

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

IN THE MATTER OF	)	
	)	
Clean Air Act Title V Permits (Initial)	)	
	)	
Issued to Bonanza Creek Energy Operating	)	
Company, LLC	)	Title V Permits No. 20OPWE417,
for the Antelope CPF 13-21 Production	)	20OPWE418, 20OPWE419, and
Facility, State Antelope O-1 Central	)	20OPWE420
Production Facility, State North Platte 42-26	)	
Central Production Facility, and State	)	
Pronghorn 41-32 Central Production Facility	)	
	)	
	)	
Issued by the Air Pollution Control Division	)	
of the Colorado Department of Public Health	)	
and Environment	)	

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**Petition to Object to Colorado Title V Permits Nos. 20OPWE417, 20OPWE418,  
20OPWE419, and 20OPWE420 for the Antelope CPF 13-21 Production Facility, State  
Antelope O-1 Central Production Facility, State North Platte 42-26 Central Production  
Facility, and State Pronghorn 41-32 Central Production Facility**

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**TABLE OF CONTENTS**

INTRODUCTION .....5

PROCEDURAL BACKGROUND.....8

PETITIONERS .....8

GENERAL TITLE V PERMITTING REQUIREMENTS.....10

GROUNDS FOR OBJECTION.....12

    I.    The Permits unjustifiably assume a control efficiency of 95 percent for control devices, without proper testing, monitoring, and reporting to ensure this, and despite evidence to the contrary.....12

        A. The Antelope 13-21 and North Platte Permits Lack Adequate Testing, Monitoring, Recordkeeping and Reporting to Assure Compliance with Section II, Condition 1.1.2.....13

        B. All Four Permits Lack Adequate Testing, Monitoring, Recordkeeping and Reporting to Assure Compliance with the Permits Assumed 95% Control Efficiency for the ECD Serving the Loadout to Tanker Trucks .....33

CONCLUSION.....37

## LIST OF EXHIBITS

1. EPA Office of Inspector General, *Improving Air Quality: EPA Should Conduct More Oversight of Synthetic-Minor-Source Permitting to Assure Permits Adhere to EPA Guidance* (July 8, 2021).
2. Troutman Pepper Hamilton Sanders LLP as Special Assistant Attorneys General for the State of Colorado, *Public Report of Independent Investigation of Alleged Non-Enforcement of National Ambient Air Quality Standards by the Colorado Department of Public Health and Environment* (Sept. 22, 2021).
3. EPA, *EPA Region 8 Review of EPA's Office of Inspector General Hotline Complaint No. 2021-0188* (July 2022).
4. Center for Biological Diversity, *Comments on Draft Title V Operating Permit No. 20OPWE417 for Bonanza Creek Energy Operating Company, LLC – Antelope CPF 13-21 Production Facility (COGCC No. 441276) – Weld County* (Apr. 5, 2023).
5. Division, *Stack Tests for Enclosed Combustion Devices* (Jan. 2022).
6. EPA, *EPA Region 8, Wyoming Department of Environmental Quality, Measuring Enclosed Combustion Device Emissions Using Portable Analyzers* (May 14, 2020).
7. Email from Christopher LaPlante, CDPHE, to Jennifer Mattox, CDPHE, et al., *Fwd: Measuring Enclosed Combustion Device Emissions Using Portable Analyzers – Results Phase 1* (June 8, 2020).
8. Dr. Ranajit Sahu, *Technical Comments on the Proposed CDPHE Permit No. 20AD0062 for Haugen #1-30*.
9. EPA, *Parameters for Properly Designed and Operated Flares, Report for Flare Review Panel* (Apr. 2012).
10. Division, *Technical Review Document for Operating Permit 170PJA401: SandRidge Exploration and Production — Bighorn Pad* (Jan. 1, 2020).
11. Center for Biological Diversity, *Public Comments Regarding Draft Title V Operating Permit No. 20OPWE418 for Bonanza Creek Energy Operating Company, LLC – State Antelope O-1 Central Production Facility (COGCC No. 440823) – Weld County* (Apr. 5, 2023).
12. Center for Biological Diversity, *Public Comments Regarding Draft Title V Operating Permit No. 20OPWE419 for Bonanza Creek Energy Operating Company, LLC – State North Platte 42-26 Central Production Facility (COGCC No. 434730) – Weld County* (Apr. 5, 2023).

13. Center for Biological Diversity, *Public Comments Regarding Draft Title V Operating Permit No. 20OPWE420 for Bonanza Creek Energy Operating Company, LLC – State Pronghorn 41-32 Central Production Facility (COGCC No. 438946) – Weld County* (Apr. 14, 2023).
14. Division, *Compliance Advisory Case Nos. 2022-104 – 2022-108* (Aug 3, 2022).
15. Letter from Operating Permit Unit, Division, to Ryan Maher, Center for Biological Diversity, *Response to Comments on Draft Initial Operation Permit Antelope CPF 13-21* (Apr. 18, 2023).
16. Letter from Operating Permit Unit, Division, to Ryan Maher, Center for Biological Diversity, *Response to Comments on Draft Initial Operation Permit Antelope O-1* (Apr. 12, 2023).
17. Letter from Operating Permit Unit, Division, to Ryan Maher, Center for Biological Diversity, *Response to Comments on Draft Initial Operation Permit North Platte* (Apr. 18, 2023).
18. Letter from Operating Permit Unit, Division, to Ryan Maher, Center for Biological Diversity, *Response to Comments on Draft Initial Operation Permit Pronghorn* (May 5, 2023).
19. EPA, EPA Region 8 – Title V Operating Permit Public Petition Deadlines (accessed Nov. 10, 2022).
20. Division, *Operating Permit Bonanza Creek Energy Operating Company, LLC Antelope CPF 13-21 Production Facility (COGCC#441276)* (June 6, 2023).
21. Division, *Operating Permit Bonanza Creek Energy Operating Company, LLC State Antelope O-1 Central Production Facility (COGCC#440823)* (June 6, 2023).
22. Division, *Bonanza Creek Energy Operating Company, LLC State North Platte 42-26 Central Production Facility (COGCC#434730)* (June 6, 2023).
23. Division, *Bonanza Creek Energy Operating Company, LLC State Pronghorn 41-32 Central Production Facility (COGCC #438946)* (June 23, 2023).

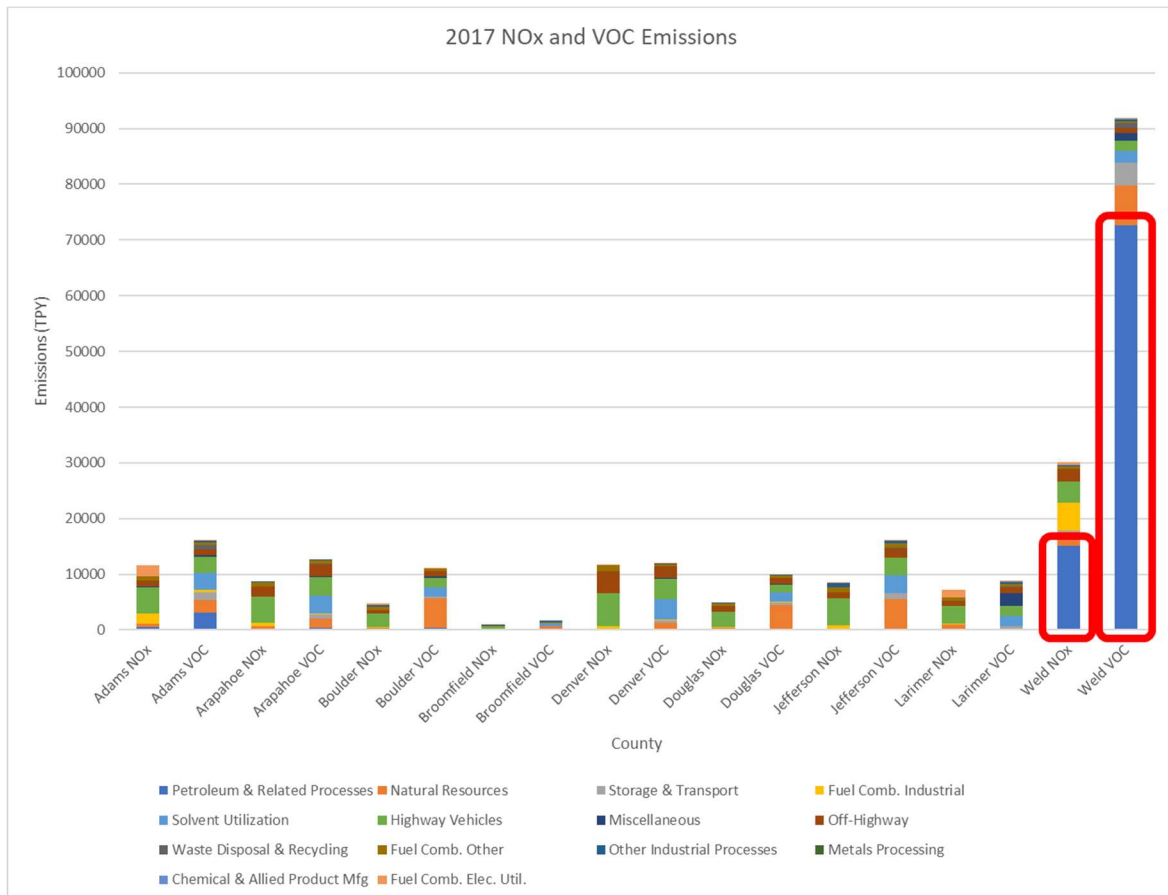
## INTRODUCTION

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”), Public Employees for Environmental Responsibility (“PEER”), 350 Colorado, the Sierra Club, and GreenLatinos [collectively “Public Interest Groups”] respectfully petition the Administrator of the United States Environmental Protection Agency (“Administrator” or “EPA”) to object to the initial Title V Permits Nos. 20OPWE417, 20OPWE418, 20OPWE419, and 20OPWE420 (collectively “Permits”) issued by the Air Pollution Control Division (“Division”) of the Colorado Department of Public Health and Environment (“CDPHE”) for Antelope CPF 13-21 Production Facility (“Antelope 13-21”), State Antelope O-1 Central Production Facility (“Antelope O-1”), State North Platte 42-26 Central Production Facility (“North Platte”), and State Pronghorn 41-32 Central Production Facility (“Pronghorn”).

The Antelope 13-21, Antelope O-1, North Platte, and Pronghorn Facilities [collectively “Facilities”] are oil and gas production facilities. The Facilities collect and process wastewater, oil, and gas from remote or onsite wells. The Facilities release large amounts of volatile organic compounds (“VOC”) and nitrogen oxides (“NOx”) emissions, which can harm human health and are also precursors to ground-level ozone and particulate matter less than 2.5 microns in diameter. The Facilities emit other pollutants that harm public health and welfare in several ways, including causing premature mortality. The Facilities also release a variety of hazardous air pollutants.

The Facilities are located in Weld County, Colorado, which is part of the Denver Metro/North Front Range ozone nonattainment area. This area, home to over three-and-a-half million people as well as spectacular natural areas like Rocky Mountain National Park, has been

in violation of EPA’s national ambient air quality standards (“NAAQS”) for over a decade and a half. In other words, there are high school students who have lived their whole lives suffering from ozone levels above EPA’s health- and welfare-based standards. Oil and gas production facilities in Weld County, including the four at issue in this petition, are the reason the Denver Metro/North Front Range area is a severe nonattainment area for the 2008 ozone NAAQS and a moderate, but soon to be serious, nonattainment area for the 2015 ozone NAAQS. Data from EPA’s 2017 National Emission Inventory, shown below, makes this very clear.



The Division has issued thousands and thousands of air pollution permits for sources of ozone precursor emissions over the past 15 years in the Denver Metro/North Front Range ozone nonattainment area. All of them have been minor source permits. In other words, the Division has not issued any major nonattainment new source review permits, which, among other important protections, would have to include emission offsets. The minor source permits the Division issues do not require emission offsets. Obviously, if the Division keeps authorizing more and more pollution to the Denver Metro/North Front Range nonattainment area, the area is not going to come into attainment with the ozone NAAQS.

The Division's minor source permits' emission limits, to the extent they exist, are not enforceable as a practical matter. Nor does the Division have a rational basis to determine that the pollution authorized by the minor source permits does not cause or contribute to a violation of a national ambient air quality standard, in particular the 2010 1-hour NO<sub>x</sub> NAAQS. The EPA Inspector General has found that EPA is not providing sufficient oversight of states', including Colorado's, minor source permitting programs. *See* US EPA Inspector General, Improving Air Quality: EPA Should Conduct More Oversight of Synthetic Minor-Source Permitting to Assure Permits Adhere to EPA Guidance, Report No. 21-P-0175, July 8, 2021 (attached as Exhibit 1).

Colorado also retained special assistant attorneys general to investigate the Division's implementation of the NAAQS protection provisions of the minor source permitting program. *See* Troutman Pepper Hamilton Sanders LLP, PUBLIC REPORT OF INDEPENDENT INVESTIGATION OF ALLEGED NON-ENFORCEMENT OF NATIONAL AMBIENT AIR QUALITY STANDARDS BY THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, Sept. 22, 2021 (hereinafter "Troutman Report") (attached as Exhibit 2). Unfortunately, Colorado's investigators, Troutman Pepper Hamilton Sanders, is a large law firm

which represents polluters, including polluters who hold minor source permits. However, even a law firm representing minor source permit holders could not miss the obvious. The Troutman Report found “CDPHE’s decision to rely solely on EPA’s permitting threshold for existing major sources in determining whether to model minor sources left CDPHE without a well-supported policy for ensuring minor source permits would not exceed a NAAQS” and “CDPHE issued permits with unaddressed modeled NAAQS exceedances.” Ex. 2 at 2, 32-33.

## PROCEDURAL BACKGROUND

The Center submitted timely comments<sup>1</sup> on the draft permits during the public comment period, which closed on April 5, 2023 (and April 14, 2023, for Pronghorn). The Division responded to public comments<sup>2</sup> and issued the proposed Permits. The Division forwarded the proposed Permits to EPA for its 45-day review period, which ended without EPA objecting. The Public Interest Groups submit this petition within 60 days of the close of EPA’s 45-day review period—August 7, 2023 (and August 22, 2023, for Pronghorn)<sup>3</sup>—as required by 42 U.S.C. § 7661d(b)(2).

## PETITIONERS

Petitioner Center for Biological Diversity (“the Center”) 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

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<sup>1</sup> Petitioner Center’s comments on the draft permits are attached as Exhibits 4, 11, 12, and 13.

<sup>2</sup> The Division’s response to the Center’s comments are attached as Exhibits 15, 16, 17, and 18.

<sup>3</sup> EPA, *EPA Region 8 – Title V Operating Permit Public Petition Deadlines*, at 2 (accessed Aug. 3, 2023), [https://www.epa.gov/sites/default/files/2020-08/documents/title\\_v\\_operating\\_permit\\_public\\_petition\\_deadlines\\_-\\_region\\_8.pdf](https://www.epa.gov/sites/default/files/2020-08/documents/title_v_operating_permit_public_petition_deadlines_-_region_8.pdf) (Ex. 19).



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. The Center has more than 89,000 members, including over 3,100 members in Colorado.

Petitioner Public Employees for Environmental Responsibility (PEER) is a non-profit organization headquartered in Silver Spring, Maryland, that speaks on behalf of environmental and public health professionals, land managers, scientists, enforcement officers, and other civil servants dedicated to upholding environmental laws and values. PEER works to seek a higher standard of environmental ethics, scientific integrity, and legal accountability within health and environmental agencies. PEER accomplishes this by defending whistleblowers, shining the light on improper or illegal actions by government and regulated entities, working to improve enforcement and implementation of laws and regulations, and securing a higher level of protection of health and the environment. PEER has a field office in Denver, Colorado.

Petitioner 350 Colorado (“350 CO”) is a nonprofit, 501(c)(3) organization, dedicated to working on the root causes of the climate crisis while prioritizing environmental justice. Founded in 2013, 350 CO now has 20,000 members statewide. 350 CO was involved with the rulemakings mandated by SB19-181 at the Colorado Oil and Gas Conservation Commission (now renamed the Energy and Carbon Management Commission) and in 2022 was a co-petitioner requesting the Commission to initiate a rulemaking to address cumulative impacts of oil and gas development, with a focus on ozone precursor and greenhouse gas emissions. As a party to the 2022 Ozone SIP rulemaking at the Air Quality Control Commission, 350 CO

advocated for the SIP to include more control measures to reduce NO<sub>x</sub> and VOC emissions from oil and gas development.

Petitioner Sierra Club's mission is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives. In addition to helping people from all backgrounds explore nature and our outdoor heritage, Sierra Club works to promote clean energy, safeguard the health of our communities, protect wildlife, and preserve our remaining wild places through grassroots activism, public education, lobbying, and legal action. Sierra Club currently has approximately 722,600 members nationwide, and 21,000 members in Colorado.

Petitioner GreenLatinos is an active comunidad of Latino/a/x leaders, emboldened by the power and wisdom of our culture, united to demand equity and dismantle racism, resourced to win our environmental, conservation, and climate justice battles, and driven to secure our political, economic, cultural, and environmental liberation.

## **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. 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* Order Responding to Petition Requesting Objection to the Issuance of Title V Operating Permit, *In re Valero Refining-Texas, L.P.*, Petition No. VI-2021-8, 2022 EPA CAA Title V LEXIS 15, at \*10–11 (June 30, 2022).

### GROUNDINGS FOR OBJECTION

For the reasons set forth below, the Permits fail to comport with the Clean Air Act. All of the issues discussed below were raised in comments on the draft permits.

**I. The Permits unjustifiably assume a control efficiency of 95 percent for control devices, without proper testing, monitoring, and reporting to ensure this, and despite evidence to the contrary.**

Title V permits must include testing, monitoring, reporting, and recordkeeping requirements sufficient to assure that the permitted source complies with the terms and conditions of the permit. 42 U.S.C. § 7661c(c); 40 C.F.R. §§ 70.6(a)(1), (c)(1). Procedures for determining compliance must be “sufficiently reliable” for determining compliance. 42 U.S.C. § 7661c(b); *see also* 40 C.F.R. § 70.6(a)(3). A Title V permit must also 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). Where a Title V permit fails to require sufficient monitoring to assure compliance, the permit cannot provide the information necessary to determine whether a source is in compliance and is therefore 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”).

**A. The Antelope 13-21 and North Platte Permits Lack Adequate Testing, Monitoring, Recordkeeping and Reporting to Assure Compliance with Section II, Condition 1.1.2.**

As discussed on pages 2 and 3 of the Center's comments on the draft Antelope 13-21 permit, Ex. 4 at 2-3, the Antelope 13-21 Permit does not comply with these requirements, that is it lacks testing, monitoring, reporting, and recordkeeping sufficient to assure compliance because Section II, Condition 1.1.2, on page 19 of Ex. 20, simply assumes that the enclosed combustion device serving the dehydration unit still vent achieves 95% control efficiency without any enforceable testing or monitoring as well as recordkeeping and reporting of the control efficiency. Section II, Condition 1.1.2 is meant to achieve compliance with the monthly and annual VOC mass emission limits in Section II, Condition 1.1. However, Section II, Condition 1.1.2 is also an independently enforceable emission limit of 95% VOC control efficiency for the enclosed combustion device. *See* Ex. 20 at 2, Section I, Condition 1.4 (emphasis added) (“**All** conditions in the permit are enforceable by ... citizens”).

The same problem exists for the North Platte facility, which the Center raised in its comments at Ex. 12 at 1-3. The North Platte permit contains an identical Section II, Condition 1.1.2, which lacks monitoring, testing, recordkeeping, and reporting to assure compliance with the 95% VOC control efficiency requirement for the enclosed combustion device. Ex. 22 at 19.

The Antelope 13-21 and North Platte Permits cannot presume that control devices will operate with a control efficiency of 95 percent without any testing, monitoring, recordkeeping and reporting of control efficiency throughout the lifetime of the device. *See* 42 U.S.C. § 7661c(c); 40 C.F.R. §§ 70.6(a)(1), (c)(1); 57 Fed. Reg. 32,250, 32,251 (July 21, 1992) (Title V permits 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.”); *see, e.g.*, Order Granting in Part and Denying in Part Petition for Objection to Permit, *In the Matter of Cash Creek Generation, LLC*, Petition No. IV-2010-4, 2012 EPA CAA Title V LEXIS 5, at \*51–56 (June 22, 2012); Colorado Regulation No. 3, Part C, Section V.C.5.b. In incorporating these defective conditions into the Permits, the Division was well aware that enclosed combustion devices, or ECDs, at oil and gas production facilities can have actual control efficiencies of less than 95 percent. For instance, direct measurement of enclosed combustion devices showed that at another Bonanza Creek facility, the Wetco Farms A-4 well pad (“Wetco Farms”), ECD-1 Load-out had a control efficiency of 68.61 percent, while ECD-1 had a control efficiency of 76.50 percent. *See* Division, *Stack Tests for Enclosed Combustion Devices* (Jan. 2022) (Ex. 5).<sup>4</sup> ECD-2 at this oil and gas well pad had an actual control efficiency of 90.73 percent and the control efficiency for ECD-2 Load-out was 92.17 percent. *See id.*

The problem also extends to different companies using different makes and models of enclosed combustion devices. For example, the enclosed combustion device at another well pad, PDC Energy’s Troudt 18-27 Pad SE (“Troudt”), had a control efficiency of 93.04 percent when tested. *See id.* Thus, the Division’s own empirical evidence rebuts its presumed 95% control efficiency.

Further, EPA Region 8 and the Wyoming Department of Environmental Quality (“Wyoming DEQ”) produced a report based on results from a large study of ECD combustion efficiency. EPA and Wyoming DEQ found:

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<sup>4</sup> The Division created Ex. 5 which is a summary of the results of enclosed combustion device test results and provided it to the Center for Biological Diversity in response to a request under the Colorado Open Records Act. It is worth noting, although certainly not necessary for proving the point, that as far as the Center is aware, all of these tests were performed when the enclosed combustion devices were new or almost new, which likely biased the results to higher control efficiencies because the devices had not yet endured the “wear and tear” from Colorado’s extreme weather.

The “as found” ECDs were observed to be operating over a wide range of combustion efficiencies ranging from below 20% to above 99%. Further optimization testing was conducted on each ECD where the ECD’s operational setup modified by opening and closing air inlet dampers, adjusting heat load and restricting burner availability. Optimization testing revealed that depending on the operational setup, ECD combustion efficiency can be affected by as little as 2% to more than 80%. This observation emphasizes the value of site-specific “spot checking” of ECDs because test conditions/operational setup can dramatically affect individual ECD performance.

EPA, Region 8, Wyoming DEQ, *Measuring Enclosed Combustion Device Emissions Using Portable Analyzers*, at 9 (May 14, 2020) (Ex. 6).

The Division was fully aware of this, including the fact that some control equipment destroys less than 20 percent of VOCs, when developing the Permits. See Email from Christopher LaPlante, CDPHE, to Jennifer Mattox, CDPHE, et al., *Fwd: Measuring Enclosed Combustion Device Emissions Using Portable Analyzers – Results Phase 1*, at 1–2 (June 8, 2020) (Ex. 7). Yet the Division still relied on simple assumptions to presume compliance. In fact, the very nature of these control devices, with their lack of control over key parameters like temperature and residence time, and the variable composition of the gas being combusted, means that assumptions about control efficiency are invalid. See, e.g., Dr. Ranajit Sahu, *Technical Comments on the Proposed CDPHE Permit No. 20AD0062 for Haugen #1-30*, at 2–5 (Ex. 8). However, the Permits still contain the assumption that control devices will operate with a control efficiency of 95 percent throughout their lifetime, under all conditions, without including any testing and monitoring of the control efficiency to assure compliance with that assumption.

It is true that Section II, Condition 1.1.2 of the Antelope 13-21 Permit requires compliance with Conditions 1.9, 1.11.1.1, and 1.11.2.1<sup>5</sup> and Section II, Condition 1.1.2 of the

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<sup>5</sup> Although the Permits do not specify, we assume Section II, Condition 1.1.2 is referring to Section II, Conditions 1.9, 1.11.1.1 and 1.11.2.1 as opposed to another section of the Permits.

North Platte Permit requires compliance with Section II, Conditions 1.9, 1.10.1.1 and 1.10.2.1 in order to presume that the ECD has achieved 95% control efficiency. Ex. 20 at 19; Ex. 22 at 19. However, as explained in more detail below, none of these Conditions are enforceable requirements for monitoring or testing the control efficiency of the ECD serving AIRS point number 001. Thus, Section II, Condition 1.1.2 in both Permits lacks monitoring, testing, recordkeeping, and reporting to assure compliance.

Section II, Condition 1.9 first requires that the ECD serving AIRS Point Number 001 be “capable of reducing VOC and HAP emissions” to less than the emission limits in Summary Table 1. Ex. 20 at 21; Ex. 22 at 21. But an ECD can be “capable” of reducing VOC and HAP to below the mass emission limits in Summary Table 1 and not actually achieve those mass emission values. Order Granting in Part and Denying in Part Petition for Objection to Permit, *In the Matter of Cash Creek Generation, LLC*, Petition No. IV-2010-4, 2012 EPA CAA Title V LEXIS 5, at \*53 (June 22, 2012). Furthermore, Summary Table 1 contains a mass emission limit but the first paragraph of Section II, Condition 1.9 does not address the 95% control efficiency requirement set forth in Section II, Condition 1.1.2.

Section II, Condition 1.9, by its plain language, is “operating and maintenance requirements” (“O&M”), not testing, monitoring, recordkeeping, and reporting requirements. Ex. 20 at 21; Ex. 22 at 21.

Section II, Condition 1.9.1 is not relevant to the issue of compliance by the ECD because it addresses the closed loop system recycling flash tank emissions, which are allegedly closed loop and control 100% of the emissions, and thus these emissions are not routed to the ECD. Ex. 20 at 21-22; Ex. 22 at 21-22.



Section II, Condition 1.9.2.1 is an O&M requirement for the pilot light to be present at all times. Ex. 20 at 22; Ex. 22 at 22. But the presence of the pilot light does not tell us anything about the control efficiency other than that it is not zero percent. As this condition itself acknowledges, without a pilot light there is no combustion in the ECD and thus the control efficiency in the ECD is zero. *Id.* But knowing that the control efficiency is not zero provides no information, much less assurance, about whether the control efficiency is more than zero but less than 95%. As detailed above, the Division and EPA have test results for ECDs showing a control efficiency of more than zero, indicating the pilot light was present, but less than 95%. *See e.g.* Exs. 5 and 6.

Section II, Condition 1.9.2.2 requires monitoring for the presence of “smoke,” an undefined term, and in certain circumstances, opacity. This is, **in theory, qualitative** monitoring for VOC control efficiency. We say in theory because the smoke and opacity could have absolutely nothing to do with the VOC control efficiency. For example, the smoke and opacity could be caused by the combustion temperature in the ECD causing thermal and/or fuel bound nitrogen being converted into PM<sub>2.5</sub> like nitrates. Nitrogen (N<sub>2</sub>) is in the ambient air and nitrates are not VOCs. Thus, the detection of “smoke” or opacity can be totally unrelated to VOC control efficiency and there is no reason to believe that addressing them would increase VOC control efficiency or guarantee a certain level of control efficiency. *See Order Granting in Part and Denying in Part Petition for Objection to Permit, In the Matter of Cash Creek Generation, LLC*, Petition No. IV-2010-4, 2012 EPA CAA Title V LEXIS 5, at \*54–55 (June 22, 2012) (monitoring for other pollutants does not assure compliance with a VOC control efficiency). Rather, the exact opposite could happen. The operator could change the combustion temperature or residence time to address nitrate, that is PM<sub>2.5</sub> unrelated to VOC, formation

which could have the unintended, and **undetected**, consequence of decreasing VOC control efficiency. *See e.g.* Ex. 8 at 2 (changes in temperature change control efficiency).

Importantly, there is no evidence that the ECD covered by Section II, Condition 1.1.2, or ECDs in general, cannot have control efficiencies of VOCs below 95% while producing no smoke and no or low opacity. Thus, Section II, Condition 1.9.2.2 does not assure compliance with the quantitative 95% control efficiency requirement for VOCs in Section II, Condition 1.1.2.

Section II, Condition 1.9.3 in the Antelope 13-21 Permit and Section II, Condition 1.9.2.3 in the North Platte Permit, which are identical in substance, are again O&M requirements, not testing, monitoring, recordkeeping, and reporting. Ex. 20 at 23; Ex. 22 at 23. Further, we do not even know what the O&M plan requires as it was not required to be submitted as part of the permit record. *Id.* It would be literally and legally arbitrary for EPA to determine that unknown maintenance practices and schedules assure 95% VOC control efficiency. *See In the Matter of WE Energies Oak Creek Power Plant*, Permit No. 241007690-P10, 2009 EPA CAA Title V LEXIS 17, at \*60-67 (June 12, 2009) (granting petition to object because the title V permit did not include various pollution-control plans, and nor did the public notice for the permit comment period, where the plans “define permit terms” and the permit relies upon the plans “to assure compliance with applicable requirements.”); *see also In the Matter of Delaware City Refining Company, LLC*, Petition No. III-2022-10, 2023 EPA CAA Title V LEXIS 8, \*69-70 (July 5, 2023). Second, maintenance practices and schedules, even if perfect, which of course they would not be in reality, would be designed to maintain the status quo. But as the Permits lack enforceable requirements for initial testing to determine if the ECD is achieving 95% control efficiency, maintaining the status quo could mean maintaining a control efficiency that was

initially below 95%. The O&M plan thus provides us with no information, much less an assurance, that there is a continuous 95% control efficiency.

Section II, Condition 1.11.1.1 in the Antelope 13-21 Permit and Section II, Condition 1.10.1.1 in the North Platte Permit, which are identical in substance, also do not provide testing, monitoring, recordkeeping, and reporting to assure continuous compliance with the 95% control efficiency presumption in Section II, Condition 1.1.2. Ex. 20 at 24; Ex. 22 at 23. To begin with, Section II, Condition 1.11 in the Antelope 13-21 Permit and Section II, Condition 1.10 in the North Platte Permit, which are identical in substance, provide that Section II, Condition 1.11.1.1 in the Antelope 13-21 Permit and Section II, Condition 1.10.1.1 in the North Platte Permit can change at any time if the Colorado Air Quality Control Commission changes Regulation 7, without public notice and comments, EPA 45-day review, or an opportunity for the public to object to the change. *Id.* It is not possible for EPA to determine that an unknown change to these conditions in the future would assure compliance with Section II, Condition 1.1.2. This, by itself, is a fatal flaw in relying on these conditions to assure compliance.

If EPA were to look beyond this fatal flaw, which it should not, these conditions apply Section II, Conditions 10.1.1.1 and 10.1.1.2 of the Antelope 13-21 Permit and Section II, Conditions 11.1.1.1 and 11.1.1.2 of the North Platte Permit, which are identical in substance, to Section II, Condition 1.1.2. Ex. 20 at 19; Ex. 22 at 19. As with the conditions explained above, these conditions do not assure compliance with the quantitative limit in Section II, Condition 1.1.2.

Specifically, the first part of Section II, Condition 10.1.1.1 for the Antelope 13-21 Permit and Section II, Condition 11.1.1.1 for the North Platte Permit require that the ECDs be operated and maintained consistent with manufacturer specifications and the undefined “good engineering

and maintenance practices.” Ex. 20 at 102; Ex. 22 at 107. There is no evidence, nor could any evidence be produced, that operating and maintenance pursuant to the undefined and vague “good engineering and maintenance practices” results in continuous compliance with the 95% VOC control efficiency. Rather, the record shows that other ECDs performed below that threshold, and there is no evidence that they were not complying with this general provision, which would apply to them.

As to the manufacturer specifications, as with the O&M plans discussed above, these are not in the permit record and thus did not go through notice and comment. EPA cannot rely on something that it and the public do not know the content of.

Furthermore, there is no evidence that operating and maintenance according to these specifications will result in continuous compliance with Section II, Condition 1.1.2. Rather, the evidence is the opposite. *See e.g.* Ex. 5. And as noted above, EPA has previously held that the fact that a flare was designed to be able to achieve a certain control efficiency does not assure that it will achieve that control efficiency continuously under all conditions. Order Granting in Part and Denying in Part Petition for Objection to Permit, *In the Matter of Cash Creek Generation, LLC*, Petition No. IV-2010-4, 2012 EPA CAA Title V LEXIS 5, at \*53 (June 22, 2012). There are a lot of variables which determine control efficiency, including residence time, temperature, and turbulence in the ECD as well as the mix of individual VOCs which make up the VOCs entering the ECD. *See* Ex. 8 at 2-3. Some of these variables, like residence time, are inherently uncontrollable in an ECD. *Id.* at 3. Thus, periodic testing like annual stack testing is the only way to assure compliance. *Id.* at 5.<sup>6</sup>

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<sup>6</sup> Due to the nature of ECDs, it would actually take CEMS to assure continuous compliance. *Id.* at 5. However, EPA need not agree to object to Section II, Condition 1.1.2.

The second part of Section II, Condition 10.1.1.1 and Condition 11.1.1.1 requires that the air pollution control equipment be adequately designed and sized to achieve the control efficiency rates required “by this Section I”. Ex. 20 at 102; Ex. 22 at 107. To begin with, it is not clear what this reference to Section I is referring to be, but it is clearly not referring to Section II, Condition 1.1.2 of the Permits, so it is not adequate to assure compliance with that permit condition. Furthermore, these conditions lack recordkeeping and reporting to allow EPA, the Division, and the public to determine if the air pollution control equipment, in particular the ECD which serves AIRS Point 001, was actually adequately designed and sized to achieve 95% control efficiency. And finally, as explained above, EPA has already held that design and sizing does not assure compliance with a flare’s VOC control efficiency. Order Granting in Part and Denying in Part Petition for Objection to Permit, *In the Matter of Cash Creek Generation, LLC*, Petition No. IV-2010-4, 2012 EPA CAA Title V LEXIS 5, at \*53 (June 22, 2012).

Section II, Condition 10.1.1.2 for the Antelope 13-21 Permit and Section II, Condition 11.1.1.2 for the North Platte Permit, which are identical in substance, fail to assure compliance for all the reasons discussed above. Namely, the vague terms of “minimize emissions” to the “maximum extent practicable” do not assure 95% control efficiency. Also, the conditions lack recordkeeping and reporting to inform the Division, EPA, and public of whether the design, operation, and maintenance actually do minimize emissions of VOCs to the maximum extent practicable. And finally, design and maintenance do not assure 95% control efficiency. Order Granting in Part and Denying in Part Petition for Objection to Permit, *In the Matter of Cash Creek Generation, LLC*, Petition No. IV-2010-4, 2012 EPA CAA Title V LEXIS 5, at \*53 (June 22, 2012).

Finally, we turn to Section II, Condition 1.11.2.1 in the Antelope 13-21 permit and Section 1.10.2.1 in the North Platte permit. These conditions inherently fail to assure the public and EPA of compliance with Section II, Condition 1.1.2 because they are “state-only enforceable.” Ex. 20 at 2, 26; Ex. 22 at 2, 26. EPA has granted a petition to objection where “The Permit requires non-federally enforceable monitoring to show compliance with a federally enforceable condition prohibiting the combustion of routinely-released gases in a flare.” *In the Matter of Chevron Products Company*, Petition No. IX-2004-08, 2005 EPA CAA Title V LEXIS 6, at \*81-82, 88 (Mar. 15, 2005) (also stating, “EPA also agrees with Petitioner that federally enforceable monitoring is necessary to assure compliance with the federally enforceable requirements of Condition 18656.”) (emphasis added); *see also In the Matter of Conoco Phillips Co.*, Petition No. IX-2004-09, 2005 EPA CAA Title V LEXIS 8, at \*51 (Mar. 15, 2005). Because the public and EPA cannot assure that the permittee complies with the requirements in these conditions, the permit conditions cannot assure the public and EPA that these conditions will assure compliance with Section II, Condition 1.1.2.<sup>7</sup>

EPA recently denied a Title V petition submitted by the Center because EPA said it will not evaluate a state-only enforceable permit term unless “it impairs the effectiveness or enforceability of the federally enforceable title V permit conditions[.]” Order Granting in Part and Denying in Part Petitions for Objection to a Title V Operating Permit, *In the Matter of Terra Energy Partners, Rocky Mountain LLC, Parachute Water Management Facility*, Petition Nos.

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<sup>7</sup> Colorado could fix this problem by submitting Reg. 7, Part D, Sections II.B.2.g and h to EPA to be part of the Colorado SIP. The Center explicitly asked the Division and the Colorado Air Quality Control Commission to do that in the rule-making proceeding that created these parts of Reg. 7. The Division and the Colorado Air Quality Control Commission explicitly refused this request. Colorado has renumbered Reg. 7 such that the cite would now be Reg. 7, Part B, Sections II.B.2.g and h.

VIII-2022-16 & VIII-2022-17 at 12 (June 14, 2023) (hereinafter, “TEP Order”); *see also, e.g., In the Matter of Cargill, Inc.*, Petition No. VII-2022-9, 2023 EPA CAA Title V LEXIS 2, at \*77 (Feb. 16, 2023) (“State-only terms are not subject to the requirements of Title V and hence are not . . . evaluated by EPA unless those terms are drafted in a way that might impair the effectiveness of the permit or hinder a permitting authority's ability to implement or enforce the permit.”). No one is claiming that Section II, Conditions 1.11.2.1 and 1.10.2.1 impair the enforceability of Section II, Condition 1.1.2. Thus, consistent with the TEP Order and EPA’s position in prior orders, EPA should not credit these state-only enforceable provisions.

Even if EPA were to explicitly hold that Section II, Conditions 1.11.2.1 and 1.10.2.1 must be evaluated to determine if the permits contain monitoring, testing, recordkeeping, reporting to assure compliance with Section II, Condition 1.1.2, as explained below, EPA would still have to hold that that they do not. Section II, Condition 1.11.2.1 applies Condition 10.7 to AIRS Point 001 and Section II, Condition 1.10.2.1 applies Condition 11.7 to AIRS Point 001. Ex. 20 at 26; Ex. 22 at 26. Section II, Condition 10.7 is the same in substance as Section II, Condition 11.7. *See* Ex. 20 at 114 – 121; Ex. 22 at 119 – 126.

Section II, Condition 11.7 and Section II, Condition 10.7 are clearly marked “State-Only Enforceable.” Ex. 20 at 114; Ex. 22 at 119. Thus, as explained above, these conditions cannot assure compliance for EPA and the public because EPA and the public cannot enforce these conditions to assure that the facilities comply with them.

Even if we ignore the fact that these are state-only enforceable conditions, they still do not assure compliance with Section II, Condition 1.1.2. Section II, Conditions 10.7.1.1, 10.7.1.2, 10.7.2.1, and 10.7.2.3 in the Antelope 13-21 Permit and Section II, Conditions 11.7.1.1, 11.7.1.2, 11.7.2.1, and 11.7.2.3 in the North Platte Permit create vague requirements for design, operation,

auto-igniters, and maintenance discussed above and do not assure compliance for the reasons explained above. See Ex. 20 at 114-115; Ex. 22 at 119-120. *See also Supra* at 16 - 21.

Section II, Condition 10.7.2.2 and Section II, Condition 11.7.2.2, require that the combustion device be “enclosed.” But having the combustion device be enclosed does not assure 95% control efficiency of VOCs. The empirical evidence shows that not to be the case. Ex. 5 and 6. The purpose of enclosing the combustion device is really to avoid radiation from the flare to the surrounding area, as well as to provide some noise reduction. Ex. 8 at n.6. While it does possibly reduce cross-winds, that does not guarantee a minimum residence time, which is what is needed to assure a certain control efficiency. *Id.*

Section II, Condition 10.7.2.2 and Section II, Condition 11.7.2.2 also require no visible emissions during normal operations. As explained above, a prohibition on visible emissions does not assure a 95% VOC control efficiency. *See Supra* at 17 - 18. Furthermore, this requirement only applies during the undefined “normal operations.” But monitoring must be sufficient to assure continuous compliance, not just during normal operations, which, regardless, is not a defined state of operation.

Finally, these conditions require that an observer can, by means of visual observation from the outside of the ECD, or by other means approved by the Division, determine whether the ECD is operating “properly.” This provision fails because the Division can approve an unknown method without a change to the Title V permit and thus without notice and a comment period, without EPA’s 45-day review period, and without the opportunity for the public to petition EPA for an objection. EPA and the public cannot know if this unknown method the Division can approve, with unlimited discretion, will assure compliance. *See* TEP Order at \*46-47 (granting petition for objection with respect to an improper permit condition that allows the Division to



approve alternative emissions estimation methods “entirely outside of the permitting process . . .”). In any event, all an observer can determine by looking at the ECD is whether there is combustion. As explained above, this does not assure that 95% of VOCs are being controlled. *See Supra* at 16 - 17. Section II, Condition 10.7.2.4.a and b(i) – (iv), (vi) and Section II, Condition 11.7.2.4.a and b(i) – (iv), (vi) require certain maintenance and visual inspections. Ex. 20 at 115; Ex. 22 at 120. As explained above, this does not assure 95% VOC control efficiency. *See Supra* at 16 - 21.

Section II, Conditions 10.7.2.4.b(vii) and 10.7.2.5 and Section II, Conditions 11.7.2.4.b(vii) and 11.7.2.5 address flow meters for ECDs or banks of ECDs. Ex. 20 at 115-116; Ex. 22 at 120-121. These conditions do not assure compliance with the 95% VOC control efficiency because flow meters are not actually required. Flow meters are *per se* not required on portable ECDs and are not required if the Division decides they are “technically or economically infeasible.” Section II, Condition 10.7.2.5.c; Section II, Condition 11.7.2.5.c. Ex. 20 at 116; Ex. 22 at 121. EPA has long held that these “director’s discretion” provisions are not legal. *See e.g.* 85 Fed. Reg. 43,692, 43,693 (July 20, 2020); TEP Order at \*46-47. Furthermore, obviously a non-existent flow meter on a temporary ECD provides no information about VOC control efficiency.

Moreover, all that is required if a flow meter is installed is the weekly maximum and minimum flow rate. Continuously recording flow is optional. Section II, Conditions 10.7.2.4.b(vii) (owner or operator **may** use automation to continuously record flow) and Section II, Conditions 11.7.2.4.b(vii) (owner or operator **may** use automation to continuously record flow). Ex. 20 at 115; Ex. 22 at 120. One would need continuous flow data to determine

continuous compliance if flow data actually could determine control efficiency, which it cannot by itself.

Furthermore, owners and operators can use one flow meter to measure the flow into a whole bank of ECDs. Section II, Condition 10.7.2.5 and Section II, Conditions 11.7.2.5. Ex. 20 at 116; Ex. 22 at 121. Using one flow meter for a whole bank of ECDs provides no data on flow to an individual ECD and thus no information about its individual performance. The Division would undoubtedly just assume that the flow to each ECD in the bank is the flow to the bank divided by the number of ECDs in the bank, but that assumption would be arbitrary because there would be no data to support it. Thus, it would not assure anyone of anything.

Fundamentally, even if there was a flow meter serving one ECD and continuously recording the flow, that does not tell one what the VOC control efficiency is. As explained above, control efficiency is determined by temperature, residence time, and turbulence. *See Supra* at 15. Flow meters do not provide any data on any of these variables. Furthermore, flow measures all VOCs, but as explained above, individual VOCs are controlled at different rates under the same conditions in an ECD. *See Supra* at 20. Just measuring flow ignores that fact that the composition of individual VOCs at the inlet to an ECD varies over time.

Finally, a flow meter, by itself, does nothing. The Permits do not set limits on the flow in an attempt to assure 95% control efficiency.

Section II, Condition 10.7.2.6 and Section II, Condition 11.7.2.6 do at first glance appear to require performance testing of the ECD serving AIRS 001. Ex. 20 at 116 – 119; Ex. 22 at 121 – 124. However, a review of the language of these conditions establishes that they do not assure compliance with Section II, Condition 1.1.2.

Section II, Condition 10.7.2.6(a)(ii) and Section II, Condition 11.7.2.6(a)(ii) require that the performance test must be conducted in accordance with a Division-approved test protocol. Ex. 20 at 116; Ex. 22 at 121. These conditions do not require that the performance test be performed pursuant to a specific performance specification or performance specifications. EPA and the public will not have an opportunity to comment on the Division-approved test protocol and object to or otherwise challenge Division-approved test protocol. Because the test method that will actually be used is not part of the record for this permitting action, which the public and EPA did not have access to during this permitting process, EPA cannot find that these undefined conditions assure compliance.

Section II, Condition 10.7.2.6(a)(iv) and Section II, Condition 11.7.2.6(a)(iv) arbitrarily state that a source has to use the results of any failed performance test for “the calendar year of a failing performance test.” Ex. 20 at 117; Ex. 22 at 122. In other words, if a source fails a performance test on January 2nd, the source can still assume it had a control efficiency of 95% on December 31st even though there is absolutely no evidence to support this assumption.

Similarly, Section II, Condition 10.7.2.6(a)(v) and (vi) and Section II, Condition 11.7.2.6(a)(v) and (vi) arbitrarily authorize continued violations of the control efficiency requirement for up to 120 days. *Id.* The Division has no authority to pre-authorize violations of Title V permits. In any event, these conditions are the exact opposite of assuring EPA and the public that the source is complying with the applicable requirements in the Title V permits.

Section II, Condition 10.7.2.6(a)(vii) and Section II, Condition 11.7.2.6(a)(vii) allow certain ECDs to not be performance tested at all. Ex. 20 at 117; Ex. 22 at 122. The fact that one particular unit of a particular model was tested under certain ambient conditions with a certain mix of VOCs does not assure that the ECDs serving AIRS 001 at the Antelope 13-21 and North

Platte facilities will continuously achieve a 95% VOC control efficiency. For example, the mix of VOCs during the test pursuant to 40 C.F.R. § 60.5413a(d) will certainly be different than the mix of VOCs Antelope 13-21 and North Platte produce, and there is no basis to assume that the performance of the ECDs will be the same on the different VOC mixes. And that is just one example of the differences between the one test pursuant to 40 C.F.R. § 60.5413a(d) and the conditions Antelope 13-21 and North Platte's ECDs will experience.

Section II, Condition 10.7.2.6(b)(i) and Section II, Condition 11.7.2.6(b)(i) allow the Division to approve any testing schedule that the Division wants. Ex. 20 at 117; Ex. 22 at 122. Thus, because the permits do not set testing frequency, EPA and the public cannot be assured that the performance testing will be frequent enough to assure compliance.

Accordingly, EPA must object to the Antelope 13-21 and North Platte Permits because there must be testing, monitoring, and reporting to verify that control devices are achieving the require control efficiency. This must include, at a bare minimum, a federally enforceable requirement for stack testing pursuant to a specific test methodology, like a performance specification, which should be required no less frequently than semi-annually, consistent with the Bighorn Pad Title V permit. See Ex. 10, Division, *Technical Review Document for Operating Permit 170PJA401: SandRidge Exploration and Production — Bighorn Pad*, at 10 (Jan. 1, 2020) (“Semi-annual stack testing is required by the Division to ensure appropriate emission control efficiency.”) (hereinafter “Bighorn Permit”).

In its response to comments, the Division says that the Bighorn Permit is not a relevant comparison because the permittee was requesting a presumed control efficiency of 98.5%, which is more than 95%, and one of the Division's memos says that in those cases performance testing must be required. Ex. 15 at 5<sup>th</sup> page; Ex. 17 at 5<sup>th</sup> page to 6<sup>th</sup> page. But the Division offers no

evidence for this distinction between 95% control and 98.5% control, or the requirements necessary to achieve these levels of control. Rather, the evidence before the Division shows ECDs operate down to 20% or less control efficiency. Thus, the distinction between 95% control and 98.5% control is literally and legally arbitrary.

The Permits must also include continuous emissions monitoring and associated recordkeeping and reporting. If EPA does not conclude that continuous emissions monitoring systems are necessary, despite their technological feasibility, as they are used by stack testing companies during stack tests, then EPA must object to the Permits based on the lack of parametric monitoring for the control devices. The parametric monitoring should, at a minimum, set maximum and minimum requirements for both flow, temperature, residence time, and turbulence, with the acceptable parameters being based on the most recent stack tests.

In its response to the Center's comments on this issue, the Division outlines the actions the permittee must perform for the presumption of 95 percent control efficiency to apply, including operating the control device consistent with manufacturer specifications and operating an auto-igniter. Ex. 15 at 3<sup>rd</sup> page to 5<sup>th</sup> page; Ex. 17 at 3<sup>rd</sup> page to 6<sup>th</sup> page. These are the same requirements that applied to the control devices at the Wetco Farms and Troudt well pads discussed above, which were functioning with less than 95 percent control efficiency. *See* 5 C.C.R. 1001-9, Pt. D § II.B.<sup>8</sup> Thus, these requirements do not assure compliance with the Permits terms. Additionally, these requirements do not assure compliance for the reasons discussed above. *See Supra* at 16 - 17, 19 - 20.

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<sup>8</sup> Colorado renumbered Regulation 7 so that the current cite is 5 C.C.R. 1001-9, Pt. B §§ I.C.1, II.B.2.

Further, there are several factors that affect flare control efficiency that the Permits do not account for. Control efficiency is affected by variables like weather, altitude, damage during shipping, the way the equipment is installed, improper construction of the particular device, variabilities in the fuel and waste streams, and different temperatures needed for different VOCs. See e.g. Ex. 8 at 2–5; *see also* Ex. 9 EPA, *Parameters for Properly Designed and Operated Flares, Report for Flare Review Panel* (Apr. 2012). VOC control efficiency is also controlled by residence time and temperature. Ex. 8 at 2–3. A flare does not necessarily ensure consistency for these two parameters and thus cannot deliver a consistent control efficiency. *Id.* No quantitative assumptions can rationally be made about the impacts these many variables in total have on the mass emissions from a flare, nor do opacity or visible emissions testing provide information about VOC emissions. *Id.* at 5; *Supra* at 17 - 18. Variables in the field, like altitude, weather, and precipitation, may differ from the initial testing conditions the manufacturer relied upon, such that actual control efficiency can deviate from the manufacturer’s specifications. Only testing will provide the data needed to ensure compliance. *Id.*

In its response to comments, the Division references Section II, Conditions 1.9, 3.8, 4.8, 5.8, 8.9, and 10.7 as the conditions which must be met to presume 95% control efficiency for the Antelope 13-21 facility. Ex. 15 at 3<sup>rd</sup> page. But Section II, Condition 1.1.2 makes no reference to Section II, Conditions 3.8, 4.8, 5.8, or 8.9, either directly or by reference. Ex. 20 at 19.

Similarly, in its response to comments, the Division references Section II, Conditions 1.9, 2.9, 3.7, 5.8, 6.7, 9.9, and 11.7 as the conditions which must be met to presume 95% control efficiency for the North Platte facility. Ex. 17 at 3<sup>rd</sup> page. But Section II, Condition 1.1.2 makes no reference to Section II, Conditions 2.9, 3.7, 5.8, 6.7 or 9.9, either directly or by reference. Ex. 22 at 19.

As explained above, Section II, Condition 1.9 does not assure compliance with the qualitative requirement of 95% VOC control efficiency. *See Supra* at 16 - 18. The same goes for Section II, Condition 10.7 and Section II, Condition 11.7, which are incorporated by reference into Section II, Condition 1.11.2.1 and Section II, Condition 1.10.2.1. Ex. 20 at 26; Ex. 22 at 26. *See Supra* at 21 - 28. Furthermore, the Division fails to even mention in its response to comments that Section II, Conditions 1.11.2.1 and 10.7 and Section II, Conditions 1.10.2.1 and 11.7 are State-Only Enforceable provisions, much less explain how provisions which EPA and the public cannot enforce can nevertheless provide testing, monitoring, recordkeeping, and reporting which are to assure EPA and the public that the Antelope 13-21 is complying with Section II, Condition 1.1.2.

The Division declares by fiat that the requirements of “operating the control device consistent with manufacturer specifications, following individually developed maintenance practices, operating with no visible emissions, performing visual observations to confirm the control device is operating properly, and installing and operating an auto-igniter” are parametric monitoring used to determine if the ECD is meeting the requirement to achieve 95% control efficiency. Ex. 15 at 3<sup>rd</sup> page; Ex. 17 at 3<sup>rd</sup> page. The Division offers no evidence in general to connect these parametric monitoring requirements and 95% control efficiency, much less to explain the specific situations where ECDs were complying with these requirements and tested below 95% VOC control efficiency.

The Division goes on to discuss conditions 4.2.1, 4.9, 2.8.7, 2.8, 2.9.1.2, 2.9.1.3, and 2.7 for the Antelope 13-21 facility and 3.1.1, 6.1.1, 4.8.7, 4.10.1.2, 4.10.1.3, 4.7, and 4.10.1.4 for the North Platte facility. Ex. 15 at 3<sup>rd</sup> to 4<sup>th</sup> page; Ex. 17 at 3<sup>rd</sup> to 4<sup>th</sup> page. None of these conditions

are required to be met to use the presumption of 95% VOC control efficiency in Section II, Condition 1.1.2.

The Division goes on to reference Condition 10.7.2.6 and Condition 11.7.2.6 and explain that this condition “contains no presumption of compliance” but rather “certain emission units subject to a 95% control requirement” are required to conduct performance testing, and thus claims the permits contain “appropriate monitoring to assess compliance with the 95% control efficiency requirement[.]” Ex. 15 at 4<sup>th</sup> – 5<sup>th</sup> page; Ex. 17 at 5<sup>th</sup> page. However, for the reasons explained above, Conditions 10.7.2.6 and 11.7.2.6 do not actually assure compliance. *See Supra* at 26 - 28.

The Division also asserts that its testing of control devices showed that, on average, the devices had control efficiencies of 95 percent or more. Ex. 15 at 5; Ex. 17 at 6. The Division, however, concedes that not each ECD achieved 95 percent and that five stack tests revealed control efficiencies below 95 percent. *Id.* Pursuant to the Clean Air Act, the standard is not that the monitoring and testing requirements of the permit *may* result in compliance with the permit’s terms and conditions. Nor is it good enough that all devices across all sources average out to 95 percent as that is not the applicable requirement. Rather, the permit conditions require that each device at these facilities achieve 95 percent control efficiency, and the testing, monitoring, and reporting must assure that. The monitoring and testing requirements must *assure* compliance with the Permits’ specific terms in all cases, 42 U.S.C. § 7661c(c); 40 C.F.R. §§ 70.6(a)(1) & (3)(i)(B), (c)(1), and the Division acknowledges that the current approach in the Permits does not always assure compliance with a 95 percent control efficiency.

Thus, EPA must object to the Antelope 13-21 and North Platte permits because they do not contain monitoring, testing, recordkeeping, and reporting sufficient to assure compliance



with Section II, Condition 1.1.2 and thus do not comply with 42 U.S.C. § 7661c(c); 40 C.F.R. §§ 70.6(a)(1) & (3)(i)(B), (c)(1).

**B. The Four Permits Lack Adequate Testing, Monitoring, Recordkeeping and Reporting to Assure Compliance with the Permits Assumed 95% Control Efficiency for the ECD Serving the Loadout to Tanker Trucks**

The same problem described in Section I.A above with regard to the ECDs serving the Dehydration Units at the Antelope 13-21 and North Platte facilities also exists with regard to the ECDs serving the Loadout to Tanker Trucks at all four Facilities. Specifically, as discussed on pages 2 and 3 of the Center's comments on the draft Antelope 13-21 permit, Ex. 4 at 2-3, the Antelope 13-21 Permit does not comply with these requirements, that is, it lacks testing, monitoring, reporting, and recordkeeping sufficient to assure compliance because Section II, Condition 3.2.1.1 on page 43 of the Antelope 13-21 permit, which is Ex. 20, simply assume that the enclosed combustion device serving the hydrocarbon loadout to tanker trucks, AIRS 008, achieves 95% control efficiency without any enforceable testing or monitoring, nor any recordkeeping and reporting of the control efficiency, that assures 95% control efficiency of VOCs. Section II, Condition 3.2.1.1 (Ex. 20 at 43) is meant to ensure compliance with the annual VOC mass emission limits in Section II, Condition 3.2. However, Section II, Condition 3.2.1.1 is also an independently enforceable emission limit of 95% VOC control efficiency for the enclosed combustion device. *See* Ex. 20 at 2, Section I, Condition 1.4 (emphasis added) (“**All** conditions in the permit are enforceable by ... citizens”).

The Center's comments raised this same issue with regard to Section II, Condition 2.2.1 (Ex. 21 at 29) of the Antelope O-1 Permit (Ex. 11 at 2-3); Section II, Condition 5.2.1 (Ex. 22 at 59) of the North Platte Permit (Ex. 12 at 2-3); and Section II, Condition 3.1.1 (Ex. 23 at 36) of

the Pronghorn Permit (Ex. 13 at 1-4). These permit conditions are all identical to Section II, Condition 3.2.1.1 of the Antelope 13-21 permit in terms of their substantive requirements.

Section II, Condition 3.2.1.1 of the Antelope 13-21 permit does require that Section II, Conditions 3.8 and 10.7.2.2 be met in order to use the presumption of 95% VOC control efficiency. Ex. 20 at 43. The other three permits have provisions which are identical in substance, even though they reference different condition numbers. Ex. 21 at 29, Ex. 22 at 59, Ex. 23 at 36. As explained below, the requirement to meet these two conditions does not assure compliance with 95% VOC control efficiency. Specifically, Section II, Condition 3.8 requires the ECD be “capable of reducing VOC” to the mass emission limit in Table 3. Ex. 20 at 46. *See also* Ex. 21 at 32 (same), Ex. 22 at 62 (same), Ex. 23 at 38 (same). As explained above, a requirement for the ECD to be capable of reducing VOC does not assure 95% control efficiency. *See Supra* at 16.

Section II, Condition 3.8.1 are operating and maintenance requirements to ensure that the VOCs enter the inlet to the ECD, as opposed to escape to the atmosphere, rather than that the ECD destroys 95% of them. Ex. 20 at 46-47. *See also* Ex. 21 at 32 (same), Ex. 22 at 62 (similar but more comprehensive), Ex. 23 at 38 (similar but more comprehensive).<sup>9</sup> Thus, they are not relevant to this issue. To the extent EPA disagrees about the relevancy, there is no evidence that the O&M procedures assure 95% VOC control efficiency for the ECD. *See Supra* at 18 - 20.

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<sup>9</sup> To the extent that the Division believes, or EPA finds, that the requirements in Section II, Conditions 5.8.1 and 5.8.2 for the North Platte Facility and Section II, Conditions 3.7.1 and 3.7.2 for the Pronghorn Facility are necessary to assure compliance the 95% control efficiency requirement for the ECD and/or the VOC mass emission for the hydrocarbon loadout to tanker trucks, then EPA should find that the permits for the Antelope 13-21 and Antelope O-1 facilities are inadequate because they lack all of the requirements which are present in the North Platte and Pronghorn Facilities. EPA could address this issue by re-opening the Antelope 13-21 and Antelope O-1 permits.

Section II, Condition 3.8.2.1 addresses the pilot light in the ECD. Ex. 20 at 47. As explained above, this does not assure 95% VOC control efficiency. *See supra* at 16 - 17. The same is true for the other Facilities. *See* Ex. 21 at 32-33, Section II, Condition 2.8.2.1, Ex. 22 at 63, Section II, Condition 5.8.3.1, Ex. 23 at 39, Section II, Condition 3.7.3.1.

Section II, Condition 3.8.2.2 addresses visible emissions observations of the ECD. Ex. 20 at 47-48. As explained above, this does not assure 95% VOC control efficiency. *See supra* at 17 - 18. The same is true for the other Facilities. *See* Ex. 21 at 33-34, Section II, Condition 2.8.2.2; Ex. 22 at 63-64, Section II, Condition 5.8.3.2; Ex. 23 at 39-40, Section II, Condition 3.7.3.2.

Section II, Condition 3.8.3 requires following individually developed maintenance practices and schedules which must be consistent with good air pollution control practices for minimizing emissions. Ex. 20 at 48. As explained above, this does not assure 95% VOC control efficiency. *See supra* at 18 – 20. The same is true for the other Facilities. *See* Ex. 21 at 34, Section II, Condition 2.8.3, Ex. 22 at 64, Section II, Condition 5.8.4, Ex. 23 at 40, Section II, Condition 3.7.4.

Section II, Condition 10.7.2.2, is State-Only Enforceable, Ex. 20 at 114, and requires that a combustion device be enclosed, have no visible emissions during normal operations, and be designed so that an observer can, by visual observation from outside of the ECD, or other means approved by the Division, determine whether the ECD is operating properly. Ex. 20 at 114. As explained above, this does not assure 95% VOC control efficiency. *See supra* at 17 – 17, 23 – 25. The same is true for the other Facilities. *See* Ex. 21 at 98, Section II, Condition 9.7.2.2, Ex. 22 at 119, Section II, Condition 11.7.2.2, Ex. 23 at 98-99, Section II, Condition 10.7.2.2.

We want to emphasize that Section II, Condition 3.2.1.1, Ex. 20 at 43, does not require the meeting of Section II, Condition 10.7.2.6, which does purport to require performance testing.

Section II, Condition 10.7.2.6, Ex. 20 at 116, says it only applies to AIRS 001, 007 & 009 and the loadout to tanker trucks is AIRS 008. Ex. 20 at 43. The same is true for the other Facilities, that is the loadout to tanker trucks is not covered although the AIRS numbers in each permit do vary. *See* Ex. 21 at 29, 99, Ex. 22 at 59, 121, Ex. 23 at 36, 100.

In its response to comments, the Division does mention that Section II, Condition 3.2.1 does require that Section II, Condition 3.8 be met in order for the presumption of 95% control efficiency to apply. Ex. 15 at 3<sup>rd</sup> page. The same is true for the other permits in substance although the condition numbers vary. Ex. 16 at 3<sup>rd</sup> page, Ex. 17 at 3<sup>rd</sup> page, Ex. 18 at 3<sup>rd</sup> page. As explained above, Section II, Condition 3.8 does not assure 95% VOC control efficiency from the ECD serving the loadout to tanker trucks. *See Supra* at 34 - 35.

The Division's response to comments also states that Section II, Condition "10.7" must be met in order to get the presumption of 95% VOC control efficiency. Ex. 15 at 3<sup>rd</sup> page. The same is true for the other permits in substance although the condition numbers vary. *See* Ex. 16 at 3<sup>rd</sup> page, Ex. 17 at 3<sup>rd</sup> page, Ex. 18 at 3<sup>rd</sup> page. As explained above, Section II, Condition 10.7.2.2 does not assure 95% VOC control efficiency from the ECD serving the loadout to tanker trucks. *See Supra* at 35.

The Division's responses to comments only reference Section II, Condition "10.7". Ex. 15 at 3<sup>rd</sup> page, Ex. 16 at 3<sup>rd</sup> page, Ex. 17 at 3<sup>rd</sup> page, Ex. 18 at 3<sup>rd</sup> page. The Division's response fails to acknowledge that only Section II, Condition 10.7.2.2 applies to Section II, Condition 3.2.1 and fails to acknowledge, and is thus misleading in that Section II, Condition 10.7.2.6, which purports to require performance testing, does not apply to the ECD serving loadout to tanker trucks. The Division's response does not explain why some ECDs are subject to purported performance testing and others are not. Loadout to tanker trucks is subject to a 25.9

tons per year VOC limit. Ex. 20 at 41. Because the Denver Metro/North Front Range area is designated as a severe nonattainment area for the 2008 ozone NAAQS, 25.9 tons per year of VOCs would make the loadout to tanker trucks a major source by itself. The Division did not explain why an ECD serving such a major emission point is treated differently than other ECDs.

### **CONCLUSION**

EPA must object to Title V Permit Nos. 20OPWE417, 20OPWE418, 20OPWE419, and 20OPWE420 for the Bonanza Creek Energy Operating Company, LLC, for the Antelope CPF 13-21 Production Facility, State Antelope O-1 Central Production Facility, State North Platte 42-26 Central Production Facility, and State Pronghorn 41-32 Central Production Facilities for the reasons discussed above. As this petition demonstrates, the proposed Permits fail to assure compliance with applicable requirements under Title V of the Clean Air Act. The Permits lack the monitoring, testing, reporting, and recordkeeping requirements necessary to assure compliance with its terms and conditions, or to enable detection and enforcement of permit violations. Accordingly, the Public Interest Groups respectfully request that the Administrator object to the Permits and require the Division to revise and reissue the Permits in a manner that complies with the requirements of the Clean Air Act.

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Respectfully submitted,

/s/ Robert Ukeiley

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