB. The Petitioner concludes that although the renewal applications may have been timely, they were not a timely ***and*** complete renewal applications in the first instance and therefore could not prevent permit expiration. *Id.*

The Petitioner claims that AQB's RTCs do not deny that the state does not consider title V permits to expire when an untimely renewal application is submitted. *Id.* at 5. The Petitioner contends that this response "defies the plain language of 20.2.70.400.D NMAC" which the Petitioner asserts states only the submission of a "timely ***and*** complete"—not a timely ***or*** complete—application for permit issuance prevents the expiration of the permit and allows a source to continue operating. *Id.* The Petitioner claims that AQB's response implies that a source, such as Lucid Frac Cat or Big Lizard, would be allowed to continue operating despite submitting an untimely, yet complete, permit renewal application. *Id.* The Petitioner concludes that this means "Condition A101.B does not ensure compliance with state and federal Title V permitting requirements and therefore fails to assure compliance with applicable requirements in accordance with 40 C.F.R. § 70.7(a)(1)(iv) and 70.8(c)(1)," and thus the condition should be revised. Lucid Frac Cat Petition at 5–6 and Big Lizard Petition at 6.

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

Under CAA § 505(b)(2), a petitioner must demonstrate that "*the permit* is not in compliance with the requirements" of the CAA before EPA will object to the permit. 42 U.S.C. § 7661d(b)(2) (emphasis added). Under § 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to EPA. Here, this does not appear to be a claim that the title V *permits* are not in compliance with the requirements of the Act or part 70. Instead, the Petitioner claims that EPA has a duty to object to the permits due to concerns about how AQB will implement Permit Condition A.101.B of both permits in the future (as a result of previous instances of AQB allegedly not implementing conditions similar to A101.B correctly for other sources). Condition A101.B states:

> If a timely and complete application for a permit renewal is submitted, consistent with 20.2.70.300 NMAC, but the Department has failed to issue or disapprove the renewal permit before the end of the term of the previous permit, then the permit shall not expire and all the terms and conditions of the permit shall remain in effect until the renewal permit has been issued or disapproved. (20.2.70.400.D NMAC)

Final Permits at A3.

This term accurately reflects New Mexico's operating permit regulations, as it is the exact language found in 20.2.70.400.D NMAC. The Petitioner has not demonstrated that Permit Condition A101.B is not in compliance with the requirements of the Clean Air Act, thus, the Petitioner's assertion that the condition should be revised goes beyond what is required by the Act and EPA's regulations. In general, a title V permit must include applicable requirements that dictate the operations of individual emission units at the source,[11] along with some general requirements broadly applicable to the source's permitting obligations.[12] But title V permits are not required to include specific conditions that describe all aspects of how a title V program will be implemented or how the permitting process will transpire in future permitting actions. These implementation-focused requirements are contained in the relevant EPA and state regulations, and do not necessarily need to be included in individual permits.

The Petitioner appears to reference the examples of Harvest Four Corners, LLC and Portales Dairy Products, LLC, as previous instances of AQB not implementing condition A101.B correctly, both of which are different facilities and permits. As an initial matter, the Petitioner did not demonstrate that an identical, or even similar, permit term existed in the permits referenced in the examples of Harvest Four Corners, LLC and Portales Dairy Products, LLC. In any case, referencing previous instances of programmatic issues related to implementation of permit conditions in permits issued to different sources is not relevant to the current permit actions and the deficiency of the specific permit term. Here, the Petitioner's claim is not based on a substantive flaw with the permits' conditions, but rather it appears to be based on the alleged failure to properly implement permit terms in previous (and completely separate) permit actions, suggesting the possibility of a programmatic flaw. To the extent this programmatic flaw concerns these specific permit actions, it appears the Petitioner is concerned about actions AQB may or may not take in the future. The title V petition process is not the appropriate forum to challenge such actions or inactions. The Petitioner is also not necessarily alleging any procedural defect with the current permit actions. EPA denies the Petitions with regard to Claim I of both Petitions.

> **Claim II: The Petitioner Claims That "The Title V Permit Fails to Assure Compliance with the New Mexico State Implementation Plan and Related Requirements to Protect Ambient Air Quality Standards."**

***Petitioner's Claim:*** The Petitioner claims that the Final Permits do not assure that emissions from Lucid Frac Cat and Big Lizard will not cause or contribute to exceedances of the ozone

[11] *See* 40 C.F.R. § 70.2 (defining "applicable requirements" to include various CAA requirements "as they apply to emissions units in a part 70 source").
[12] *See* 40 C.F.R. § 70.6(a)(6)–(7).

NAAQS. Petitions at 6. In Lucid Frac Cat, the Petitioner specifically references Condition A103.B, which states that "[c]ompliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 4221M6." Lucid Frac Cat Final Permit at A5. In Big Lizard, the Petitioner specifically references Condition A103.C, which similarly states that "[c]ompliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 7960-M1." Big Lizard Final Permit at A5. The Petitioner asserts that these permit conditions are inaccurate because AQB has not completed any analysis or assessment demonstrating compliance with the NAAQS for ozone. Petitions at 6.

In justifying its argument that AQB cannot approve a construction permit without a demonstration that the permit would not cause or contribute to air pollution levels exceeding the 2008 and/or 2015 ozone NAAQS,[13] the Petitioner refers to 20.2.72.208.D NMAC, which states:

> The department shall deny any application for a permit revision if considering emissions after controls [] [t]he construction, modification, or permit revision will cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico ambient air quality standard[.]

The Petitioner further notes that because SIP provisions are an applicable requirement under title V,[14] a title V permit must ensure that a source operates such that its emissions would not cause or contribute to an exceedance of the ozone NAAQS. Lucid Frac Cat Petition at 6–7 and Big Lizard Petition at 7. The Petitioner expands on this, arguing that where an underlying permit (in this case NSR Permit 4221M6 for Lucid Frac Cat and NSR Permit 7960M2 for Big Lizard[15]) fails to ensure that a source would not cause or contribute to exceedances of the ozone NAAQS, the title V permit must address the deficiency by being written in a way to assure protection of the NAAQS. Petitions at 7. The Petitioner claims that the NSR permit applications and statements of basis do not analyze or assess the impacts of Lucid Frac Cat or Big Lizard on ambient ozone concentrations,[16] despite acknowledging that the facilities would release large and increased amounts of VOCs and $NO_x$—both of which are ozone precursors. *Id.* The Petitioner provides a number of tables displaying ozone data for the area where Lucid Frac Cat and Big Lizard are located, including Carlsbad, Carlsbad Caverns National Park, and Hobbs, which purportedly

[13] The Petitioner cites 40 C.F.R. §§ 50.15 and 50.19.
[14] The Petitioner cites 40 C.F.R § 70.2 (defining "applicable requirement" as "any standard or other requirement provided for in the applicable [state] implementation plan").
[15] The Petitioner states that the Big Lizard Final Permit references NSR Permit 7960M1 in Condition A103.C; however, at issue is NSR Permit 7960M2, which the Petitioner claims AQB indicates the Final Permit incorporates. Big Lizard Petition at 7.
[16] Note the language in the Lucid Frac Cat Petition appears to be a typographical error. The Petitioner states: "Both the permit application submitted by Lucid and the AQB's statement of basis for NSR Permit 4221M6 actually analyze—either qualitatively or quantitatively—the impacts of the Frac Cat Station to ambient ozone concentrations." Lucid Frac Cat Petition at 7 (emphasis added). However, the Petitioner appears to claim that the AQB did not actually analyze—either qualitatively or quantitatively—the impacts of the Frac Cat Station to ambient ozone concentrations.

show regional exceedances of the ozone NAAQS prior to the issuance of NSR Permits 4221M6 and 7960M1. *Id*. at 7–8. The Petitioner asserts that because of these alleged prior exceedances, there does not appear to be a possible way that emissions related to the approval of NSR Permit 4221M6 and NSR Permit 7960M2 would not have contributed to exceedances of the ozone NAAQS. *Id.* at 9. The Petitioner further contends that because there was no analysis of the ozone impacts related to the facilities and NSR Permits 4221M6 and 7960M2, there is no support for Condition A103.B in the Lucid Frac Cat Final Permit or Condition A103.C in the Big Lizard Final Permit. *Id.*

The Petitioner criticizes AQB's RTCs, quoting a portion that states "PSD minor sources do not 'cause or contribute' to violations of the ozone standard," referencing Department testimony in the hearing records for EIB [Environmental Improvement Board] Hearing No. 20-4 21(A) and EIB Hearing No. 20-33(A). *Id.*

The Petitioner attempts to refute these statements, claiming that AQB acknowledges that it did not analyze the impacts that emissions from the facilities would have on the ozone NAAQS and that the testimony referenced by AQB "refers to testimony provided in a consolidated hearing before the New Mexico Environmental Improvement Board" regarding permitting actions not related to NSR Permit 4221M6 or NSR Permit 7960M2. Lucid Frac Cat Petition at 9 and Big Lizard Petition at 10. Additionally, the Petitioner argues that AQB's assertion that "PSD minor sources do not 'cause or contribute' to violations of the ozone standard" is unsupported, considering AQB cannot point to an analysis or assessment demonstrating that PSD minor sources will never cause or contribute to violations of the ozone NAAQS. Petitions at 10. The Petitioner further claims that although EPA has established significant impact levels "to guide states in determining whether sources may cause or contribute to violations of the ozone NAAQS," this only applies to PSD major sources and only in attainment areas, thus it does not apply in the case of Lucid Frac Cat or Big Lizard. The Petitioner notes that EPA has not "affirmatively determined that PSD minor sources will never cause or contribute to violations of the ozone NAAQS." *Id* at 10.

Lastly, the Petitioner refers to 20.2.72.208.D NMAC,[17] emphasizing that the phrase "shall deny any application" imposes a mandatory duty on AQB to deny any application, including minor source permits, that would cause or contribute to exceedances of the NAAQS. *Id.* The Petitioner asserts that the SIP does not provide AQB the discretion to determine that PSD minor sources do not cause or contribute to violations of the ozone NAAQS. Lucid Frac Cat Petition at 10 and Big Lizard Petition at 11. The Petitioner concludes that EPA must object to the permits and direct AQB to address the impacts of Lucid Frac Cat and Big Lizard on the ozone NAAQS and make revisions to the Final Permits to assure compliance with the New Mexico SIP. Petitions at 11.

***EPA's Response:*** For the following reasons, EPA grants the Petitioner's request for an objection on this claim for both Petitions.

[17] "The department shall deny any application for a permit revision if considering emissions after controls [] [t]he construction, modification, or permit revision will cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico ambient air quality standard unless the ambient air impact is offset by meeting the requirements of either 20.2.79 NMAC or 20.2.72.216 NMAC, whichever is applicable[.]"

The Petitioner alleges that both the NAAQS, as well as 20.2.72.208.D NMAC, are "applicable requirements" with which the permits must assure compliance. Petitions at 6–7. First, contrary to the Petitioner's suggestion,[18] EPA has previously stated that the NAAQS themselves are not an "applicable requirement" with which a source must directly comply, and the promulgation of a NAAQS does not, in and of itself, automatically result in actionable measures applicable to a source.[19] Instead, the specific measures contained in each state's EPA-approved SIP to achieve the NAAQS are the relevant applicable requirements. *See* 40 C.F.R. § 70.2. Nonetheless, the Petitioner is correct that the Lucid Frac Cat Final Permit does erroneously indicate that the NAAQS are an applicable requirement,[20] and therefore, the Lucid Frac Cat Final Permit itself is materially incorrect regarding that provision. However, the Big Lizard Final Permit makes it clear that the NAAQS are not an applicable requirement, as they are listed under Table 103.B for "Non-Applicable Requirements." Big Lizard Final Permit at A5.

Second, it is unclear whether 20.2.72.208.D NMAC establishes an applicable requirement with which the title V permits must assure compliance. This regulation reads, in part:

> The department shall deny any application for a permit or permit revision if considering emissions after controls: . . . The construction, modification, or permit revision will cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico ambient air quality standard . . . .

The Petitioner asserts that the phrase "shall deny any application" in 20.2.72.208.D NMAC implies a mandatory duty to deny *any* application that would cause or contribute to an exceedance of the NAAQS, and contends that if this duty is not fulfilled in issuing a preconstruction permit, "the Title V permit must address this deficiency in the underlying permitting and be written in such a manner as to assure protection of the NAAQS." Petitions at 7. However, this argument ignores the fact that this SIP provision, on its face, only applies to the issuance of preconstruction permits (as with the rest of Section 20.2.72). More specifically, this SIP provision appears to impose an obligation on the permitting authority to deny an application for a construction permit that would cause or contribute to an exceedance of the NAAQS, but does not impose an obligation to include additional terms in a title V permit that prevents exceedances of the NAAQS.[21] Moreover, because 20.2.72.208.D NMAC does not appear to impose any requirement that applies to the source itself or to any particular emission unit at the source (but instead imposes an obligation on the state regarding permit issuance/revisions), it is unclear whether this provision is an "applicable requirement" with which the title V permits must

[18] *See* Petitions at 7 n.4.
[19] 40 C.F.R. § 70.2 (definition of "applicable requirement"); *see, e.g.*, *In the Matter of Duke Energy, LLC Asheville Steam Electric Plant,* Order on Petition No. IV-2016-06 at 11–12 (June 30, 2017) and *In the Matter of Duke Energy, LLC Roxboro Steam Electric Plant*, Order on Petition No. IV-2016-07 at 10–11 (June 30, 2017).
[20] Frac Cat Final Permit at A4.
[21] This distinction is not without consequence. If EPA were to accept the Petitioner's view, the SIP obligation for New Mexico to consider a construction project's impacts on the NAAQS would transform into an obligation to assess the impacts of prior preconstruction permits in a potentially unlimited number of subsequent title V permit actions. That is not what the SIP requires.

assure compliance, or that can or should be implemented through title V.[22] The permits and permit records exacerbate this uncertainty.[23] Overall, the permits and permit records are not clear as to whether (or why) AQB considers 20.2.72.208.D NMAC an "applicable requirement" with which the title V permit must assure compliance.

Additionally, EPA agrees with the Petitioner that the Final Permits and AQB's RTCs are inconsistent and unclear as to whether modeling, or any assessment or analysis, was conducted for NSR Permit 4221M6 or NSR Permit 7960M1 and/or 7960M2[24]. The Petitioner appears to be correct that if, in fact, no modeling, assessment, or analysis was conducted, the permit terms (Condition A103.B in the Lucid Frac Cat Final Permit and Condition A103.C in the Big Lizard Final Permit) would be inaccurate, insofar as these permit terms expressly state that modeling was performed at that time.[25] In its RTCs, AQB states that "air emissions from the Frac Cat Compressor Station were reviewed and evaluated prior to issuance of construction permit 4221M6 . . . ." Lucid Frac Cat RTC at 5. AQB also states that "air emissions from the Big Lizard Compressor Station were reviewed and evaluated prior to issuance of construction permit 7960M1 . . . ." Big Lizard RTC at 7. In both instances, AQB then cites NMED AQB Modeling Guidelines to support its assertion that PSD minor sources do not cause or contribute to violations of the ozone NAAQS, and that the emissions, therefore, do not require a modeling analysis. AQB's responses strongly suggests that AQB did not conduct any modeling, but it simply "evaluated" emissions. However, Conditions A103.B in the Lucid Frac Cat Final Permit and A103.C in the Big Lizard Final Permit, as stated, explicitly state that "air dispersion modeling" was performed. In addition, it is unclear how (and if) this permit term is related to 20.2.72.208.D NMAC, which may or may not be an applicable requirement. Therefore, to the extent that the permit term is related to 20.2.72.208.D NMAC and to the extent that 20.2.72.208.D NMAC is an applicable requirement, it is unclear whether the permit term assures compliance with applicable requirements. For these reasons, EPA grants the Petitions with regard to Claim II.

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[22] Applicable requirements include requirements of the SIP, but only "as they apply to emissions units in a part 70 source." 40 C.F.R. § 70.2 (definition of "applicable requirement"); *see also* 20.2.70.7 NMAC (defining "applicable requirement" to include SIP provisions "as they apply to a Part 70 source or to an emissions unit at a Part 70 source"). The SIP provision at issue here appears to impose an obligation on the *permitting authority* to consider potential emissions in the context of the NAAQS in deciding whether to issue an NSR permit, rather than imposing an obligation on the source or "emissions units" at the source. 40 C.F.R. § 70.2. EPA highlights these regulatory definitions for the state's careful consideration as the question of whether 20.2.72.208.D NMAC is an applicable requirement is a matter for the state to assess in the first instance. For the reasons explained herein, given the ambiguity regarding whether the state considers 20.2.72.208.D NMAC an "applicable requirement," EPA is granting Petitioner's claim.

[23] EPA notes that the purpose of these permit terms is unclear. The terms do not impose any obligation on the source, but rather make a declaratory statement that compliance with the permit itself demonstrates compliance with the NAAQS.

[24] EPA notes that the Big Lizard RTC and Final Permit Condition A103.C reference NSR Permit 7960M1, while NSR Permit 7960M2 is incorporated in the Final Permit through Table 103.A. Big Lizard Final Permit at A5.

[25] Specifically, Condition A103.B in the Lucid Frac Cat Final Permit states: "Compliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 4221M6" and Condition A103.C in the Big Lizard Final Permit states: "Compliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 7960-M1." Final Permits at A5.

Lastly, EPA acknowledges the Petitioner's concerns regarding its submitted data suggesting historical violations of the ozone NAAQS in the area surrounding the Lucid Frac Cat and Big Lizard facilities. These concerns could be more appropriately addressed through proceedings related to the attainment designation of this area. EPA observes that the Petitioner submitted a petition requesting that EPA undertake a rulemaking to redesignate portions of the Permian Basin on March 2, 2021.[26] EPA is currently evaluating that petition, and to the extent EPA takes action related to the redesignation of this area, the Petitioner may have additional opportunities to participate in that regulatory process.

***Direction to AQB:*** In responding to this order, AQB must revise the permits and/or permit records to address the inconsistency between permit conditions A103.B in Lucid Frac Cat and A103.C in Big Lizard and the state's RTC regarding whether modeling was actually conducted for ground-level ozone (or its precursors) for NSR Permit 4221M6 and NSR Permit 7960M1/M2. AQB should also amend the Lucid Frac Cat permit to remove the erroneous suggestion that the NAAQS are themselves an "applicable requirement" with which the source has an obligation to comply. Additionally, AQB must clarify whether 20.2.72.208.D NMAC is an "applicable requirement" with which the title V permits must assure compliance or that is intended to be implemented through a title V operating permit. If AQP determines that this SIP provision is not an "applicable requirement," a potential solution may be to remove Condition A103.B in the Lucid Frac Cat permit and Condition A103.C in the Big Lizard permit altogether.

**Claim III: The Petitioner Claims That "Condition A107 Fails to Require Sufficient Periodic Monitoring and is Unenforceable as a Practical Matter."**

***Petitioner's Claim:*** The Petitioner claims that the Lucid Frac Cat and Big Lizard title V permits do not comply with 42 U.S.C § 7661c(a) and 7661c(c), and 40 C.F.R. § 70.6(a)(3)(i)(B) and 70.6(c)(1) because they do not contain sufficient monitoring to assure compliance with the requirement that vented VOC emissions during startup, shutdown, maintenance, and malfunctions (SSM/M) shall not exceed 10 tons per year found in Condition A107.A of both permits. Petitions at 11. The Petitioner claims that Condition A107.C states that the facilities must "perform a facility inlet gas analysis once every year" and comply with monitoring and recordkeeping requirements under other portions of Condition A107.C. the Petitioner argues that although this constitutes some form of monitoring, the permits fail to require any other monitoring. Lucid Frac Cat Petition at 11–12 and Big Lizard Petition at 12. The Petitioner specifies that its primary concern lies within Condition A107.C, in which the only monitoring required is that the facilities "shall monitor all SSM/M events." Petitions at 12. (quoting Lucid Frac Cat Final Permit at A10 and Big Lizard Final Permit at A9). The Petitioner argues that this does not set forth any method for monitoring or otherwise explain how VOC emissions will be

[26] *See* Letter from Jeremy Nichols, Climate and Energy Program Director, WildEarth Guardians, to Jane Nishida, Acting Administrator, U.S. EPA, *Petition to Designate Permian Basin of Southeast New Mexico a Nonattainment Area Due to Ongoing Violations of Ozone Health Standards; Petition to Find New Mexico's State Implementation Plan is Failing to Attain and Maintain Ambient Air Quality Standards* (March 2, 2021) and *In the Matter of Designation of the New Mexico Permian Basin Ozone Nonattainment Area and Call for the Revision of the New Mexico Station Implementation Plan Over its Failure to Attain and Maintain the National Ambient Air Quality Standards for Ground-level Ozone,* Rulemaking petition under the Administrative Procedure 5 U.S.C. § 551, *et seq.*, and the Clean Air Act, 42 U.S.C. § 7401, *et seq*. (March 2, 2021).

measured to accurately track venting emissions and assure compliance with the VOC venting limit. *Id*. at 12.

The Petitioner attempts to refute several points raised in AQB's RTCs, the first of which is AQB's statement that compliance with the VOC limit during SSM/M events "requires tracking and calculating the total VOC emissions based on the inlet gas analysis (meaning the % VOC content of the gas), the volume of gas vented, and the number of venting events per year." *Id.* (quoting Lucid Frac Cat RTC at 6 and Big Lizard RTC at 11). The Petitioner contends that while the Final Permits do require the facility to perform the gas inlet analysis, the Final Permits do not require tracking or calculating the volume of gas vented or the number of venting events per year. *Id.* The Petitioner contends that AQB admits in its RTCs that the Final Permits do not set forth monitoring requirements with regard to tracking and calculating volume of gas vented. The Petitioner points to AQB's statement that the "volume of vented gas is calculated based on the volumes contained within the various equipment that are being depressurized, including the compressors and associated piping." *Id.* The Petitioner claims that despite this statement, AQB explains that the approach for calculating volume is not set forth in the Final Permits, but rather Section 6 of the permit applications, which the Petitioner asserts is not appropriate because title V requires that monitoring is set forth in the permit rather than the application. *Id.*

The Petitioner points out that Section 6 of the Lucid Frac Cat permit application "does not set forth any methodology or procedure for calculating the volume of gas released during SSM/M events," but rather it generally explains what SSM/M events encompass. Lucid Frac Cat Petition at 12. The Petitioner contends that it is difficult to understand how the Lucid Frac Cat facility could possibly calculate the volume of gas, as the application describes SSM/M events as "unforeseen" and "cannot be anticipated." *Id.* The Petitioner also asserts that while AQB indicates that monitoring and recordkeeping requirements in the Final Permits ensure recording of the volume of gas vented and tracking of "the rolling 12-month total of VOC emissions due to SSM and Malfunction events to ensure compliance with the annual emission limits in the permit," this does not constitute sufficient monitoring. *Id.* at 12–13.

In regard to the Big Lizard facility, the Petitioner also points out that Section 6 of the Big Lizard permit application "does not set forth any methodology or procedure for calculating the volume of gas released during SSM/M events;" however, the application does present estimated calculations of VOC emissions vented during SSM events. Big Lizard Petition at 12. Despite this, the Petitioner contends that the application appears to only present estimated calculations of VOC emissions during blowdowns from compressor engines, omitting other SSM/M events. *Id.* Similarly to Lucid Frac Cat, the Petitioner also asserts that while AQB indicates that monitoring and recordkeeping requirements in the Final Permits ensure recording of the volume of gas vented and tracking of "the rolling 12-month total of VOC emissions due to SSM and Malfunction events to ensure compliance with the annual emission limits in the permit," this does not constitute sufficient monitoring. *Id.* at 13.

Lastly, the Petitioner refers to Condition A107.C in both permits, noting the condition does not appear to require the facilities to calculate the number of venting events each year, despite requiring the maintenance of other records regarding emission events, such as cumulative emissions, percent VOC of the gas, volume vented, the "equipment or activity," and a

"[description of] the event that is the source of emissions." Petitions at 13 (alteration in Petitions). The Petitioner adds that based on AQB's assertion in the RTCs that calculating the number of venting events per year is required, the Final Permits are deficient in this regard. *Id.*

***EPA's Response:*** For the following reasons, EPA grants the Petitions with regard to Claim III of both Petitions.

It is AQB's responsibility, as the title V permitting authority, to ensure that the title V permit "set[s] forth" monitoring sufficient to assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a), (c); 40 C.F.R. § 70.6(a), (a)(3), (c); and 20.2.70.302.C(1) NMAC.[27] The Petitioner has demonstrated that the title V permits do not assure compliance with the CAA, part 70, and New Mexico's approved title V program, because the title V permits do not contain sufficient monitoring designed to assure compliance with the 10 ton per year emission limit on VOCs from SSM/M events. EPA agrees with the Petitioner that while Condition A107.C in both permits includes a compliance method requirement that the facility "shall perform a facility inlet gas analysis once every year and, on a monthly basis, complete the following monitoring and recordkeeping to demonstrate compliance with the allowable emission limits,"[28] the referenced monitoring condition only states that "[t]he permittee shall monitor all SSM/M events."[29] This condition alone does not set forth any monitoring methods for demonstrating compliance with the VOC emission limit. Because the permit condition does not require Lucid Frac Cat or Big Lizard to follow any particular monitoring or recordkeeping methodology, the title V permits cannot be said to "set forth" monitoring sufficient to assure compliance. 42 U.S.C. § 7661c(c).

AQB's RTCs are also deficient and point to flaws both in the permit records and the permits themselves. In its RTCs, AQB states:

> For planned maintenance events, the facility may need to depressurize portions of the facility by venting gas. Similarly for malfunctions, portions of the facility will need depressurizing. The methodology is based on the engineering design of the equipment being depressurized. The volume of vented gas is calculated based on the volumes contained within the various equipment that are being depressurized, including the compressors and associated piping. The SSM and malfunction condition in the permit requires tracking and calculating the total VOC emissions based on the inlet gas analyses (meaning the % VOC content of the gas), the volume of gas vented, and the number of venting events per year. This methodology is

[27] 42 U.S.C. § 7661c(a) ("Each permit issued under [title V of the CAA] shall include . . . such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan."); 7661c(c) ("Each permit issued under [title V of the CAA] shall set forth . . . monitoring and reporting requirements to assure compliance with the permit terms and conditions."); 40 C.F.R. § 70.6(a) ("Each permit issued under this part shall include . . ."); 70.6(a)(3)(i) ("Each permit shall contain the following requirements with respect to monitoring: . . . ."); 70.6(c) ("All part 70 permits shall contain the following with respect to compliance: . . . testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit."); and 20.2.70.302.C(1) NMAC ("Each permit shall *contain* all emissions monitoring requirements, and analysis procedures or test methods, required to assure and verify compliance with the terms and conditions of the permit and applicable requirements, including any procedures and methods promulgated by the administrator.") (emphasis added).

[28] Lucid Frac Cat Final Permit at A9–A10 and Big Lizard Final Permit at A9

[29] Lucid Frac Cat Final Permit at A10 and Big Lizard Final Permit at A9.

> provided in the application (Section 6) with the demonstrating calculations. The number of events the permittee uses in the calculation represents their estimated worst-case scenario. The permit condition in Section 107 (107.C) does state in the recordkeeping section the requirement for the gas analysis and for the volume of gas vented. Records must be kept for at least five (5) years as specified in Condition B109B of the permit. The permit conditions do not state the number of venting events, because this may vary from year to year. In addition, the same SSM or malfunction activity, such as pigging, releases different volumes of gas when the activity occurs in different parts of the facility. The permittee must monitor for the occurrence of all SSM and Malfunction events and keep records. Monitoring and recordkeeping requires monthly tracking of the rolling 12-month total of VOC emissions due to SSM and Malfunction events to ensure compliance with the annual emission limits in the permit.

Lucid Frac Cat RTC at 5–6 and Big Lizard RTC at 11–12.

AQB's responses indicates the SSM/M condition "requires tracking and calculating the total VOC emissions based on the inlet gas analyses (meaning the % VOC content of the gas), the volume of gas vented, and the number of venting events per year."[30] However, as the Petitioner points out, the Final Permits do not explicitly require that the facility track the number of venting events per year. EPA also reads the RTCs to indicate the methodology for calculating *total VOC emissions* from SSM/M events is included in Section 6 of the permit applications. However, the Petitioner is correct in asserting that Section 6 of the permit application for Lucid Frac Cat does not set forth any methodology for calculating the total VOC emissions from SSM/M events. Instead, Section 6 of the Lucid Frac Cat application explains that the facility requests the 10 ton per year limit and explains what constitutes these SSM/M events. To the extent the state intended to rely on calculation methodologies in the Lucid Frac Cat application, these calculations are not sufficient because they appear not to exist. In regard to Big Lizard, while the application does include calculations for SSM/M emissions for compressor blowdowns, it is unclear whether these calculations include *all* SSM/M emissions, as Section 6 of the application states that "specific MSS emissions include blowdowns, slop tank cleaning, slop tank emptying and refilling, and miscellaneous activities." Big Lizard Application at Section 6, Page 2. Thus, to the extent the state intended to rely on these calculation methodologies, it is unclear whether the calculations are properly justified and comprehensive in covering all possible types of SSM/M events.

Because the permits do not specify monitoring methods for demonstrating compliance with the 10 ton per year emission limit on VOCs from SSM/M events, including the methodology for calculating total VOC emissions, EPA grants the Petitions with regard to Claim III.

[30] Lucid Frac Cat RTC at 6 and Big Lizard RTC at 11. EPA notes that the Petitioner incorrectly claims that the Final Permits do not require tracking or calculating the volume of gas vented, as the Recordkeeping requirements in Condition A107.C(1)(b) in both permits states "[r]ecords shall also be kept of the inlet gas analysis, the percent VOC of the gas based on the most recent gas analysis, and of the volume of total gas vented…" Lucid Frac Cat Final Permit at A10 and Big Lizard Final Permit at A9.

***Direction to AQB:*** AQB must amend the permits to specify the monitoring requirements that assure compliance with the 10 ton per year emission limits on VOCs from SSM events. The permits must include a clear requirement for tracking and/or calculating of the number of venting events per year. Alternatively, the RTCs indicate that the number of events the permittees use in the calculation of VOC emissions represents their estimated worst-case scenario. If this is the case, then the permit condition(s) should also reflect this assumption. Additionally, the methodology used to calculate total VOC emissions from SSM/M events should be included in the permits, whether that is on the face of the permit itself, or in the permit applications (as described in the RTC) and subsequently incorporated by reference in the permit. If AQB chooses to incorporate the application (and the aforementioned calculations) into the permits, AQB must also ensure that these applications are readily available and must provide a justification of the sufficiency of the described monitoring in the permit records.

## V. CONCLUSION

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

Dated: NOV 16 2022

Michael S. Regan
Administrator