

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

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| IN THE MATTER OF |) | |
| |) | |
| Clean Air Act Final Initial |) | |
| Title V Operating Permit |) | |
| |) | |
| Issued to DCP Operating Company, LP |) | Title V Permit No. 21OPWE434 |
| for the Northstar Compressor Station, Weld |) | |
| County, Colorado |) | |
| |) | |
| Issued by the Colorado Department of |) | |
| Public Health and Environment, Air Pollution |) | |
| Control Division |) | |

**PETITION TO OBJECT TO FINAL INITIAL TITLE V OPERATING PERMIT
NO. 21OPWE434 FOR DCP’S NORTHSTAR 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 initial Title V Operating Permit (“Title V Permit”) issued by the Colorado Department of Public Health and Environment’s Air Pollution Control Division (“Division”) authorizing DCP Operating Company, LP (hereafter “DCP”) to operate the Northstar Compressor Station in Weld County, Colorado.

Petitioners request 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 limits.

The Division’s final Title V Permit, which was issued on March 1, 2025, and the associated final Technical Review Document (“TRD”), are attached as Exhibits 1 and 2, respectively.

THE NORTHSTAR COMPRESSOR STATION

The Northstar 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 turbines for transport via pipeline and further processing by additional downstream processing facilities. A dehydrator is used to remove water from the gas stream and a flare is used to control volatile organic compound (“VOC”) emissions. Sources of air pollution at the Northstar Compressor Station include the turbines, dehydrator, and tanks.

The Northstar Compressor Station is a major source of nitrogen oxide (“NO_x”) and carbon monoxide (“CO”) emissions, which are released from the turbines and flare, and VOCs, which are released from the dehydrator and flare. The facility is also a large source of hazardous air pollutants (“HAPs”), including benzene, a known carcinogen. *See* EPA, “Benzene,” Summary prepared by EPA available at <https://www.epa.gov/sites/default/files/2016-09/documents/benzene.pdf> (last accessed April 14, 2025).

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 NO₂,” website available at <https://www.epa.gov/no2-pollution/basic-information-about-no2> (last accessed April 14, 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 14, 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 14, 2025).

The Northstar Compressor Station is located in the Denver Metro/North Front Range severe ozone nonattainment area. Due to nearly 20 years of ongoing violations of national ambient air quality standards (“NAAQS”) for ground-level ozone, this nine-county region with a population of more than four million people has been classified a “severe” ozone nonattainment area. *See* 40 C.F.R. § 81.306. Emissions of NO_x and VOCs, including from the Northstar Compressor Station, directly contribute to high ozone levels in the region.

Annually, the facility has the potential to emit 37.6 tons of NO_x, 45.3 tons of CO, and 58.9 tons of VOCs, including 7.0 tons of benzene, 6.6 tons of toluene, and 2.0 tons of xylene.

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 Northstar Compressor Station Title V Permit on June 26, 2024. *See* Exhibit 3, Center for Biological Diversity Comments on Draft

Title V Permit (June 26, 2024). The Division responded to the Center’s comments on December 30, 2024. *See* Exhibit 4, Colorado Air Pollution Control Division, “Response to Comments on Draft Operating Permit” (Dec. 30, 2024). The proposed permit was subsequently submitted to EPA for the agency’s 45-day review. According to EPA Region 8’s Title V Operating Permit Public Petition Deadlines webpage, the agency’s 45-day review concluded on February 14, 2025. *See* EPA, “Title V Operating Permit Public Petition Deadlines in Region 8,” website available at <https://www.epa.gov/caa-permitting/title-v-operating-permit-public-petition-deadlines-region-8> (last accessed April 14, 2025). EPA did not object to the proposed permit. The Division issued the final permit on March 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 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.

GROUND 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 Northstar Compressor Station.

I. The Title V Permit Does not Ensure Adequate Monitoring to Assure the Dehydrator 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 Northstar Compressor Station does not set forth sufficient monitoring to assure compliance with NO_x, CO, and VOC limits applicable to the glycol dehydrator, AIRS ID 003, at the Northstar Compressor Station. Of primary concern is that the Permit does not assure sufficient monitoring of the enclosed combustion device, or flare, used to control emissions from the dehydrator. Although Section II, Condition 2 sets forth explicit quantitative annual limits on these pollutants, 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.

In comments, the Center detailed concerns over inadequate monitoring from the flare and the failure of the draft Title V Permit to set forth sufficient monitoring to assure compliance. *See* Exhibit 3, Center Comments on Draft Title V Permit, Technical Comments at 1-8. The Center flagged that the draft Title V Permit failed to require any periodic testing of NO_x and CO emissions to verify emission factors and compliance with applicable limits, and failed to require any periodic testing of VOCs and VOC destruction efficiency to assure compliance with

applicable limits. The Center highlighted the draft Title V Permit's improper reliance on 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 one sentence response: "To address these concerns the Division added ongoing federally enforceable performance testing for the ECD to the Operating Permit at Section II, Condition 2.2.4." Exhibit 4, Division Response to Comments at Unnumbered Page 2. Although the Center appreciates that the Division acknowledged the deficiencies 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 2.2.5 requires performance testing to verify compliance with applicable NO_x, CO, and VOC limits, and the minimum 95% VOC destruction efficiency, for the flare. Unfortunately, while the Title V Permit requires an initial compliance test within 180 days of permit issuance, the Permit requires testing only every five years thereafter. This appears 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 dehydrator. In its response to comments, the Division simply acknowledged the deficiency in the draft Title V Permit and added Condition 2.2.5 into the final Title V Permit. This lack of a rationale alone is grounds for the Administrator to object.

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 sufficiently frequent performance testing must be required, there is no explanation as to how the Division determined that testing once every five years was sufficient for the Northstar Compressor Station. In comments, the Center noted deficiencies in the NO_x and CO emission factors and that the frequency of testing for NO_x and CO must be sufficiently frequent, urging the Division to require at least monthly testing to verify compliance. *See* Exhibit 3, Center Comments on Draft Title V Permit, Technical Comments at 1-2. The Center also commented that it was questionable whether once-every-five-year testing of flare VOC destruction efficiency, which is required by state-only rules, was sufficiently frequent due to numerous reports of flares failing to continuously achieve required destruction efficiencies. *See id.* Technical Comments at 5-8. The Division did not respond to these comments.

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, NO_x, and CO limits.

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, 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 control 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 5, 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, 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 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 Northstar 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 may believe that, in conjunction with parametric monitoring required by the Title V Permit, once-every-five-year testing is sufficient. However, for this unstated belief to be true, the Division would have to demonstrate that parametric monitoring assures compliance with applicable quantitative limits, including the 95% VOC control 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 detailed 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 comments, the Center detailed that 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). *See* Exhibit 3, Center Comments on Draft Title V Permit, Technical Comments at 3-5. The Center also provided numerous examples of flares at oil 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 id.* Technical Comments at 5-7.

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 2. The Division simply responded, "This federally enforceable monitoring represents practically enforceable limits and is consistent with EPA's intent for Title V testing, recordkeeping, and reporting requirements." Exhibit 4, Division Response to Comments at Unnumbered Page 2. While the parametric monitoring in the Title V Permit may indeed be federally enforceable and consistent with "EPA's intent," it is nevertheless not sufficient to assure compliance with the applicable quantitative limits.

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.

The Administrator must object to the issuance of the Title V Permit for the Northstar Compressor Station over the failure of the permit to assure adequate monitoring of the flare used to control emissions from the facility's glycol dehydrator. Although the Division required once-every-five-year performance testing to verify compliance with applicable limits set forth at Section II, Condition 2, there is no support for the conclusion that once-every-five-year testing is sufficiently frequently enough to assure compliance with the applicable annual NO_x, CO, and VOC limits and the applicable 95% VOC destruction efficiency, which apply on a continuous basis.

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 Northstar Compressor Station in Weld County, Colorado. As this Petition demonstrates, the Title V Permit fails to assure compliance with applicable requirements. The Title V Permit does not set forth sufficient monitoring to assure compliance with limits applicable to the flare controlling emissions from the dehydrator. 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 14, 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 Northstar Compressor Station Title V Permit
2. Final Northstar Compressor Station Title V Permit Technical Review Document
3. Comments of the Center for Biological Diversity on the draft initial Title V Permit for the Northstar Compressor Station
4. Colorado Air Pollution Control Division Response to Center for Biological Diversity Comments
5. Air Pollution Control Division Colorado Operating Permit, D90 Energy, LLC—Bighorn 0780 S17 CTB Facility, Permit No. 17OPJA401 (Jan. 1, 2020)
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)