BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	
	)	
Clean Air Act Final Renewed	)	
Title V Operating Permit	)	
	)	
Issued to Laramie Energy, LLC	)	Title V Permit No. 07OPGA292
for the Conn Creek Compressor Station,	)	
Garfield County, Colorado	)	
	)	
Issued by the Colorado Department of	)	
Public Health and Environment, Air Pollution	)	
Control Division	)	

PETITION TO OBJECT TO FINAL RENEWED TITLE V OPERATING PERMIT NO. 07OPGA292 FOR LARAMIE ENERGY'S CONN CREEK COMPRESSOR STATION

Pursuant to Section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), the Center for Biological Diversity ("Center" or "Petitioner") petitions the Administrator of the United States Environmental Protection Agency ("Administrator" or "EPA") to object to the final renewed Title V Operating Permit ("Title V Permit") issued by the Colorado Department of Public Health and Environment's Air Pollution Control Division ("Division") authorizing Laramie Energy, LLC (hereafter "Laramie Energy") to operate the Conn Creek Compressor Station in Garfield County, Colorado.

The Center requests the EPA Administrator object on the basis that the Title V Permit fails to assure compliance with Title V requirements under the Clean Air Act and fails to assure compliance with applicable requirements, including applicable requirements in the Colorado State Implementation Plan ("SIP") set forth in the state's Air Quality Control Commission ("AQCC") regulations.

The Division's final Title V Permit and supporting Technical Review Document ("TRD") were issued on April 1, 2025 and are attached as Exhibits 1 and 2, respectively.

THE CONN CREEK COMPRESSOR STATION

The Conn Creek Compressor Station is an oil and gas processing facility. The facility receives gas from nearby wells that is run through separators to remove oil and wastewater and compressed with several large engines for transport via pipeline and further processing by additional downstream processing facilities. Sources of air pollution at the Conn Creek

Compressor Station include compressor engines, dehydration units, oil and wastewater storage tanks, and routine gas venting from maintenance activities.

The Conn Creek Compressor Station is a significant source of nitrogen oxide ("NO_x") and carbon monoxide ("CO") emissions, which are released from the compressor engines, but is also a large source of harmful volatile organic compounds ("VOCs") and other hazardous air pollutants ("HAPs").

NO_x emissions are a byproduct of combustion and include a number of gases known to be harmful to human health and the environment, including nitrogen dioxide. *See* EPA, "Basic information about NO_2," website available at https://www.epa.gov/no2-pollution/basic-information-about-no2 (last accessed April 29, 2025). VOCs include a number of gases known to be extremely harmful to public health, including hazardous air pollutants like benzene, toluene, hexane, and xylene. *See* EPA, "Technical Overview of Volatile Organic Compounds," website available at https://www.epa.gov/indoor-air-quality-iaq/technical-overview-volatile-organic-compounds (last accessed April 29, 2025). Both NO_x and VOCs also react with sunlight to form ground-level ozone, a respiratory irritant and the key ingredient of smog. *See* EPA, "Ground-level Ozone Basics," website available at https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics (last accessed April 29, 2025).

Annually, the facility has the potential to emit up to 242.1 tons of NO_x, 63.8 tons of CO, and 141.2 tons of VOCs. The primary source of NO_x and CO are the facility's compressor engines and the primary source of VOCs at the Conn Creek Compressor Station include the engines, storage tanks, flares, and gas venting.

PETITIONER

The Center for Biological Diversity is a nonprofit, 501(c)(3) conservation organization. The Center's mission is to ensure the preservation, protection, and restoration of biodiversity, native species, ecosystems, public lands and waters, and public health through science, policy, and environmental law. Based on the understanding that the health and vigor of human societies and the integrity and wildness of the natural environment are closely linked, the Center is working to secure a future for animals and plants hovering on the brink of extinction, for the ecosystems they need to survive, and for a healthy, livable future for all of us.

PROCEDURAL BACKGROUND

The Center submitted comments on the draft Conn Creek Compressor Station Title V Permit on February 10, 2024. *See* Exhibit 3, Center for Biological Diversity Comments on Draft Title V Permit (Feb. 10, 2024). The Division responded to the Center's comments on January 24, 2025. *See* Exhibit 4, Colorado Air Pollution Control Division, "Response to Comments on Draft Operating Permit" (Jan. 24, 2025). The proposed permit was subsequently. submitted to EPA for the agency's 45-day review. The EPA's 45-day review concluded on March 3, 2025.

EPA did not object to the proposed permit. The Division issued the final permit on April 1, 2025.

Pursuant to 42 U.S.C. § 7661d(b)(2), this petition is now timely submitted within 60 days following a lack of objection from the EPA during the agency's 45-day review period.

GENERAL TITLE V PERMITTING REQUIREMENTS

The Clean Air Act prohibits qualifying stationary sources of air pollution from operating without or in violation of a valid Title V permit, which must include conditions sufficient to "assure compliance" with all applicable Clean Air Act requirements. 42 U.S.C. §§ 7661c(a), (c); 40 C.F.R. §§ 70.6(a)(1), (c)(1). "Applicable requirements" include all standards, emissions limits, and requirements of the Clean Air Act, including all requirements in an applicable implementation plan, or state implementation plan ("SIP"). 40 C.F.R. § 70.2. Congress intended for Title V to "substantially strengthen enforcement of the Clean Air Act" by "clarify[ing] and mak[ing] more readily enforceable a source's pollution control requirements." S. Rep. No. 101-228, at 347, 348 (1990), *as reprinted in* A Legislative History of the Clean Air Act Amendments of 1990, at 8687, 8688 (1993). As EPA explained when promulgating its Title V regulations, a Title V permit should "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." Operating Permit Program, Final Rule, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992). Among other things, a Title V permit must include compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. 42 U.S.C. § 7661c(c); 40 C.F.R. §§ 70.6(a)(1), (c)(1).

Under the Clean Air Act, "any person" may petition EPA to object to a proposed permit "within 60 days after the expiration of [EPA's] 45-day review period." 42 U.S.C. § 7661d(b)(2); *see also* 40 C.F.R. § 70.8. Each objection in the petition must have been "raised with reasonable specificity during the public comment period provided for in § 70.7(h) of this part, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period." 40 C.F.R. § 70.8(d). Any objection included in the petition "must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements [of 40 C.F.R. Part 70]." 40 C.F.R. § 70.12(a)(2).

Upon receipt of a petition, EPA "*shall* issue an objection within [60 days] if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of this chapter, including the requirements of the applicable implementation plan." 42 U.S.C. § 7661d(b)(2) (emphasis added); *see also* 40 C.F.R. § 70.8(c) ("The Administrator will object to the issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under this part."). When deciding whether a petitioner has met this demonstration requirement, EPA will evaluate the entirety of the permit record, including the statement of basis and response to comments. *See In re Valero Refining-Texas, L.P.*, Order on Petition No. VI-2021-8 (June 30, 2022). Indeed, EPA's review of a Title

V petition is confined to the petition itself, including exhibits, the permitting record, and any final permit that may be available. *See* 40 C.F.R. § 70.13.

GROUNDS FOR OBJECTION

For the reasons set forth below, the Title V Permit fails to comply with applicable requirements under the Clean Air Act. The issues discussed below were raised in comments on the draft Title V Permit for the Conn Creek Compressor Station.

I. The Title V Permit Does Not Ensure Adequate Monitoring to Assure the Flare Controlling Emissions from Dehydrator D2 Complies with Applicable Emission Limits

A Title V permit must set forth monitoring requirements to assure compliance with the permit terms and conditions. *See* 42 U.S.C. § 7661c(c). To this end, a Title V permit must contain "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit[.]" 40 C.F.R. § 70.6(a)(3)(i)(B); *see also* 40 C.F.R. § 70.6(c)(1) (Title V permits must contain monitoring requirements "sufficient to assure compliance with the terms and conditions of the permit."). Where a Title V permit fails to require sufficient monitoring to assure compliance, the permit cannot provide information necessary to determine whether a source is in compliance and therefore is unenforceable as a practical matter, contrary to Title V of the Clean Air Act. *See* 42 U.S.C. § 7661c(a) (stating that Title V permits shall include "enforceable emission limitations and standards").

Here, the Title V Permit for the Conn Creek Compressor Station does not set forth sufficient monitoring to assure compliance with the VOC limit applicable to the D2 glycol dehydrator, AIRS ID 018, at the Conn Creek Compressor Station. Of primary concern is that the Permit does not assure sufficient monitoring of the enclosed combustion device, or flare, identified as VCU4, used to control emissions from the dehydrator. Although Section II, Condition 7 set forth explicit quantitative annual limits on VOCs, as well as requires the flare to achieve a minimum 95% VOC destruction efficiency, the Title V Permit does not set forth adequate monitoring to assure compliance with these limits.[1]

[1] Although Section II, Condition 7.3 of the Title V Permit requires the flare to achieve a minimum VOC ***"destruction efficiency"*** of 95%, the underlying applicable construction permit, Permit No. 08GA1157, Issuance 4 (April 20, 2018), states that the applicable VOC limit is based on a 95% ***"control efficiency."*** *See* Exhibit 5, Construction Permit No. 08GA1157, Issuance 4 (April 20, 2018) at 24, Notes to Permit Holder Section, Condition 5. As the Division has noted, "design destruction efficiency is not the same as the overall control efficiency of the enclosed combustion device." Exhibit 6, Air Pollution Control Division, "Oil and Gas Industry Enclosed Combustion Device Overall Control Efficiency Greater than 95%," Permitting Section Memo 20-02 (Feb. 4, 2020) at 3. While "destruction efficiency" is the percent removal of hydrocarbons by a combustion device, "control efficiency" is the product of the destruction efficiency of the combustion device and the process efficiency of the combustion device and vapor control system (i.e., control efficiency = destruction efficiency x process efficiency). *Id*. To assure compliance with the applicable 95% VOC control efficiency, the flare controlling emissions from the D2 dehydrator 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

In comments, the Center raised concerns over inadequate monitoring from VCU4 and the failure of the draft Title V Permit to set forth sufficient monitoring to assure flares used to control VOC emissions at the Conn Creek Compressor Station assure compliance with applicable limits. *See* Exhibit 3, Center Comments on Draft Title V Permit, Technical Comments at 4-8. The Center provided several examples of enclosed flares failing to achieve minimum destruction efficiencies and flagged that the draft Title V Permit failed to require any periodic testing of VOCs to assure compliance with applicable limits at Section II, Condition 7, and failed to require testing to assure compliance with the 95% VOC destruction efficiency at Section II, Condition 7. The Center highlighted the draft Title V Permit's improper reliance on state-only provisions and qualitative parametric monitoring to assure compliance with quantitative limits.

In response to the Center's comments, the Division agreed that the draft Title V Permit failed to require sufficient monitoring and in particular failed to require sufficient testing. The Division offered a short response:

> To address these concerns the Division added federally enforceable initial and periodic (every 5 years) performance testing that is utilized in conjunction with continuous monitoring (including but not limited to: visible emissions and pilot light and a federally enforceable CAM plan) to monitor compliance with 95% VOC control efficiency identified in the operating permit[.]"

Exhibit 4, Division Response to Comments at Unnumbered Page 6. Although the Center appreciates that the Division acknowledged the deficiency in the draft Title V Permit and agreed to require some performance testing of the flare to assure compliance with applicable limits, the final Title V Permit unfortunately still does not set forth sufficient monitoring that assures compliance with applicable limits.

Section II, Condition 7.3 requires performance testing to verify compliance with applicable VOC limit and the minimum 95% VOC destruction efficiency for the flare. Unfortunately, the Title V Permit only requires testing only once every five years after the initial test date of October 15, 2024. This is too infrequent to assure continuous compliance with the applicable annual limits and the 95% VOC destruction efficiency.

It is first critical to highlight that the Division provided no rationale for determining that performance testing only once every five years is sufficiently periodic to assure ongoing and continuous compliance with the limits applicable to the D2 dehydrator. In its response to comments on this issue, the Division stated, "the Division summarized above and in the TRD why this monitoring scheme is appropriate." Exhibit 4, Division Response to Comments at Unnumbered Page 6. However, neither the response to comments nor the TRD actually provide any explanation or rationale in support of the determination that testing once every five years was sufficient. This lack of a rationale alone is grounds for the Administrator to object.

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only a 95% destruction efficiency, does not assure compliance with the applicable 95% control efficiency requirement.

As the EPA has made clear, "In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record." *In the Matter of CITGO Refining and Chemicals Company, L.P.*, Order on Petition No. VI-2007-01 at 7-8 (May 28, 2009) (granting petition because permitting authority "did not articulate a rationale for its conclusions that the monitoring requirements… are sufficient to assure compliance") (hereinafter, "CITGO Order"); *see also* 40 C.F.R. § 70 .7(a)(5). In general, the EPA has described five factors that should be relied upon in determining appropriate monitoring under Title V, including:

> (1) The variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring, process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities.

CITGO Order at 7-8 (May 28, 2009). These five factors are generally applied on a case-by-case basis. *Id*. at 7.

In this case, even though the Center commented that sufficient monitoring must be required, there is no explanation as to how the Division determined that testing once every five years was sufficient for the Conn Creek Compressor Station. Citing examples of flares failing to achieve 95% destruction efficiency, as well as the Division's practice of requiring more frequent testing of flare destruction efficiency, the Center stated that the Title V Permit must require testing of control devices "no less frequently than semi-annually[.]" Exhibit 3, Center Comments on Draft Title V Permit, Technical Comments at 7. The Division did not respond to this comment.

Here, the five-year frequency of the performance testing requirement is far too infrequent to assure compliance with the 95% minimum VOC destruction efficiency requirement, as well as the annual VOC limit for the D2 dehydrator.

Indeed, the Division's awareness over the need to ensure adequate and regular (i.e., more frequently than every five years) testing and monitoring of flares is reflected in its own policies, regulations, and in other permits issued in Colorado.

For example, as the Center noted in its comments, in a Title V Permit for an oil and gas production facility in Jackson County, Colorado the Division required semiannual testing of a flare to assure compliance with an applicable 98% VOC destruction efficiency requirement. In Title V Permit No. 17OPJA401 issued for the Bighorn 0780 S17 CTB Facility, the Division required:

> On a semi-annual basis, a source compliance test shall be conducted on the TCI 4800 control device to measure the emission rate of Volatile Organic Compounds (VOC) in order to demonstrate the enclosed combustor achieves a minimum destruction efficiency of 98% for VOC, and to monitor compliance with the annual emission limits[.]

Exhibit 7, Air Pollution Control Division Colorado Operating Permit, D90 Energy, LLC—Bighorn 0780 S17 CTB Facility, Permit No. 17OPJA401 (Jan. 1, 2020) at Section II, Condition 2.8.

Similarly, the Division has adopted a policy requiring at least annual testing of flares whenever a permittee requests a VOC control efficiency greater than 95%. *See* Exhibit 6, Permitting Section Memo 20-02 (Feb. 4, 2020) at 4-5. It is not clear why, in light of this policy, the Division did not require more frequent testing of the flare at the Conn Creek Compressor Station.

Although the Division may assert that more frequent testing may only be necessary at higher control efficiencies (i.e., greater than 95%), there is no support for this assertion. If a flare is not likely to achieve a greater than 95% destruction efficiency, thereby requiring semi-annual or annual testing, then there is no valid basis to conclude that a flare operating at a 95% destruction efficiency is somehow less likely to fail or otherwise less capable of not achieving the required destruction efficiency and does not require comparably frequent testing. Put another way, the distinction between 95% destruction efficiency and greater than 95% destruction efficiency is arbitrary in the context of assuring adequate monitoring. There is no support for requiring annual or semi-annual testing only when VOC destruction efficiency requirements are higher than 95%.

The Division's response to the Center's comments appears to indicate that it believes once-every-five-year testing in conjunction with parametric monitoring required by the Title V Permit is sufficient to assure compliance. However, for this to be true, the Division would have to demonstrate that parametric monitoring assures compliance with applicable quantitative limits, including the 95% VOC destruction efficiency, during the time between testing. The Division made no such demonstration. To the contrary, all indications are that the parametric monitoring set forth in the Title V Permit will not assure compliance.

As the Center stated in its comments, to the extent the Title V Permit requires parametric monitoring of the flare, this monitoring does not assure compliance with the applicable quantitative limits, in particular the applicable 95% VOC destruction efficiency requirement. In response to comments, the Division asserted that performance testing in conjunction with "continuous monitoring (including, but not limited to: visible emissions and pilot light and a federally enforceable CAM plan)" would assure compliance. However, the "continuous monitoring" cited by the Division does not assure compliance.

As the Center detailed in its comments, while the draft Title V Permit relied upon presence of pilot light monitoring and visible emissions monitoring, monitoring these parameters 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).[2] The Center provided several examples of flares at oil

[2] To the extent the Division cites the Title V Permit's Compliance Assurance Monitoring ("CAM") Plan as evidence of sufficient monitoring, the CAM Plan relies entirely on present of pilot light monitoring and visible emissions monitoring and does not present any additional forms of parametric monitoring to assure compliance.

and gas production and processing facilities failing to achieve a minimum 95% VOC destruction efficiency, even where there was a pilot light present and even where visible emission limits were met. *See* Exhibit 3, Center Comments on Draft Title V Permit, Technical Comments at 5-7.

Since commenting on the draft Title V Permit, the Center has obtained numerous additional examples of the oil and gas industry itself reporting flares failing to achieve a 95% destruction efficiency in Colorado. For example:

- The company Rocky Mountain Midstream reported a VOC destruction efficiency of 69.6% when conducting compliance testing for an enclosed combustion device controlling dehydrator emissions at the company's Latham Compressor Station in June 2020. *See* Exhibit 8, Division, "Stack Test Memo: Latham Compressor Station" (Oct. 19, 2020) at 2.

- The company Wexpro reported a VOC destruction efficiency of 67% when conducting compliance testing for an enclosed combustion device controlling condensate tank emissions at the company's Powder Wash Pad 4 in August 2023. *See* Exhibit 9, "Form 2, Notification of Failed ECD Performance Test, Wexpro Powder Wash Pad 4."[3]

- Wexpro reported a VOC control efficiency of 67% when conducting compliance testing for an enclosed combustion device controlling dehydrator emissions at the company's East Hiawatha Compressor Station in August 2023. *See* Exhibit 10, "Form 2, Notification of Failed ECD Performance Test, Wexpro East Hiawatha Compressor Station."

- The company Kerr-McGee Oil and Gas reported a VOC destruction efficiency of 93.27% when conducting compliance testing for an enclosed combustion device controlling produced water tank emissions at the company's Blue Chip 6-22HZ facility in November 2023. *See* Exhibit 11, "Form 2, Notification of Failed ECD Performance Test, Kerr-McGee Oil and Gas Blue Chip 6-22HZ."

- And in 2023, Laramie Energy itself reported a VOC destruction efficiency of 60.89% when conducting compliance testing for an enclosed combustion device controlling condensate tank emissions at the company's East Plateau Compressor Station. Exhibit 12, "Form 2, Notification of Failed ECD Performance Test, Laramie Energy East Plateau Compressor Station."

Notably, the failure of these enclosed flares to achieve a 95% destruction efficiency occurred even as combustion was occurring. It was only performance testing that revealed flare destruction efficiency below 95%.

[3] The "Notification of Failed Stack Test" forms were obtained from the Division through the Colorado Open Records Act.

In its response to comments, the Division did not respond to the Center's specific concerns that pilot light monitoring and visible emission monitoring were insufficient to assure compliance with the applicable quantitative limits in Section II, Condition 7. The Division simply asserted that pilot light and visible emissions monitoring in conjunction with testing once every five years will assure compliance with the 95% destruction efficiency. *See* Exhibit 4, Division Response to Comments at Unnumbered Page 6. However, the Division provided no information or analysis to support this assertion and did not respond to the Center's specific concerns over the failure of the Title V Permit's qualitative monitoring to assure compliance.

The EPA has generally rejected the Division's reliance on pilot light monitoring and visible emissions monitoring to assure compliance with applicable quantitative emission limits, including VOC destruction efficiency limits, for flares at oil and gas production and processing facilities. *See* In *the Matter of Bonanza Creek Operating Company, LLC*, Order on Petition No. VIII-2023-11 (Jan. 30, 2024); *In the Matter of DCP Operating Company LP, Platteville Natural Gas Processing Plant*, Order on Petition No. VIII-2023-14 (April 2, 2024); In *the Matter of HighPoint Operating Corporation, Anschutz Equus Farms 4-62-28*, Order on Petition No. VIII-2024-6. Here, any reliance on such parametric monitoring in the intervening time between flare performance testing appears similarly unsupported and insufficient to assure compliance with applicable limits. Without more frequent performance testing of the flare, the Title V Permit does not set forth sufficient monitoring under Title V that assures compliance with the applicable VOC limit and VOC destruction efficiency requirement.

The Administrator must object to the issuance of the Title V Permit for the Conn Creek Compressor Station over the failure of the permit to assure adequate monitoring of the flare used to control emissions from the D2 dehydrator. Although the Division required once-every-five-year performance testing to verify compliance with applicable limits set forth at Section II, Condition 7, there is no support for the conclusion that once-every-five-year testing is sufficiently frequent enough to assure compliance with the applicable VOC limit and the applicable 95% VOC destruction efficiency, which apply on a continuous basis.

II. The Title V Permit Does Not Assure Compliance With Applicable VOC Emission Limits for Gas Venting

Section II, Condition 9 of the Title V Permit establishes applicable limits for "routine or predictable gas venting," or "ROPE." Among other requirements, the Title V Permit limits VOC emissions from three "Activities." *See* Exhibit 1, Title V Permit at 52. This Condition, however, is not enforceable as a practical matter, does not set forth sufficient monitoring, and overall does not assure compliance with the applicable limits. The Center raised this issue with reasonable specificity in comments on the draft Title V Permit. *See* Exhibit 3, Center for Biological Diversity Comments on Draft Title V Permit, Technical Comments at 8-11.

A. Background

Emission limitations and standards within a Title V permit must be "enforceable." 42 U.S.C. § 7661c(a). To be enforceable, terms and conditions must be enforceable as a practical

matter. *See* In *the Matter of Plains Marketing LP, et al.*, Order on Petition Nos. IV-2023-1 and IV-2023-3 at 30 (Sept. 18, 2023). Inherent in this requirement is that limitations and standards must be unambiguous, understandable, and capable of informing regulators and the public as to what is actually required. *See e.g. In the Matter of West Elk Coal Mine*, Order on Petition VIII-2024-3 at 33 (May 24, 2024) (noting that ambiguity can render conditions unenforceable). Further, to be enforceable and assure compliance, a Title V permit must set forth monitoring that assures compliance with permits terms and conditions, including "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit[.]" 40 C.F.R. § 70.6(a)(3)(i)(B); *see also* 42 U.S.C. § 7611c(c) and 40 C.F.R. § 70.6(c)(1); *see also In the Matter of XTO Energy Inc., Wildcat Compressor Station*, Order on Petition No. VI-2023-4 (Aug. 7, 2023) at 19-21 (objecting to permit that failed to set forth methodologies for demonstrating compliance with applicable limits).

B. Section II, Condition 9 is Unenforceable as a Practical Matter

As the Center commented, it is first not clear what the term "routine or predictable" emissions means and how "routine or predictable" gas venting emissions differ from gas venting that is not "routine or predictable." The Title V Permit contains no specific definition or explanation as to what comprises a "routine or predictable" act of gas venting such that one can be reliably and accurately identified and monitored in order to verify compliance.

Although Section II, Condition 9.1 identifies the three "activities" subject to the "routine or predictable" emissions 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. The Title V Permit provides no specific description of the five activities, but rather simply lists the activities in terms of ambiguous phrases that do not appear grounded to any particular definitions or context that would enable an understanding of what they mean. As the Center noted in its comments:

- Activity 01 is defined as "Storage Tank Depressurization." It is not clear what operational parameters define "storage tank depressurization," what tanks are referred to, or what constitutes "depressurization."

- Activity 02 is defined as "Storage Tank Cleaning." It is not clear what operational parameters define "storage tank cleaning," what tanks are referred to, or what constitutes "cleaning."

- Activity 03 is defined as "Process Unit Blowdowns." It is not clear what operational parameters define a "blowdown," what equipment might experience blowdowns or purges, or what distinguishes a "blowdown" from other gas or liquid venting activities. Although Condition 9.1.2 identifies "compressor blowdowns, heater treater blowdowns, and 3-phase separator blowdowns," it is not clear whether Activity 03 covers blowdowns only in these instances or if these activities are cited only as examples. It is further not clear what the terms "compressor blowdowns, heater treater blowdowns, and 3-phase separator blowdowns" refer to. The draft Title V permit contains no clarity to specifically identify what pieces of equipment experience blowdowns and from where.

Exhibit 3, Center for Biological Diversity Comments on Draft Title V Permit, Technical Comments at 9-10. Without specific and accurate definitions of the activities identified in Condition 9.1, the condition cannot be enforced as a practical matter and the Title V Permit does not assure compliance with the applicable emission limits.

In response to comments on this issue, the Division stated, "The Division provides guidance on activity definitions and calculating and monitoring methodologies for ROPE in PS Memo 20-04." Exhibit 4, Division Response to Comments at Unnumbered Page 6. The Division then proceeded to cite provisions of PS Memo 20-04, asserting that this Memo provides the additional specificity and information necessary to understand the meaning of "Storage Tank Depressurization," "Storage Tank Cleaning," and "Process Unit Blowdowns." Exhibit 4 at Unnumbered Pages 6-7. This response and more specifically the Division's reference to Permitting Section Memo 20-04 did not resolve issues over the practical enforceability of Condition 9.

To begin with, Permitting Section Memo 20-04, or PS Memo 20-04 is a non-binding November 6, 2020 Colorado Air Pollution Control Division memo meant to provide state-level guidance regarding permitting of routine or predictable venting at oil and gas facilities. *See* Exhibit 13, PS Memo 20-04 (Nov. 6, 2020). The memo is not incorporated, referenced, or even mentioned in the Title V Permit and is not an underlying applicable requirement. Aside from the reference in the Division's response to comments, it does not appear that PS Memo 20-04 was intended to authoritatively inform the application of Condition 9 or to otherwise form the basis of compliance determinations. Furthermore, PS Memo 20-04 is not a federally enforceable document. Rather it is a state-issued guidance document that, at best, is state-only enforceable (if the document is enforceable at all).

Regardless, PS Memo 20-04 does not provide the clarity and specificity asserted by the Division in its response. The Memo does not explain or define what "routine or predictable" is intended to mean in the context of permitting routine or predictable gas venting at specific facilities such as the Conn Creek Compressor Station. The Memo further does not provide the clarity and specificity necessary to understand what "Storage Tank Depressurization," "Storage Tank Cleaning," and "Process Unit Blowdowns" mean.

With regards to "Storage Tank Depressurization," the Division asserts that, based on PS Memo 20-04, this activity refers to "releasing emissions from a fixed-roof storage tank through a thief hatch, blowdown valve, venting point, or other access point that does not occur during normal operation, nor due to over-pressurization as a result of design, operation, or maintenance." Exhibit 4, Division Response to Comments at Unnumbered Page 7. While this additional information is not included in the Title V Permit, it does not fully answer the question of what constitutes "Storage Tank Depressurization" at the Conn Creek Compressor Station.

It is particularly concerning that the term refers to venting emissions that do not occur during "normal operations," yet no information is provided to explain what constitutes "normal" versus "abnormal" operations. Condition 9 is meant to apply to "routine or predictable" emissions, which would indicate it is intended to cover emissions during normal operation of

storage tanks. However, as the Division notes in its response to comments, Colorado AQCC Regulation No. 7, Part B, Section II.C.2.a prohibits venting during "normal operation." Exhibit 4 at Unnumbered Page 7. The Division further states, "emissions that result from malfunctions, upsets, poor operation and maintenance" are not included as routine or predictable emissions. *Id*. Based on the Division's response, this means that the "Storage Tank Depressurization" emissions that are subject to Condition 9 do not occur during normal operations and are not the result of over-pressurization as a result of design, operation, or maintenance, yet also do not occur during malfunctions, upsets, poor operation and maintenance. Put another way, according to the Division, these routine and predictable emissions are not normal, but also not abnormal. As is clear, it not possible to understand how to identify these emissions for purposes of assuring compliance with the VOC limit applicable to "Storage Tank Depressurization."

With regards to "Storage Tank Cleaning," the Division asserted that no definition was necessary. Exhibit 4, Division Response to Comments at Unnumbered Page 7. Citing PS Memo 20-04 and EPA's AP-42 Compendium of Emission Factors at Chapter 7.1, Section 7.1.3.4, the Division states, "it is evident that tank cleaning is an activity common among oil and gas facilities to have a designated methodology[.]" *Id*. This does not explain what constitutes tank cleaning at the Conn Creek Compressor Station.

Again, it is not clear what constitutes "cleaning" as opposed to other operations that may not be subject to Condition 9. Section 4.2.5 of PS Memo 20-04 does provide some information on what might constitute tank cleaning activities, including depressurization and the application of hot oil to clean the inside of tanks, but is not clear that this section is intended to govern how "Storage Tank Cleaning" should be identified at the Conn Creek Compressor Station for purposes of assuring compliance with Condition 9. The Title V Permit does not specifically limit cleaning activities according to Section 4.2.5 of PS Memo 20-04. Section 7.1.3.4 of EPA's AP-42 Compendium of Emission Factors refers to tank cleaning emissions as those related to forced ventilation while volatile materials remain in a tank, but it is not clear that the Title V Permit is intended to limit cleaning emissions to only forced ventilation.

With regards to "Process Unit Blowdowns," the Division clarified that Condition 9.1.3 indeed only applies to compressor blowdowns, heater treater blowdowns, and 3-phase separator blowdowns. However, the Division did not respond to the Center's comment that it was unclear what constitutes a "blowdown" as opposed to other venting or other operations. Citing PS Memo 20-04, the Division just stated "blowdowns of equipment included in ROPE is defined as a unique physical volume greater than or equal to 50 cubic feet." Exhibit 4, Division Response to Comments at Unnumbered Page 7. This did not provide any additional or specificity needed to understand what constitutes a blowdown for purposes of assuring compliance with the applicable requirements under Condition 9.

It remains unclear what is referred to by "compressor blowdowns, heater treater blowdowns, and 3-phase separator blowdowns." It is not clear what specific equipment these terms refer to, where blowdowns occur in relation to the operation of these equipment, and how blowdown emissions at these equipment differ from normal emissions or operations. It remains unclear how to distinguish compliance from non-compliance given the Title V Permit's lack of clarity and specificity around how to reliably and accurately identify blowdowns.

Overall, the Activities listed in Condition 9.1 are not sufficiently defined such that it is understood what activities are specifically subject to Condition 9 for purposes of assessing compliance with applicable requirements.

C. Section II, Condition 9 Fails to Set Forth Sufficient Monitoring to Assure Compliance With Applicable Limits

A Title V permit must set forth monitoring requirements to assure compliance with the permit terms and conditions. *See* 42 U.S.C. § 7661c(c). To this end, a Title V permit must contain "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit[.]" 40 C.F.R. § 70.6(a)(3)(i)(B); *see also* 40 C.F.R. § 70.6(c)(1) (Title V permits must contain monitoring requirements "sufficient to assure compliance with the terms and conditions of the permit."). Where a Title V permit fails to require sufficient monitoring to assure compliance, the permit cannot provide information necessary to determine whether a source is in compliance and therefore is unenforceable as a practical matter, contrary to Title V of the Clean Air Act. *See* 42 U.S.C. § 7661c(a) (stating that Title V permits shall include "enforceable emission limitations and standards").

In the case of the Conn Creek Compressor Station, the Title V Permit fails to set forth sufficient monitoring to assure compliance with the applicable limits set forth in Condition 9.

With regards to emissions during "process unit blowdowns," or Activity 03, Laramie Energy is required under Condition 9.2.3 to calculate total VOC emissions based in part on the volume of gas vented. Although Condition 9.3 sets forth the equation to calculate the volume of gas vented, it does not appear to ensure that Laramie Energy can accurately measure volume.

For one, while Condition 9.3 requires consideration of temperature and pressure when calculating the volume of gas vented, the Title V permit does not set forth methods for measuring and monitoring temperature and pressure such that it ensures Laramie Energy accurately records these conditions. As the Center noted in its comments:

> We are particularly concerned over Laramie Energy's ability to measure pressure at the end of the blowdown. It is not clear it is even possible to accurately measure pressure at the end of a blowdown. Although Condition 9.5 requires Laramie Energy to monitor and record temperature, the draft Title V permit does not explain how temperature and pressure are to be measured to ensure accurate and reliable data.

Exhibit 3, Center for Biological Diversity Comments on Draft Title V Permit, Technical Comments at 10. As noted, Condition 9.5.4 requires Laramie Energy to record temperature during routine or predictable blowdown emission events and Conditions 9.5.5 and 9.5.6 require the company to record absolute pressure at the beginning and end of blowdowns. However, the Title V Permit does not set forth the methodology for accurately recording temperature and pressure or otherwise explain how Larmie Energy must measure temperature and pressure to

ensure accurate monitoring and recordings. It is not sufficient to simply state that temperature and pressure "must be monitored and recorded," the Title V Permit must specifically set forth monitoring that assures accurate data is recorded that reliably reflects compliance.

Further, while Condition 9.3 requires consideration of "unique physical volume between isolation valves" when calculating the volume of gas vented, the Title V permit does not set forth sufficiently specific methods for measuring and monitoring unique physical volume between isolation valves. Critically, it is not clear how this volume is actually measured, how Laramie Energy identifies "isolation valves," what "isolation" means, and whether this "unique physical volume" represents the full physical volume or some other "unique" volume.

Although Condition 9.5.3 requires Laramie Energy to monitor and record "unique physical volume between isolation valves" for each blowdown event, again, the Title V Permit sets forth no specific methodology and provides no additional clarity from which to understand what an "isolation valve" is, where these valves are located, and how to accurately measure volume.

In response to the Center's comments regarding a lack of temperature and pressure monitoring, the Division simply restated Condition 9.5 and then cited PS Memo 20-04 as providing "guidance on calculation and monitoring methodologies for routine or predictable (ROPE) blowdown emissions[.]". Exhibit 4, Division Response to Comments at Unnumbered Page 8.

Referencing PS Memo 20-04 in response to the Center's comments does not fulfill the Division's duty to assure the Title V Permit sets forth sufficient monitoring that assures compliance with applicable requirements. For one, the Title V Permit does not reference or otherwise rely in any explicit way on PS Memo 20-04. Thus, even if PS Memo 20-04 may set forth some monitoring, this monitoring is not set forth in the Title V Permit.

Additionally, PS Memo 20-04 is not a federally enforceable guidance memo. Rather it is a state-issued guidance document that at best is state-only enforceable (if the document is enforceable at all). The Title V Permit cannot rely on non-federally enforceable monitoring to assure compliance with the federally enforceable limits in Condition 9. *See In the Matter of Bonanza Creek Operating Company, LLC*, Order Petition No. VIII-2023-11 (Jan. 30, 2024) at 14.

Finally, PS Memo 20-04 does not actually set forth any specific monitoring requirements for temperature and pressure. Rather, it sets forth non-binding options for permittees in Colorado to monitor routine or predictable gas venting emissions. In its response to comments, the Division cites "Condition 3.1.2" of PS Memo 20-04, but this Condition simply sets forth various generic methods for calculating the volume of emissions from routine or predictable gas venting, including "using a flow meter" or calculating using "division-approved equations and parametric monitoring during the routine or predictable gas venting event (i.e., temperature and pressure)." These generic options for measuring the volume of emissions during gas venting do not constitute sufficient temperature and pressure monitoring that assures compliance with applicable limits.

In response to the Center's comments regarding the "unique physical volume between isolation valves," the Division stated that "unique physical volume between isolation valves is tied to the physical construction of the facility [and] is not expected to change regularly." Exhibit 4, Division Response to Comments at Unnumbered Page 8. The Division points to Condition 9.6.1, which requires Laramie Energy to annually review the physical dimensions of the equipment vented during routine or predictable emission activities. *Id*. Although Condition 9.6.1 requires this review of physical dimensions of equipment, it is not clear that the volume of gas vented is limited only to the physical dimensions of specific equipment. As the Title V Permit indicates, the volume of gas vented depends on the "unique physical volume between isolation valves," which can presumably change depending on which isolation valves are utilized during routine or predictable gas venting to meet the needs of Laramie Energy and the facility. It is telling that the Title V Permit does not actually limit gas venting to any specific "unique physical volume between isolation valves," meaning there is no federally enforceable limit that assures Laramie Energy only vents from the equipment—and therefore the volumes—identified under Condition 9.6.1.

With regards to emissions during Activities 01 and 02, Condition 9.2.1 of the draft Title V permit assumes a certain amount of VOCs emitted per event, but the permit does not limit the duration of events or otherwise require Laramie Energy to monitor the duration of events. While Condition 9.4 limits the number of events, there is nothing to limit how long events may take place. An event could last an hour or several days, which could lead to a higher volume of gas vented and VOCs emitted, particularly if temperature and pressure are variable and/or if the volume of liquid throughput varies during the venting event. In spite of this, Title V Permit assumes VOC emissions would be the same. As the Center commented, "This raises concerns that the 'per event' approach to monitoring VOC emissions does not accurately reflect actual emissions and cannot serve as sufficient periodic monitoring." Exhibit 3, Center for Biological Diversity Comments on Draft Title V Permit, Technical Comments at 10

Although Condition 9.6.2 ostensibly requires verification of the emission factors set forth at Condition 9.2.1, this Condition also overlooks potential variability in the duration of venting events. As the equation in Condition 9.6.2 sets forth, verification of the VOC emission factors requires consideration of "EF_{vol}," which is a volumetric emission factor representing overall volume of gas vented. These emission factors, however, are static and presumed to be the same during every event. As the table in Condition 9.6.2 discloses, EF_{vol} is at all times presumed to be 39.2 scf/tank for condensate and produced water tank depressurization, 14.7 scf/tank for gunbarrel tank depressurization, and 1810 scf/tank for all storage tank cleaning events. In other words, although the VOC emission factor may be reviewed, it is still based on the presumption that all venting events will last the same amount of time at all times and vent the same amount of gas at all times. This assumption, however, is not supported and cannot serve to ensure adequate monitoring of VOC emissions.

In response to comments, the Division does not appear to have specifically responded to the Center's comments regarding the adequacy of monitoring for Activities 01 and 02, but generally asserts that the Title V Permit sets forth "federally enforceable monitoring" and is "consistent with EPA's intent for Title V testing, recordkeeping, and reporting requirements."

Exhibit 4, Division Response to Comments at Unnumbered Page 8. As discussed above, although the Title V Permit may contain some federally enforceable monitoring, this monitoring is not sufficient to assure compliance with VOC limits applicable to gas venting during storage tank depressurization and storage tank cleaning.

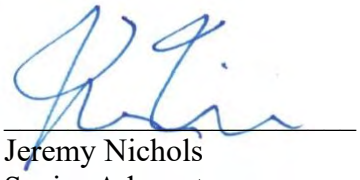
The EPA has already objected to virtually identical Title V permits setting forth gas venting VOC limits at other oil and gas processing facilities. *See In the Matter of Lucid Energy Delaware, LLC, Frac Cat Compressor Station and Big Lizard Compressor Station*, Order on Petition Nos. VI-2022-05 and VI-2022-11 (Nov. 16, 2022) at 15-19; *In the Matter of XTO Energy Inc., Wildcat Compressor Station*, Order on Petition No. VI-2023-4 (Aug. 7, 2023) at 19-21 ("*Wildcat Order*"). While these permits established gas venting VOC emission limits, they did not set forth sufficient monitoring to assure compliance with the limits. In objecting, the Administrator specifically 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 sufficient to assure compliance. 42 U.S.C. § 7661c(c). *Wildcat Order* at 20. Here, for the same reasons, EPA must object to the issuance of the Title V Permit for the Conn Creek Compressor Station for not setting forth monitoring sufficient to assure compliance with gas venting VOC limits.

CONCLUSION

Pursuant to 42 U.S.C. § 7611d(b)(2) and 40 C.F.R. § 70.8(d), the EPA must object to the issuance of the Title V Permit for the Conn Creek Compressor Station in Garfield County, Colorado. As this Petition demonstrates, the Title V Permit does not assure adequate monitoring that ensures compliance with applicable limits and does not assure compliance with Title V requirements. Accordingly, the Center requests the Administrator object to the Title V Permit and require the Division to revise and reissue the Permit in a manner that complies with the requirements of the Clean Air Act.

DATED: April 30, 2025

Respectfully submitted,



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Pursuant to 40 C.F.R. § 70.8(d), copies of this petition have been concurrently transmitted to the following parties:

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TABLE OF EXHIBITS

Exhibit

1. Final Conn Creek Compressor Station Title V Permit
2. Final Conn Creek Compressor Station Title V Permit Technical Review Document
3. Comments of the Center for Biological Diversity on the draft renewed Title V Permit for the Conn Creek Compressor Station
4. Colorado Air Pollution Control Division Response to Center for Biological Diversity Comments
5. Construction Permit No. 08GA1157, Issuance 4 (April 20, 2018)
6. Air Pollution Control Division, "Oil and Gas Industry Enclosed Combustion Device Overall Control Efficiency Greater than 95%," Permitting Section Memo 20-02 (Feb. 4, 2020)
7. Air Pollution Control Division Colorado Operating Permit, D90 Energy, LLC—Bighorn 0780 S17 CTB Facility, Permit No. 17OPJA401 (Jan. 1, 2020)
8. "Stack Test Memo: Latham Compressor Station" (Oct. 19, 2020)
9. "Form 2, Notification of Failed ECD Performance Test, Wexpro Powder Wash Pad 4"
10. "Form 2, Notification of Failed ECD Performance Test, Wexpro East Hiawatha Compressor Station."
11. "Form 2, Notification of Failed ECD Performance Test, Kerr-McGee Oil and Gas Blue Chip 6-22HZ."
12. "Form 2, Notification of Failed ECD Performance Test, Laramie Energy East Plateau Compressor Station."
13. Air Pollution Control Division PS Memo 20-04 (Nov. 6, 2020)