BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF XTO Energy, Inc. Wildcat Compressor Station, Eddy County, New Mexico Permit Number: P290 Issued by the New Mexico Environment Department, Air Quality Bureau	)	Petition Number: VI-2023- PETITION TO OBJECT TO ISSUANCE OF AN INITIAL TITLE V OPERATING PERMIT

PETITION TO OBJECT TO ISSUANCE OF TITLE V PERMIT

Pursuant to Section 505(b)(2) of the Clean Air Act and 40 CFR § 70.8(d), WildEarth Guardians (hereafter "Guardians") petitions the Administrator of the U.S. Environmental Protection Agency ("EPA") to object to the issuance of the proposed initial Title V operating permit (hereafter "proposed Title V permit") issued by the New Mexico Environment Department's Air Quality Bureau ("AQB") for XTO Energy, Inc. (hereafter "XTO") to operate the Wildcat Compressor Station (hereafter "Wildcat Station").[1] The Wildcat Station is a massive oil and gas processing facility located in Eddy County, New Mexico. The AQB proposed an initial Title V permit for the Wildcat Station on September 26, 2022. *See* Exhibit 1, XTO Energy, Inc., Wildcat Compressor Station Proposed Title V Permit, Proposed Permit Number P290 (Sept. 26, 2022). The AQB has not yet issued a final Title V permit for the Wildcat Station.

WildEarth Guardians petitions the Administrator to object to the proposed initial Title V permit on the basis that it:

1. Fails to ensure the Wildcat Station operates in compliance with applicable requirements, including the New Mexico State Implementation Plan. Namely, the proposed permit fails to ensure operation of the facility will not cause or contribute to exceedances of national ambient air quality standards ("NAAQS") for ground-level ozone, the key ingredient of smog;

2. Fails to ensure XTO complies with all applicable emission limits and standards. In particular, the proposed permit fails to include limits on harmful emissions that XTO itself requested as part of its permit applications; and

3. Fails to require sufficient periodic monitoring to ensure compliance with applicable emissions limits. Specifically, proposed requires XTO to comply with volatile organic compound ("VOC") limits on emissions during venting, yet prescribes no actual monitoring to assure compliance with this limit.

[1] The use of the words "Administrator" and "EPA" are used interchangeably in this petition.

Pursuant to 40 C.F.R. § 70.8(c)(1), the Administrator must object over the failure of the proposed initial Title V permit to assure compliance with applicable requirements.

INTRODUCTION

The Wildcat Station is a major stationary source of air pollution located 17 miles east of Malaga, New Mexico in Eddy County. The facility separates oil, gas, and water from a pipeline, stores condensate onsite until it is removed via truck or pipeline, and processes and compresses gas for transport through a sales pipeline. Sources of air pollution at the facility include large gas-fired compressor engines, flares, dehydration units, separators, tanks, fugitive emissions, and venting. *See* Exhibit 2, Statement of Basis for Proposed Operating Permit P290 at 1-2. Below are some recent pictures of the compressor station taken by WildEarth Guardians.

XTO's Wildcat Compressor Station

Compressor Station Engines and Flares

Exhaust Stack at Compressor Station

According to the proposed initial Title V permit, the Wildcat Station has the potential to annually release:

- 200.9 tons of nitrogen oxides ("NO_x");
- 247.7 tons of carbon monoxide ("CO");
- 268 tons of VOCs;
- 19.5 tons of sulfur dioxide ("SO_2");
- 17.1 tons of particulate matter less than 10 microns in diameter ("PM_{10}") and 17.1 tons of particulate matter less than 2.5 microns in diameter ("$PM_{2.5}$"); and
- 28.1 tons of hazardous air pollutants, including acetaldehyde, formaldehyde, benzene, toluene, ethylbenzene, xylene, hexane, and other toxic substances.

Exhibit 1 proposed Title V permit, Tables 102.A and 102.B at A4.

Notice of the draft Title V permit for the Wildcat Station was published on September 6, 2022. *See* Exhibit 3, Legal Notice for Air Quality Operating Permit for Wildcat Compressor Station of XTO Energy, Inc. (Sept. 6, 2022). Guardians submitted substantive comments on the draft Title V permit on October 6, 2022. *See* Exhibit 4, WildEarth Guardians Comments on Draft Title V Permit for Wildcat Compressor Station (Oct. 6, 2022). The AQB responded to Guardians' comments on November 14, 2022. *See* Exhibit 5, AQB Response to Comments (Nov. 14, 2022). Since responding to Guardians' comments, the AQB has not issued a final Title V permit or otherwise issued a modified proposed Title V permit.

The AQB submitted the proposed Title V permit for EPA review on November 15, 2022. The EPA's 45-day review period concluded on December 30, 2022. During this 45-day review period, the EPA did not object to the issuance of the Title V permit. This petition is thus timely filed within 60 days of the conclusion of EPA's 45-day review period.

This petition is based on objections to the permit raised with reasonable specificity during the public comment period. To the extent the EPA may somehow believe this petition is not based on comments raised with reasonable specificity during the public comment period, Guardians requests the Administrator also consider this a petition to reopen the Title V permit for the Wildcat Station in accordance with 40 CFR § 70.7(f).[2] A permit reopening and revision is mandated in this case because of one or both of the following reasons:

1. Material mistakes or inaccurate statements were made in establishing the terms and conditions in the permit. *See* 40 CFR § 70.7(f)(1)(iii). As will be discussed in more detail, the proposed Title V permit for the Wildcat Station suffers from material mistakes in violation of applicable requirements, etc.; and

2. The permit fails to assure compliance with the applicable requirements. *See*, 40 CFR § 70.7(f)(1)(iv). As will be discussed in more detail, the Title V Permit for the Wildcat Station fails to assure compliance with several applicable requirements.

[2] To the extent the Administrator may not believe citizens can petition for reopening for cause under 40 CFR § 70.7(f), Guardians also hereby petitions to reopen for cause in accordance with 40 CFR § 70.7(f) and pursuant to 5 USC § 555(b) (a person may appear before a federal agency to present issues and the agency must conclude a matter presented to it).

PETITIONER

Petitioner WildEarth Guardians is a Santa Fe, New Mexico-based nonprofit membership organization dedicated to protecting and restoring the health of the American West. On behalf of its members, Guardians works to confront harmful air pollution, defend clean air, and ensure polluters are paying the true cost of their operations. Guardians works to ensure the oil and gas industry complies with state and federal clean air laws and regulations, to safeguard public health and safety from unchecked oil and gas extraction, and to advance a just and equitable transition away from fossil fuels in order to protect the climate and communities.

GROUNDS FOR OBJECTION

The Wildcat Station first became subject to Title V permitting requirements on January 3, 2018. At that time, the AQB issued an air quality construction permit authorizing XTO to construct the facility and emit above major source thresholds. This new source review ("NSR") permit was numbered 7474. While Title V permitting regulations at 40 C.F.R. § 70.5(a)(1)(i) require sources to submit initial Title V permit applications within 12 months of becoming subject to Title V requirements, XTO did not submit an application until December 14, 2020, nearly two years after the 12-month deadline to submit an application. XTO then submitted an updated Title V permit application on May 6, 2022, nearly 18 months after submitting its original application. *See* Exhibit 6, XTO Energy, Inc, LLC, Initial Title V Permit Application (Update) (May 2020). Under Title V regulations, a source is not allowed to operate if it does not submit a timely application for an initial permit. *See* 40 C.F.R. § 70.7(b). Nevertheless, the AQB has allowed XTO to continue to operate the Wildcat Station.

That the AQB has allowed XTO to illegally operate under the Clean Air Act is indicative of the agency's broader failure to assure the Wildcat Station operates in compliance with applicable requirements. As WildEarth Guardians will demonstrate below, the AQB has proposed a Title V permit that allows XTO to flout emission limits, operate under unenforceable oversight, and jeopardize regional compliance with national ambient air quality standards. Accordingly, Guardians requests the EPA object to the issuance of Permit Number P290 for XTO's Wildcat Station and/or find reopening for cause for the following reasons:

I. The Proposed Title V Permit Fails to Ensure Compliance with the New Mexico State Implementation Plan as it Relates to Protecting National Ambient Air Quality Standards

The proposed Title V permit fails to assure compliance with applicable requirements under the New Mexico State Implementation Plan ("SIP") related to the protection of the NAAQS. Specifically, the proposed Title V permit fails to assure that emissions from the Wildcat Station will not cause or contribute to exceedances of the ozone NAAQS. Guardians raised this issue with reasonable specificity on pages 3-6 of its comments.

Under the New Mexico SIP, the AQB cannot approve a construction permit for any new or modified stationary sources of air pollution that would "cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard[.]". 20.2.72.208.D NMAC. Given this, the AQB cannot approve any construction permit for a new or modified stationary source unless a demonstration is made that the permit would not cause or contribute to air pollution levels in excess of the 2008 and/or 2015 ozone NAAQS, which are codified at 40 C.F.R. §§ 50.15 and 50.19.

SIP provisions are an applicable requirement under Title V. *See* 40 C.F.R. § 70.2 (defining "applicable requirement" as "any standard or other requirement provided for in the applicable [state] implementation plan"). With regards to the AQB's duty to protect the NAAQS, this means that a Title V permit must ensure that a source operates such that its emissions would not cause or contribute to air pollution levels in excess of the ozone NAAQS.[3] Where an underlying construction permit fails to ensure that a source would not cause or contribute to air pollution levels in excess of the 2008 and/or 2015 ozone NAAQS, the Title V permit must address this deficiency and be written in such a manner as to assure protection of the NAAQS.

At issue here is that the most recent construction permit incorporated into the proposed Title V permit, namely NSR Permit 7474M2, fails to ensure that the Wildcat Station operates such that its emissions will not cause or contribute to exceedances of the ozone NAAQS. This means the proposed Title V permit fails to provide for compliance with all applicable requirements in accordance with 40 C.F.R. § 70.7(a)(1)(iv).

When the AQB reviewed XTO's application for NSR Permit 7474M2, neither XTO nor the AQB addressed the impacts of the Wildcat Station's air pollution to ambient ozone concentrations. Neither the permit application submitted by XTO or the AQB's statement of basis for NSR Permit 7474M2 actually analyze—either qualitatively or quantitatively—the impacts of the Wildcat Station to ambient ozone concentrations. *See* Exhibit 7, Application for NSR Modification for Wildcat Compressor Station (June 2, 2020) and Exhibit 8, AQB, Statement of Basis Narrative, Wildcat Compressor Station, Permit No. 7474M2 (Feb. 19, 2021). Further, nothing in NSR Permit 7474M2 indicates any consideration of impacts to ambient ozone concentrations. *See* Exhibit 9, Air Quality Bureau New Source Review Permit Issued Under 20.2.72 NMAC, 7474M2, Wildcat Compressor Station (Feb. 19, 2021). Although it was disclosed that the facility would release large amounts of ozone precursor emissions, including VOCs and NO_x, no analysis was actually completed to demonstrate that the Wildcat Station would not cause or contribute to ozone concentrations in excess of the NAAQS.[4]

As Guardians explained in its comments, this is problematic. At the time the NSR Permit 7474M2 was under review and ultimately approved, monitoring data from where the Wildcat

[3] 20.2.72 NMAC is explicitly identified as an applicable requirement in the Title V permit. Further, the NAAQS are also applicable requirements according to the proposed Title V permit. *See* Exhibit 1, proposed Title V permit at Table 103.A at A5 (identifying "20.2.72 NMAC" and "40 CFR 50 National Ambient Air Quality Standards" as "applicable requirements").

[4] It is well known and understood that VOCs and NO_x are primary ozone precursor emissions. Both gases are known to photochemically react to form ozone. *See e.g.*, EPA, "Ground-level ozone basics," website accessed at https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics (last visited March 1, 2023).

Station is located showed numerous exceedances of both the 2008 NAAQS of 0.075 parts per million ("ppm") and the 2015 NAAQS of 0.070 ppm. The region where the Wildcat Station is located encompasses the Permian Basin of southeast New Mexico, where intensive oil and gas extraction activity is occurring and posing tremendous impacts to air quality. The region includes Eddy County, where the Wildcat Compressor Station is located, and adjacent Lea County, New Mexico directly to the east. When NSR Permit 7474M2 was approved in 2021, monitors in Eddy and Lea Counties had recorded numerous exceedances of the 2008 and 2015 ozone NAAQS. The tables below show recent exceedances of the ozone NAAQS measured at monitors in Eddy and Lea Counties.[5]

Carlsbad, NM (Monitor No. 35-015-1005) 8-Hour Ozone Readings (in ppm), Eddy County, 2015-2022

	2015	2016	2017	2018	2019	2020	2021	2022
1st Max.	0.069	0.065	0.082	0.096	0.095	0.075	0.092	0.084
2nd Max.	0.068	0.064	0.078	0.095	0.092	0.075	0.082	0.083
3rd Max.	0.067	0.064	0.077	0.091	0.084	0.075	0.080	0.080
4th Max.	0.067	0.063	0.076	0.083	0.080	0.073	0.080	0.079
Number of Days Above NAAQS	0	0	10	18	19	5	23	23

Carlsbad Caverns National Park (Monitor No. 35-015-0010) 8-Hour Ozone Readings (in ppm), Eddy County, 2015-2022

	2015	2016	2017	2018	2019	2020	2021	2022
1st Max.	0.068	0.070	0.069	0.099	0.082	0.074	0.085	0.086
2nd Max.	0.068	0.069	0.065	0.081	0.080	0.074	0.080	0.085
3rd Max.	0.065	0.069	0.065	0.080	0.078	0.073	0.079	0.084
4th Max.	0.065	0.069	0.065	0.080	0.074	0.073	0.077	0.083
Number of Days Above NAAQS	0	0	0	10	6	9	15	21

Hobbs, NM (Monitor No. 35-025-0008) 8-Hour Ozone Readings (in ppm), Lea County, 2015-2022

	2015	2016	2017	2018	2019	2020	2021	2022
1st Max.	0.070	0.069	0.080	0.083	0.082	0.062	0.086	0.075
2nd Max.	0.069	0.066	0.074	0.078	0.075	0.060	0.075	0.075
3rd Max.	0.069	0.065	0.072	0.077	0.073	0.060	0.072	0.074
4th Max.	0.067	0.065	0.069	0.076	0.070	0.060	0.068	0.072
Number of Days Above NAAQS	0	0	3	6	3	0	3	4

[5] This data was queried from EPA's AirData website, https://www.epa.gov/outdoor-air-quality-data/monitor-values-report.

Further, at the time of approval of NSR Permit 7474M2 in 2021, monitors in Eddy County were in violation of the 2015 ozone NAAQS and the monitor in Lea County was right at the NAAQS. A violation of the 8-hour ozone NAAQS is triggered when the three-year average of the annual fourth highest daily reading exceeds the NAAQS. *See* 40 C.F.R. § 50.19(b). This three-year average value is commonly referred to as the "design value." Based on monitoring data, the two ozone monitors in Eddy County are currently in violation of both the 2015 and 2008 ozone NAAQS, and the Hobbs monitor is very near violating the 2015 NAAQS. In 2021, when NSR Permit 7474M2 was approved, the 2018-2020 design value violated the 2008 and 2015 ozone NAAQS in Eddy County, and very nearly violated the 2015 ozone NAAQS in Lea County. The table below shows ozone design values at the Lea and Eddy County monitors since 2015.

8-Hour Ozone Design Values (in ppm) for Lea and Eddy County, New Mexico Monitoring Sites

Monitor	Monitor ID	2015-2017 Design Value	2016-2018 Design Value	2017-2019 Design Value	2018-2020 Design Value	2019-2021 Design Value	2020-2022 Design Value
Hobbs	350250008	0.067	0.070	0.071	0.068	0.066	0.066
Carlsbad	350151005	0.068	0.074	0.079	0.078	0.077	0.077
Carlsbad Caverns	350150010	0.066	0.071	0.073	0.075	0.074	0.077

Here, there appears to be no possible way that emissions related to the approval of NSR Permit 7474M2 would not have contributed to exceedances of the ozone NAAQS. The approval of the permit authorized potential VOC emissions of 267.5 tons per year and potential NO_x emissions of 200.9 tons per year. With the region already both exceeding ***and*** violating the NAAQS, there is simply no way that these increases in ozone precursor emissions would not contribute at all to exceedances of the ozone NAAQS.

Regardless, with no analysis of ozone impacts associated with NSR Permit 7474M2, the proposed Title V permit fails to assure compliance with applicable requirements. Although Condition A103.C of the proposed Title V permit states that, "[c]ompliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 7474M2," there is simply no support for the conclusion that compliance with the terms and conditions of the proposed Title V permit will comply with the ozone NAAQS promulgated under 40 C.F.R. § 50, or otherwise ensure that operation of the Wildcat Station will not cause or contribute to exceedances of the ozone NAAQS as required by the New Mexico SIP.

In response to Guardians' comments, the AQB acknowledged that it did not analyze the impacts of emissions from the Wildcat Station to the ozone NAAQS. Nevertheless, the AQB asserted in its response to comments that operation of the Wildcat Station would not cause or contribute to violations of the NAAQS. According to the AQB, because the Wildcat Station is a minor source under the Clean Air Act's Prevention of Significant Deterioration ("PSD")

program, it is presumed that it would not cause or contribute to violations of the NAAQS. *See* Exhibit 5, Response to Comments at 8.

The AQB's assertion is first and foremost irrational and unsupported because it ignores the past and present state of air quality in Eddy County, where the Wildcat Compressor Station is located. This region is currently in violation of the ozone NAAQS and was in violation of the NAAQS when NSR Permit 7474M2 was issued. It is absolutely preposterous and absurd to conclude that the addition of ozone precursors into the atmosphere in a region already violating the ozone NAAQS would not contribute in any way to that violation.

In its response to WildEarth Guardians' comments, the AQB did not address the present or past state of air quality in Eddy County. Rather, in support of its preposterous and absurd position, the AQB cites three primary lines of information. None of these lines of information actually support the AQB's claim that operation of the Wildcat Compressor Station would not cause or contribute to violations of the ozone NAAQS.

First, the AQB suggests that an EPA guidance document supports the contention that PSD minor sources are presumed not to cause or contribute to violations of the ozone NAAQS. *See* Exhibit 5, Response to Comments at 8. In this guidance, the EPA provided direction for analyzing the impacts of sources considered to be major under PSD to the ozone NAAQS. *See* Exhibit 10, EPA, "Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and $PM_{2.5}$ under the PSD Permitting Program" (April 30, 2019). However, the EPA developed this guidance only in the context of major source permitting under PSD and only in areas where air quality is not violating the NAAQS (i.e., attaining the NAAQS). Accordingly, it provides no support for the AQB's assertion that operation of the Wildcat Station, a minor source under PSD, would not cause or contribute to violations of the ozone NAAQS in Eddy County, which has been and remains in violation of the ozone NAAQS.

Second, the AQB cites an in-house analysis that it claims supports the contention that PSD minor sources are presumed not to cause or contribute to violations of the ozone NAAQS. Specifically, the AQB cites pages 12, 25, and 27 of a July 22, 2022 "Air Dispersion Modeling Guidelines" document. *See* Exhibit 5, Response to Comments at 8. This document and the cited page numbers, however, do not demonstrate that minor sources under PSD do not cause or contribute to violations of the ozone NAAQS or that the Wildcat Station will not cause or contribute to violations of the ozone NAAQS. For one, the guidance document simply demonstrates that emissions from minor sources under PSD are generally presumed to be below significant impact levels, or SILs. The guidance does not actually demonstrate that minor sources will never cause or contribute to violations of the ozone NAAQS. The guidance document is also premised upon air quality being in compliance with the ozone NAAQS. However, as explained, Eddy County, the region where the Wildcat Station is located, has been and continues to be out of compliance with (i.e., in violation of) of the ozone NAAQS. The SILs cited by the AQB only apply in areas that are in compliance with the ozone NAAQS, not to areas currently violating.

Third and finally, the AQB references testimony by an employee presented in an unrelated New Mexico Environmental Improvement Board ("EIB") hearing, EIB Hearing No. 20-21(A). The AQB asserts that, based on this testimony, "PSD minor sources do not 'cause or contribute' to violations of the ozone standard." *See* Exhibit 5, Response to Comments at 8. This response fails to cure the AQB's failure to ensure the Title V permit assures compliance with all applicable requirements.

For one, the testimony referenced by the AQB refers to testimony provided in a consolidated hearing before the New Mexico EIB regarding the validity of three separate permitting actions. These permitting actions had no relation whatsoever to the permitting of the Wildcat Station or the validity of NSR Permit 7474M2. In other words, this testimony has no bearing at all as to whether the issuance of NSR Permit 7474M2 would cause or contribute to exceedances of the ozone NAAQS.

Importantly, however, the AQB's categorical assertion that "PSD minor sources do not 'cause or contribute' to violations of the ozone standard," is, again, completely unsupported. For one, the AQB can point to no analysis or assessment demonstrating that sources classified as minor under the Clean Air Act's PSD program will never ever cause or contribute to violations of the ozone NAAQS. The AQB has not prepared, presented, or pointed to any actual air quality information or analysis justifying the application of a categorical presumption that minor sources under PSD will, unequivocally and at all times, never cause or contribute to violations of the ozone NAAQS anywhere in the state of New Mexico.

The failure of the AQB to demonstrate that issuance of NSR Permit 7474M2 would not cause or contribute to violations of the ozone NAAQS means that the proposed Title V permit fails to assure the Wildcat Station will operate in compliance with applicable requirements under the Clean Air Act. 20.2.72.208.D NMAC, a provision of the New Mexico SIP that requires the AQB to deny any permit that would cause or contribute to air contaminant levels in excess of the NAAQS, is an applicable requirement under Title V. The proposed Title V permit itself states that the SIP at 20.2.72 NMAC is an applicable requirement and additionally states that the NAAQS at 40 C.F.R. § 50 are also applicable requirements. *See* Exhibit 1, proposed Title V permit at A5. Furthermore, the AQB presumes that compliance with the Title V permit will assure compliance with all NAAQS, as stated by Condition A103.C. To this end, the EPA must object to the issuance of the proposed Title V permit on the basis that it fails to assure compliance with applicable requirements.

The EPA has already objected to the AQB's failure to address the impacts of sources of emissions in the Permian Basin to the ozone NAAQS in the region. *See In the Matter of Lucid Energy Delaware, LLC, Frac Cat Compressor Station and Big Lizard Compressor Station*, Order on Petition Nos. VI-2022-05 and VI-2022-11 (Nov. 16, 2022) at 12-15. Here, for the same reasons, EPA must also object to the issuance of the Title V permit for the Wildcat Station. To ensure compliance with these applicable requirements, the AQB must be directed to address the impacts of operation of the Wildcat Station to the ozone NAAQS, undertake any necessary revisions and/or denials of underlying NSR permits, and to finalize the Title V permit such that it incorporates legally adequate emissions limits that assure compliance with the SIP and all other applicable requirements.

II. The Proposed Title V Permit Fails to Include all Applicable Emission Limitations and Standards

The proposed Title V permit fails to include emission limitations and standards necessary to assure compliance with applicable requirements. Specifically, the proposed Title V permit at Condition A106.A fails to include all emission limits requested by XTO as part of its application for NSR Permit 7474M2 and all emission limits that were explicitly set forth in NSR Permit 7474M2. Guardians raised this issue with reasonable specificity on pages 6-7 of its comments.

Under the Clean Air Act, Title V permits must include "[e]mission limitations and standards" that assure compliance with all applicable requirements. 40 C.F.R. § 70.6(a)(1). Applicable requirements under Title V include, "[a]ny term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the [Clean Air] Act." 40 C.F.R. § 70.2. Accordingly, a Title V permit must include emission limitations and standards to ensure compliance with the terms or conditions of an underlying construction permit.

Here, the proposed Title V permit for the Wildcat Station does not include "emission limitations and standards" that assure compliance with all the terms or conditions of NSR Permit 7474M2. Accordingly, the EPA must object to the issuance of the proposed Title V permit. Below, we detail the deficiencies warranting an objection by the EPA.

A. Hourly VOC Limits for Truck Loading

While the proposed Title V permit sets forth VOC emission limits for truck loading of oil and/or condensate (identified as "Unit No. LOAD"), the permit only sets for an annual limit, stating that hourly VOC limits for this activity "are not appropriate for this operating situation." Exhibit 1, proposed Title V permit, Condition A106.A, Table 106.A at A9-A10.

In its application for NSR Permit 7474M2, XTO requested an hourly limit for VOC emissions from truck loading of 62.76 lbs/hour. *See* Exhibit 7 at Table 2-E, page 2, .pdf page 12.[6] Although this emission limit was ultimately not explicitly incorporated into NSR Permit 7474M2, according to NSR Permit 7474M2, this is an applicable emission limit.

According to NSR Permit 7474M2, "The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision." Exhibit 9 at B2, Condition B101.A. The permit further requires XTO to "operate the [Wildcat Compressor Station] in accordance with all representations of the application[.]" *Id*.

Taken together, the hourly VOC limits for truck loading are applicable requirements under Title V. These limits are not only explicitly included within the "contents" of the NSR Permit 7474M2 application identified by the Department and therefore are "terms and

[6] XTO requested the same limit as part of its May 2020 Title V permit application. *See* Exhibit 6 at Table 2-E page 2, .pdf page 19.

conditions" of the permit, but to operate the Wildcat Station consistent with representations in the application, XTO must comply the hourly VOC limits for truck loading.

Accordingly, for the Title V permit to assure compliance with NSR Permit 7474M2, it must set forth limitations and standards that assure compliance with the hourly VOC limits for truck loading. The proposed Title V permit does not, meaning it fails to assure compliance with applicable requirements.

In response to comments on this specific issue, the AQB asserted it "does not require pound per hour VOC emission limits for activities such as truck loading" and that such limits "are not necessary to meet the criteria of meeting the requirements of the Air Quality Control Act and the federal act." Exhibit 5, Response to Comments at 10. This response is belied by the fact that the hourly VOC limits for truck loading are applicable requirements under Title V. Accordingly, the AQB is simply wrong that such limits are "not require[d]" or "not necessary" to meet the requirements of the Clean Air Act.

The AQB asserts that, "[t]ruck loading is not a steady state process—it is episodic[,] [a]s a result, it does not have a steady state hourly emission rate and an hourly limit is not appropriate." Exhibit 5, Response to Comments at 10. This response belied by the fact that XTO explicitly requested and set forth an hourly limit for VOC emissions during truck loading as part of NSR permit application, indicating that such a limit is appropriate. Furthermore, as XTO's NSR permit application demonstrates, compliance with the hourly limit can be met by limiting truck loading rates to no more than 210 barrels of liquid per hour. *See* Exhibit 7 at Section 6, .pdf page 49. While the proposed Title V permit contains an annual limit on truck loading rates, it does not contain an hourly limit.

The EPA must object to the issuance of the proposed Title V permit and direct the AQB to ensure any final Title V permit assures compliance with applicable hourly limits on VOC emissions from truck loading.

B. Fugitive VOC Emissions

For fugitive VOCs, the proposed Title V permit contains no hourly or annual emission limits. This is despite the fact that XTO explicitly requested limits of 2.48 pounds per hour and 10.87 tons per year in its application for NSR 7474M2. *See* Exhibit 7 at Table 2-E, page 2, .pdf page 12.[7]

According to NSR Permit 7474M2, "The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision." Exhibit 9 at B2, Condition B101.A. The permit further requires XTO to "operate the [Wildcat Compressor Station] in accordance with all representations of the application[.]" *Id.*

Taken together, the hourly and annual fugitive VOC limits requested by XTO are applicable requirements under Title V. These limits are not only explicitly included within the

[7] XTO also requested hourly and annual fugitive VOC limits in its Title V permit application. *See* Exhibit 6 at Table 2-E page 2, .pdf page 19.

"contents" of the NSR Permit 7474M2 application identified by the Department and therefore are "terms and conditions" of the permit, but to operate the Wildcat Station consistent with representations in the application, XTO must comply the hourly and annual VOC fugitive limits.

Accordingly, for the Title V permit to assure compliance with NSR Permit 7474M2, it must set forth limitations and standards that assure compliance with the hourly and annual fugitive VOC limits. The proposed Title V permit does not, meaning it fails to assure compliance with applicable requirements.

In response to comments on this specific issue, the AQB asserted that based on its monitoring protocol, it "does not establish numeric emission limits for fugitive VOC emissions of less than 25 tons per year." Exhibit 5, Response to Comments at 10. This response is belied by the fact that the hourly and annual fugitive VOC limits are applicable requirements under Title V. The AQB cannot simply choose to exclude applicable requirements in a Title V permit.

The AQB asserts that the Wildcat Station is subject to "inspection and repair programs" to reduce fugitive VOC emissions. Exhibit 5, Response to Comments at 10. However, as the AQB also acknowledges, "those inspection programs do not correlate with specific numerous emission limits for fugitive emissions of VOCs[.]". *Id*. In other words, the proposed Title V permit does not and cannot ensure the Wildcat Station operates in such a manner as to assure compliance with applicable fugitive VOC emission limits.

It is telling that the AQB has included fugitive VOC emission limits in Title V permits for other similar oil and gas processing sources in New Mexico. In an August 2022 final Title V permit authorizing 3 Bear Delaware Operating to operate the 3 Bear Libby Gas Plant, the AQB imposed fugitive VOC limits of 14.9 pounds per hour and 65.4 tons per year. *See* Exhibit 11, 3 Bear Delaware Operating—NM LLC, 3 Bear Libby Gas Plant, Final Title V Permit, Permit Number P285 (Aug. 4, 2022), Condition A106.A, Table 106.A at A10 (setting forth emission limits for "FUG-1," or fugitives). Similarly, in a September 2020 final Title V permit authorizing Enterprise Products Operating to operate the South Eddy Cryogenic Plant, the AQB imposed fugitive VOC limits of 13.0 pounds per hour and 57.1 tons per year. *See* Exhibit 12, Enterprise Products Operating LLC, South Eddy Cryogenic Plant, Final Title V Permit, Permit Number P282 (Sept. 4, 2020), Condition A106.A, Table 106.A (setting forth emission limits for "FUG," or facility fugitive emissions).

The EPA must object to the issuance of the proposed Title V permit and direct the AQB to ensure any final Title V permit assures compliance with applicable hourly and annual fugitive VOC limits.

C. Particulate Matter Emissions

For emissions of particulate matter, including PM_{10} and $PM_{2.5}$, the proposed Title V permit contains no hourly or annual emission limits. This is despite the fact that XTO explicitly requested hourly and annual particulate matter limits in its application for NSR 7474M2 for a number of emission points at the facility including engines, flares, dehydrators, reboilers,

heaters, and roads. *See* Exhibit 7 at Table 2-E, page 1, .pdf page 11.[8] This is also despite the fact that NSR Permit 7474M2 explicitly sets forth annual limits on particulate matter emissions from engines 1-9 at the Wildcat Station (ENG1—ENG9). *See* Exhibit 9 at Condition A106.A, Table 106.A at A8—A9.

According to NSR Permit 7474M2, "The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision." Exhibit 9 at B2, Condition B101.A. The permit further requires XTO to "operate the [Wildcat Compressor Station] in accordance with all representations of the application[.]" *Id*.

Taken together, the hourly and annual particulate matter limits requested by XTO for the facility's various emission points are applicable requirements under Title V. These limits are not only explicitly included within the "contents" of the NSR Permit 7474M2 application identified by the Department and therefore are "terms and conditions" of the permit, but to operate the Wildcat Station consistent with representations in the application, XTO must comply the hourly and annual particulate matter limits.

Furthermore, given that NSR Permit 7474M2 explicitly sets forth annual particulate matter limits for engines 1-9, there is no question that these limits are applicable requirements given that they represent a "term or condition" of an applicable preconstruction permit.

Accordingly, for the Title V permit to assure compliance with NSR Permit 7474M2, it must set forth limitations and standards that assure compliance with hourly and annual particulate matter limits from the facility's various emission points. The proposed Title V permit does not, meaning it fails to assure compliance with applicable requirements.

In response to comments on this specific issue, the AQB acknowledges that the proposed Title V permit must be revised to include the applicable annual particulate matter limits set forth in NSR Permit 7474M2 engines 1-9. Exhibit 5, Response to Comments at 10. However, Guardians has yet to see a proposed permit revised to incorporate these limits. Accordingly, the proposed Title V permit, which is currently the only proposed permit available to the public, remains flawed and the EPA must object.

With regards to the applicable hourly particulate matter limits for engines, heater, reboilers, flares, and roads, the AQB did not explicitly or directly respond to Guardians' comments on this matter.

The AQB appears to indirectly respond to this matter by asserting that it is not required to incorporate all information in an NSR permit applications into an NSR permit. The AQB misses the point here. NSR Permit 7474M2 states that "[t]he contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision [and that XTO must] operate the [Wildcat Compressor Station] in accordance

[8] XTO also requested hourly and annual particulate limits for the 12 compressor engines in its Title V permit application. *See* Exhibit 6 at Table 2-E page 1, .pdf page 18. XTO expressly requested hourly and annual emission limits for the following emission points: ENG1, ENG2, ENG3, ENG4, ENG5, ENG6, ENG7, ENG8, ENG9, ENG10, ENG11, ENG12, HTR1, RB1, RB2, RB3, FL1—FL3 Pilot, FL1—FL3 Norm, and ROAD.

with all representations of the application[.]" *Id*. Because the proposed Title V permit must assure compliance with NSR Permit 7474M2, it must necessarily ensure compliance with the "contents of the permit application," including XTO's requested particulate matter limits, and assure the Wildcat Station is operated in accordance with representations in the permit application such that XTO's requested particulate matter limits are complied with.

The EPA must object to the issuance of the proposed Title V permit and direct the AQB to ensure any final Title V permit assures compliance with applicable hourly and annual particulate matter emission limits.

III. Condition A107 Fails to Require Sufficient Periodic Monitoring and is Unenforceable as a Practical Matter

Condition A107 of the proposed Title V Permit establishes limits on vented VOC emissions during startup, shutdown, maintenance activities ("SSM") and during malfunctions at the Wildcat Station. Unfortunately, the proposed Title V permit fails to require monitoring sufficient to assure compliance with these VOC limits and consequently, the Condition is unenforceable as a practical matter. Guardians raised this issue with reasonable specificity on pages 8-9 of its comments.

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, Condition A107.A establishes a 10 ton per year limit on VOC emissions vented from the Wildcat Station during SSM events and a 10 ton per year limit on VOC emissions vented during malfunctions. According to the permit, the 10 ton per year VOC limit during SSM applies "Compressor Blowdowns, Pigging Equipment Blowdowns, Miscellaneous SSM Activities" and the 10 ton per year VOC limit during malfunctions applies to all "Malfunction Venting." Exhibit 1, proposed Title V permit, Condition A107.A at A13-A14. Unfortunately, the proposed Title V permit fails to require monitoring sufficient to assure compliance with these emission limit.

To ensure compliance with the two 10 ton per year limits on VOC emissions vented during SSM and malfunctions, the proposed Title V permit states that XTO must "perform a facility inlet gas analysis once every year" and comply with recordkeeping requirements set forth under Condition A107.D for SSM and Condition A107.E for malfunctions. Exhibit 1, proposed

Title V permit, Conditions A107.D and A107.E at A15. While the duty to "perform a facility inlet gas analysis" constitutes some form of monitoring, the permit fails to require any other monitoring such that it can be assured that XTO is accurately monitoring VOC emissions and gathering reliable data necessary to demonstrate compliance when venting during SSM and malfunction events.

Of primary concern are the monitoring requirements set forth under Condition A107.D. and A107.E. According to the proposed Title V permit, the only monitoring required is that XTO "shall monitor" all SSM and malfunction events. Exhibit 1, proposed Title V permit, Conditions A107.D and A107.E at A15 (setting forth the "Monitoring" requirements for venting during SSM and malfunction events). This does not constitute monitoring sufficient to assure compliance with the 10 ton per year SSM venting limit or the 10 ton per year malfunction venting limit. These monitoring requirements do not set forth the method for monitoring SSM or malfunction emissions or otherwise explain how VOC emissions will be measured in order to accurately and reliably track venting emissions and assure compliance with the two 10 ton per year VOC limits.

In response to comments, the AQB stated that compliance with the 10 ton per year limits on VOC emissions during SSM and malfunction events "requires tracking and calculating the total VOC emissions based on the inlet gas analysis (meaning the % VOC content of the gas) and the volume of the gas vented." Exhibit 5, Response to Comments at 12. While the proposed Title V permit requires XTO to calculate the gas inlet analysis, or the percent VOC content of gas, the permit does not actually require tracking or calculating the volume of gas vented.

With regards to tracking and calculating volume of gas vented, the proposed Title V permit clearly sets forth no monitoring requirements. While the AQB states in response to comments that the "volume of vented gas is calculated based on the volumes contained within the various equipment that are being depressurized, including the compressors and associated piping," the AQB explains that this approach for calculating volume is not set forth in the proposed Title V permit, but rather "provided in the application (Section 6) with the demonstrating calculations." Exhibit 5, Response to Comments at 12. While Title V requires that monitoring requirements be "set forth" in a permit, not in an application, the AQB's reliance on XTO's permit application is incredibly misplaced.

To begin with, Section 6 of XTO's application does not actually set forth any methodology or procedure for calculating the volume of gas vented during SSM or malfunction events. *See* Exhibit 6, Section 6 at .pdf page 41. While the application presents estimated calculations of VOC emissions vented during SSM and malfunction events, the application does not actually present any calculations, methodologies, or direction that would indicate some means of specifically quantifying the volume of gas released during unique SSM malfunction events from emission points. It actually appears that XTO simply assumed a maximum of 10 tons per year of vented VOCs during SSM and malfunctions "per state guidance" and not as the result of any specific calculations. *See* Exhibit 6, Section 6 at .pdf page 42 (explaining that the SSM venting limit is based on "State guidance").

In spite of this, the AQB asserts that the monitoring and recordkeeping requirements in the proposed Title V permit ensure that XTO records "the volume of gas vented" and tracks "the rolling 12-month total of VOC emissions due to SSM and Malfunction events to ensure compliance with the annual emission limits in the permit." Exhibit 5, Response to Comments at 13. While the AQB is correct that the proposed Title V permit ostensibly requires XTO to maintain records of the volume of gas vented and of monthly VOC emissions vented during SSM and malfunction events, just stating that XTO is required maintain records does not constitute monitoring sufficient to assure compliance. With no methodology or procedure set forth in the permit explaining how XTO will actually calculate the volume of gas vented, there is no basis to conclude that any records maintained by XTO will represent "reliable data from the relevant time period that are representative of the [company's] compliance with the permit," as required by 40 C.F.R. § 70.6(a)(3)(i)(B). In other words, with no actual prescribed monitoring methodology set forth in the permit, the 10 ton per year VOC limits are completely unenforceable.[9]

The EPA has already objected to virtually identical SSM and malfunction VOC venting limits in other Title V permits approved by the AQB for oil and gas processing facilities. *See In the Matter of Lucid Energy Delaware, LLC, Frac Cat Compressor Station and Big Lizard Compressor Station*, Order on Petition Nos. VI-2022-05 and VI-2022-11 (Nov. 16, 2022) at 15-19. In this Title V objection, the EPA specifically ruled:

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

Id. at 19. Here, for the same reasons, EPA must also object to the issuance of the proposed Title V permit for the Wildcat Station and offer the same direction to the AQB. A Title V permit must include sufficient monitoring requirements to assure compliance with the terms and conditions of the permit. *See* 42 U.S.C. § 7661c(c); *see also* 40 C.F.R. § 70.6(a)(3)(i)(B) and 40 C.F.R. §

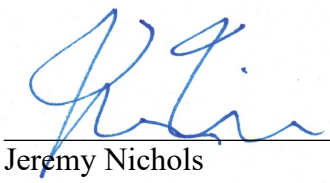
[9] The SSM and malfunction VOC venting limits are also vague and therefore unenforceable as a practical matter. For one, the proposed Title V permit is unclear as to what events would even qualify as SSM or malfunction venting. In referring to SSM emissions, the proposed Title V permit refers to venting during "miscellaneous SSM activities." "Miscellaneous" is not defined and it's entirely unclear what all "SSM activities" could or would count toward the 10 ton per year limit. For malfunction venting, it's entirely unclear what emission points would be subject to this limit and how XTO would actually track malfunction events and what events would actually qualify as malfunctions. This vagueness and open-endedness also render the 10 ton per year VOC limits unenforceable as a practical matter and unable to assure compliance with Title V of the Clean Air Act.

70.6(c)(1). Accordingly, the EPA must object to the proposed Title V permit on the basis that Condition A107 fails to require sufficient monitoring to assure compliance with the 10 ton per year limit on VOC emissions vented during SSM events and the 10 ton per year limit on VOCs vented during malfunction events.

CONCLUSION

For the foregoing reasons, the EPA must object to New Mexico's proposal to issue the initial Title V permit for XTO to operate the Wildcat Compressor Station. As demonstrated above, the proposed Title V permit fails to assure compliance with applicable requirements under the Clean Air Act. Accordingly, the Administrator has a nondiscretionary duty to issue an objection to the proposed Title V permit within 60 days in accordance with Section 505(b)(2) of the Clean Air Act. 42 U.S.C. § 7661d(b)(2).

Submitted this 1st day of March 2023



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

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TABLE OF EXHIBITS

1. XTO Energy, Inc., Wildcat Compressor Station Proposed Title V Permit, Proposed Permit Number P290 (Sept. 26, 2022).
2. Statement of Basis for Proposed Operating Permit P290.
3. Legal Notice for Air Quality Operating Permit for Wildcat Compressor Station of XTO Energy, Inc. (Sept. 6, 2022).
4. WildEarth Guardians Comments on Draft Title V Permit for Wildcat Compressor Station (Oct. 6, 2022).
5. AQB Response to Comments (Nov. 14, 2022).
6. XTO Energy, Inc, LLC, Initial Title V Permit Application (Update) (May 2020).
7. Application for NSR Modification for Wildcat Compressor Station (June 2, 2020.
8. AQB, Statement of Basis Narrative, Wildcat Compressor Station, Permit No. 7474M2.
9. Air Quality Bureau New Source Review Permit Issued Under 20.2.72 NMAC, 7474M2, Wildcat Compressor Station (Feb. 19, 2021).
10. EPA, "Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and $PM_{2.5}$ under the PSD Permitting Program" (April 30, 2019).
11. 3 Bear Delaware Operating—NM LLC, 3 Bear Libby Gas Plant, Final Title V Permit, Permit Number P285 (Aug. 4, 2022).
12. Enterprise Products Operating LLC, South Eddy Cryogenic Plant, Final Title V Permit, Permit Number P282 (Sept. 4, 2020).