May 8, 2024

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Attn: Melissa Troutman
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Re: Response to EPA Order Dated August 7, 2023: Air Quality Permit Application No P290 (Agency Interest No. 38056 – PRT20200001) XTO Energy, Inc – Wildcat Compressor Station

Dear Ms. Troutman,

On August 7, 2023, EPA Administrator Regan issued an Order ("Order") objecting to certain terms in the Title V Permit for XTO Energy, Inc. Wildcat Compressor Station (P290) and the related permitting record prepared by the New Mexico Environment Department ("NMED") Air Quality Bureau ("AQB"). EPA's Order responded to Petition VI-2023-4 filed by WildEarth Guardians ("WEG"). EPA granted WEG's Claim I, a portion of Claim II.C, and Claim III. This letter addresses the requirements regarding these Claims in EPA's Order.

During NMED's original permitting process for the Wildcat Compressor Station, WEG submitted comments about NMED's draft analysis and permit on October 6, 2022. This letter makes certain corrections or clarifications to the Wildcat Compressor Station permitting record in response to EPA's Order. This letter also includes a copy of NMED's current Re-Proposed Title V Permit for the Wildcat Compressor Station which proposes changes to Permit P290 in response to EPA's Order. For clarity, in this letter, WildEarth Guardian's previous comments are in Times New Roman italics and AQB's response is in Calibri regular font.

Regarding **Condition A103.C.**, your October 6, 2022 comment states:

This Condition 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." Draft Title V Permit at A6. Unfortunately, this Condition appears inaccurate and unsupported with regards to compliance with national ambient air quality standards ("NAAQS") for ground-level ozone.

Under the New Mexico state implementation plan ("SIP"), NMED cannot approve permits for 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. Accordingly, NMED cannot approve permits for new or modified stationary sources that would 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.

When NMED was reviewing XTO's application for NSR Permit 7474M2, neither XTO nor NMED addressed the impacts of the Wildcat Compressor Station's air pollution to ambient ozone concentrations. Although it was disclosed that the facility would release large amounts of ozone precursor emissions, including volatile organic compounds ("VOCs") and nitrogen oxides ("NOx"), no analysis, in particular any modeling analysis, was actually completed to demonstrate that the Compressor Station would not cause or contribute to ozone concentrations in excess of the NAAQS.

This is problematic. At the time the NSR Permit 7474M2 was under review and ultimately approved in 2022, monitoring data from where the Wildcat Compressor 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 Compressor 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, but also Lea County to the east. When NSR Permit 7474M2 was approved in 2022, monitors in Eddy and Lea Counties had recorded numerous exceedances of the ozone 2008 and 2015 NAAQS. Further, at the time of approval, monitors in Eddy County were in violation of the 2015 ozone NAAQS and the monitor in Lea County was right at the NAAQS. The tables below show recent exceedances of the ozone NAAQS.

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 (to date)***
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*	*21*

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 (to date)***
1st Max.	*0.068*	*0.070*	*0.069*	*0.099*	*0.082*	*0.074*	*0.085*	*0.085*
2nd Max.	*0.068*	*0.069*	*0.065*	*0.081*	*0.080*	*0.074*	*0.080*	*0.084*
3rd Max.	*0.065*	*0.069*	*0.065*	*0.080*	*0.078*	*0.073*	*0.079*	*0.083*
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*	*19*

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 (to date)***
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*

Further, at the time of approval of NSR Permit 7474M2 in 2022, 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 the NAAQS, with the design value at the Carlsbad monitor even violating the 2008 ozone NAAQS, and the Hobbs monitor is very near violating the 2015 NAAQS. In 2022, when NSR Permit 7474M2 was approved, the 2016-2018 design value violated the 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 (to date)***
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*

With no analysis of ozone impacts associated with NSR Permit 7474M2, there is no support for Condition A103.C. There is no support for the conclusion that compliance with the terms and conditions of the Title V Permit will comply with ozone NAAQS promulgated under 40 C.F.R. § 50 or otherwise ensure that operation of the Wildcat Compressor Station will not cause or contribute to exceedances of the ozone NAAQS.

Although NMED has repeatedly asserted that sources not subject to Prevention of Significant Deterioration ("PSD") permitting, such as the Wildcat Compressor Station, are categorically presumed not to cause or contribute to exceedances of the ozone NAAQS, the Department has not conducted any actual air quality analyses or assessments to support this categorical presumption. Further, the U.S. Environmental Protection Agency has never issued guidance or prepared any assessment supporting NMED's categorical presumption. Given NMED's duty to assess the air quality impacts of stationary sources on a permit-by-permit basis, there is no support for ignoring the impacts of the Wildcat Compressor Station to ambient ozone concentrations.

Furthermore, while the New Mexico Environmental Improvement Board upheld NMED's claim that the Wildcat Compressor Station is presumed not to cause or contribute to violations of the ozone NAAQS, the Board's ruling in AQB 21-35 is contrary to applicable requirements under the New Mexico SIP and the Clean Air Act. The Board's ruling in AQB 21-35 is erroneous and cannot serve to justify issuance of the draft Title V Permit under the Clean Air Act.

The failure of NMED or XTO to conduct any analysis of the impacts of the Wildcat Compressor Station's emissions to the ozone NAAQS also indicates that the Title V Permit fails to ensure compliance with applicable requirements. As the Title V Permit states, the NAAQS are applicable requirements. See Draft Title V Permit at A5, Table 103.A. With no analysis of ozone impacts, the Draft Title V Permit fails to ensure compliance with these applicable requirements.

NMED Response to Claim I:

1. The NAAQS Are Not an Applicable Requirement with which the Source Must Comply.

As explained by EPA in its Order, the NAAQS are not an applicable requirement with which sources need to comply. NMED evaluated the applicability of 40 CFR 50, National Ambient Air Quality Standards ("NAAQS") under the Title V Permitting Program and confirmed that the NAAQS are not an applicable requirement under the program. The reference to NAAQS as an applicable requirement in Permit P290, Condition A103, Table 103.A was erroneous, and NMED's re-proposed permit has been revised to remove the line in Table 103.A that listed the NAAQS as an applicable requirement and by removing Condition A103.C. *See* Exhibit A, Re-proposed Permit 290, *lacking* Condition A103 and Table 103.A, *lacking* 40 CFR 50 National Ambient Air Quality Standards.

2. 20.2.72.208.D NMAC Is Not an Applicable Requirement under the Title V Program.

There are several reasons why 20.2.72.208(D) NMAC is not an applicable requirement. The regulation at issue provides:

> The department shall deny any application for a permit or permit revision if considering emissions after controls:…(D) The construction, modification, or permit revision will cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico ambient air quality standard unless the ambient air impact is offset by meeting the requirements of either 20.2.79 NMAC or 20.2.72.216 NMAC, whichever is applicable[.]
>
> 20.2.72.208(D) NMAC.

First, this requirement under NMAC Part 72 applies to an applicant seeking to construct or modify a source. See 20.2.72.2 NMAC ("SCOPE: All persons who intend to construct or modify a source…") and 20.2.72.6 NMAC ("The objective of this part is to establish the requirements for obtaining a construction permit.") As part of the New Mexico's New Source Review Program 20.2.72.208(D) NMAC only applies to those facilities applying for a 20.2.72 NMAC construction permit or modification.

For a new facility or modification, applicants must demonstrate that the facility will not cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standards or New Mexico ambient air quality standard. If the facility's proposed operation and emission rates demonstrate that they will not cause or contribute to such exceedances, AQB issues the construction permit. During that process, applicants must demonstrate that the facility will not cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standards or New Mexico ambient air quality standard. If the facility's proposed operation

and emission rates demonstrate that they will not cause nor contribute to such exceedances, AQB issues the construction permit.

If the facility cannot satisfactorily make such a demonstration, then 20.2.72.208(D) NMAC gives AQB the authority to deny the applicant a construction permit. This citation, in the New Source Review Program does not apply to a TV source unless and until the source applies for a construction permit and then it only applies to the issuance of the construction permit, not a Title V permit. Subsection 208(D) of Part 72 is not an applicable requirement with which a Title V permit must assure compliance.

Second, Part 72 is New Source Review (NSR) construction permit which only applies to an applicable source contingently-i.e., the source needs to add or change equipment or increases its operation, pursuant to 20.2.72.200 NMAC.

Third, Subsection 208(D) cannot be an applicable requirement because it does not meet the definition of "applicable requirement." The federal definition of "applicable requirement" is:

> Applicable requirement means all of the following **as they apply to emissions units in a part 70 source** (including requirements that have been promulgated or approved by EPA through rulemaking at the time of issuance but have future-effective compliance dates)..."
>
> 40 CFR 70.2 [emphasis added].

In state regulations, the definition of "applicable requirement" is:

> Applicable requirement means all of the following, **as they apply to a Part 70 source or to an emissions unit at a Part 70 source** (including requirements that have been promulgated or approved by the board or US EPA through rulemaking at the time of permit issuance but have future-effective compliance dates)...
>
> 20.2.70.7(E) NMAC [emphasis added].

Subsection 208(D) applies to the Department and not to an emissions unit at a Part 70 source. Hence, subsection 208(D) of Part 72 does not meet the definition of an applicable requirement.

Subsection 208(D) is not an applicable requirement with which Title V permittees must comply.

3. Evaluation of Air Dispersion Modeling for the Wildcat NSR Permit 7474M2.

NMED evaluates and determines compliance with the National Ambient Air Quality Standards ("NAAQS") when an applicant applies for a new construction permit or a modification to an existing permit under 20.2.72 NMAC. New emissions are not authorized under a new Title V permit or as part of a renewal of an existing operating permit issued under 20.2.70 NMAC; Title V permits only include emissions that were already reviewed and authorized under the requirements of 20.2.72 NMAC.

Emissions of criteria pollutants other than ozone were reviewed and evaluated prior to issuance of construction permit 7474M2 in 2022, as well as for previous permits issued in 2018 and 2019. For AQB to accomplish that review and evaluation, the permittee submitted an air dispersion modeling analysis for this facility as part of the air quality permit application, as required by 20.2.72 NMAC. The modeling analysis demonstrated the facility's anticipated compliance with the NAAQS including a demonstration for compliance with national ambient air quality standards for CO, NO2, PM10, PM2.5, and SO2; for New Mexico Ambient Air Quality Standards for CO, NO2, and SO2; and for Class I and Class II PSD increments for NO2, PM2.5, PM10, and SO2.

With respect to ozone, as you are aware, it is not emitted by sources. As a result, it cannot be modeled through air dispersion modeling. Ozone is formed in the atmosphere under certain conditions when chemical reactions occur between volatile organic compounds ("VOCs") and nitrogen oxides ("NOX") (collectively referred to as "ozone precursors"). Ozone precursors may come from permitted sources, unpermitted sources such as vehicles, natural emissions from vegetation, and other sources. Ozone precursors may originate nearby or be carried in on the wind from hundreds or thousands of miles away. As such, when a source applies for a construction permit that proposes to emit VOCs and NOX, it is not self-evident that the pollutants from the source alone will produce ozone nearby. They may or they may not. Modeling for ozone is extremely complex. EPA's Appendix W expressly acknowledges that "[t]here is no preferred modeling system or technique for estimating ozone … for specific source impacts or to assess impacts from multiple sources." App. W, at 5.1.d.

The complexity of ozone formation makes modeling ozone a very costly endeavor. Source specific photo-chemical modeling analysis was not conducted or submitted as part of the application for the NSR 7474M2 permit, as this type of modeling analysis is not currently required for PSD minor source applications. Determining compliance with the ozone NAAQS is accomplished through other types of analyses. The Department follows and implements US EPA's current guidance to analyze whether an applicant's proposed source will cause or contribute to an exceedance of the federal ozone standards. NMED's re-proposed permit has been revised to remove the line in Table 103.A that listed the NAAQS as an applicable requirement and by removing Condition A103.C which referenced the air dispersion modeling done for NSR Permit 47474M2. *See* Exhibit A, Re-proposed Permit P290, Condition A103 and Table 103.A.

This resolves the issues that WildEarth Guardians raised regarding whether the Wildcat Compressor Station would operate in compliance with applicable requirements and addresses the requirements in EPA's Order Claim I for the Wildcat Permit.

NMED Response to the portion of Claim II.C which EPA Granted:

Regarding **Table 106.A**, your October 6, 2022 comment states:

For applicable particulate matter limits, including limits on PM2.5 and PM10, the draft Title V permit completely fails to include limits that are explicitly set forth in NSR 7474M2. XTO's NSR permit specifically limits annual particulate matter emissions from engines 1-9. By failing to include these applicable particulate matter limits, the draft Title V Permit fails to comply with applicable requirements. Furthermore, as part of both its Title V Permit application and its NSR permit application, XTO requested both hourly and annual particulate matter limits not only from engines 1-9, but from a number or other sources as well. In failing to include these particulate limits, the draft Title V Permit fails to ensure compliance with applicable requirements.

NMED Response:

WEG's original October 6, 2022 comment letter raised issues about Condition A106.A in the Wildcat Compressor Station Permit P290. WEG re-iterated its concerns in Claim II of its petition. In sum, WEG alleged that Permit P290 failed to include certain limits on emissions. In granting a portion of Claim II.C, EPA pointed out that Permit P290 omitted the limits on particulate matter for engines 1-9 which had been imposed in the underlying construction permit, No. 7474M2.

The Department agrees with the Petition and EPA Order Claim II.C that the PM2.5 and PM10 emissions limits are explicitly set forth in NSR permit 7474M2; the emissions are "applicable requirements" that must be included in the Title V Permit and with which the Permit must assure compliance.

The emissions have been added to Permit Table 106.A, as noted below and in the attached re-proposed permit. This resolves the issues that WildEarth Guardians raised regarding Permit 290 and will address the requirements in EPA's Order Claim II.C for the Wildcat Permit.

Table 106.A: Allowable Emissions

Unit No.	NO_x[1] pph	NO_x[1] tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO_2 pph	SO_2 tpy	$PM^{2.5}$/ PM^{10} pph	$PM^{2.5}$/ PM^{10} tpy
ENG1	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7
ENG2	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7
ENG3	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7
ENG4	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7
ENG5	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7
ENG6	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7
ENG7	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7
ENG8	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7
ENG9	4.1	18.1	5.1	22.2	3.9	16.9	0.4	1.9	<	1.7

NMED Response to Claim III:

Regarding **Condition A107**, your October 6, 2022 comment states:

Condition A107 establishes annual VOC limits for venting emissions during startup, shutdown, and maintenance ("SSM") and malfunctions. We are concerned that these emission limits are unenforceable as a practical matter due to a lack of sufficient periodic monitoring and other issues.

Condition A107 condition limits emissions of VOCs vented during SSM to 10 tons per year and also limits emissions of VOCs vented during malfunctions to no more than 10 tons per year.2 Unfortunately, the condition requires no actual monitoring of emissions that would ensure XTO complies with the 10 ton per year emission limits. While Conditions A107.D and A107.E ostensibly claim to require monitoring of emissions, the only monitoring requirement states, "The permittee shall monitor" all SSM and Malfunction events. Draft Title V Permit at A15. This is not monitoring, let alone sufficient periodic monitoring

that satisfies the requirements of 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6 (c)(1). These monitoring requirements do not set forth the method for monitoring SSM and malfunction emissions, or otherwise explain how emissions will be measured in order to accurately and credibly track venting emissions and ensure compliance with the 10 ton per year emission limits for VOCs vented during SSM and malfunctions.

We are especially concerned over a lack of sufficient periodic monitoring as it relates to malfunction emissions. By their nature, malfunctions are unforeseeable and unpredictable, meaning they are likely extremely difficult, if not impossible, to reliably observe and obtain accurate emissions data. It is unclear how a source could credibly and accurately monitor emissions during malfunction venting events.

Compounding our concerns over the enforceability of Condition A.107 is that it contains vague and undefined language that appears to render the Condition inherently unenforceable as a practical matter. For one, the permit is unclear as to what venting events would even qualify as SSM or malfunction emissions. In referring to SSM emissions, the draft 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. We are particularly concerned over the potential of malfunction events leading to fugitive VOC emissions. Given that the draft Title V Permit has no requirements to monitor the quantity of fugitive VOC emissions, it is unclear how NMED could possibly enforce the 10 ton per year limit on vented VOCs during malfunctions.

Related to this, it is unclear how startup, shutdown, and maintenance venting events differ from normal operations such that a stand-alone VOC emission limit is required. XTO already estimated hourly and annual VOC emissions from emission points at the Wildcat Compressor Station. Presumably, these estimates included consideration of emissions during SSM events. It is not appropriate for NMED to create separate emission limits for various types of normal operating conditions.

Given the deficiencies identified above, it is inappropriate for the draft Title V permit to include the 10 ton per year limits on VOC emissions during SSM and malfunction venting events. However, given that the underlying NSR permit authorizes these limits, NMED cannot simply remove the limit in the Title V permit as it would fail to assure compliance with applicable requirements. Rather, NMED must include language in any final Title V permit that effectively nullifies any underlying SSM and malfunction VOC venting emission limits that were previously authorized.

Although the New Mexico Environmental Improvement Board upheld NMED's claim that SSM and malfunction limits for VOC venting at the Wildcat Compressor Station are appropriate, the Board's ruling in AQB 21-35 is contrary to applicable requirements under the New Mexico SIP and the Clean Air Act. The Board's ruling in AQB 21-35 is erroneous and cannot serve to justify issuance of the draft Title V Permit under the Clean Air Act.

NMED Response: The Department has revised the language applying to the Startup, Shutdown, Maintenance, and Malfunction Venting Emissions condition, A107.D. These changes include:

1) AQB has limited the SSM/M venting emissions to a combined 10 tpy quantifiable startup, shutdown, maintenance (SSM), and malfunction (M) emissions based on the applicant's worst-case scenario limited to Compressor Blowdowns, Tank Degassing, Process Vessels, Headers, and Piping Blowdowns. *See* introductory paragraph in Condition A107.D and Requirement Section (5).
2) The amended condition includes a clear requirement for tracking and calculating the number of events per year. See Monitoring Section and Recordkeeping Section (1) in Condition A107.D.
3) The SSM/M condition specifies the methodology to be used to calculate the total VOC emissions from the allowable SSM/M events. See Requirements (1) in Condition A107.D.

These requirements are included in the permit itself, rather than being incorporated by reference in the application.

Method for Determining Compliance with the Startup, Shutdown, Maintenance, and Malfunction Venting Emission Limits in Table 107.A

D. Startup, Shutdown, & Maintenance (SSM) and Malfunction (M) Venting Emissions

Requirement: The permittee shall comply with this condition to determine compliance with the allowable SSM and Malfunction Venting emission limits in Table 107.A. The allowable emission limits in Table 107.A were based upon the applicant's worst-case scenario and were calculated using the maximum volume of gas that can be vented from compressor blowdowns, tank degassing, or process equipment listed below. The permittee shall calculate the emissions from each SSM/M event using the calculations provided below.

(1) Calculation Methodology for Determining Compliance

(a) The permittee shall perform an extended gas analysis at the facility inlet at least once per year.

(b) The permittee shall monitor and record each event, identify the cause of the event, the specific equipment that was vented, and shall record the information required for the appropriate calculations below.

(c) Each calendar month, the permittee shall calculate the total monthly emissions from all SSM/M events.

(d) For each SSM/M event, the permittee shall calculate the emissions resulting from the event. The calculation shall be performed using the example calculations below:

Compressor Blowdowns (Model KBZ 6 / CAT 3616) (VOC): [1,588 (scf/event)] x [Stream Molecular Weight (lb/lb-mol)] x [weight % Pollutant] / ([385.2 scf/lb-mol] x [2,000 lb/ton]) = Pollutant emissions per event (ton/event)

Compressor Blowdowns (Model JGT 4 / CAT 3516) (VOC): [1,310 (scf/event)] x [Stream Molecular Weight (lb/lb-mol)] x [weight % Pollutant] / ([385.2 scf/lb-mol] x [2,000 lb/ton]) = Pollutant emissions per event (ton/event)

Tank Degassing Emissions (500 BBL Tank) (VOC): [3,163 (scf/event)] x [Stream Molecular Weight (lb/lb-mol)] x [weight % Pollutant] / ([385.2 scf/lb-mol] x [2,000 lb/ton]) = Pollutant emissions per event (ton/event)

Tank Degassing Emissions (1,000 BBL Tank) (VOC): [6,415 (scf/event)] x [Stream Molecular Weight (lb/lb-mol)] x [weight % Pollutant] / ([385.2 scf/lb-mol] x [2,000 lb/ton]) = Pollutant emissions per event (ton/event)

Process Equipment Venting Emissions (VOC):** [Volume (scf/event) from Table 107.D] x [Stream Molecular Weight (lb/lb-mol)] x [weight % Pollutant] / ([385.2 scf/lb-mol] x [2,000 lb/ton]) = Pollutant emissions per event (ton/event)

**Note: Process Equipment Venting applies to the process vessels, process headers, and associated piping within the facility as listed in Table 107.D. Table 107.D. represents worst-case venting for two separate scenarios for each equipment type – 1) venting at operating pressure and 2) venting at flare or low pressure separator pressure.

(2) Emissions included in the Permit Limit and/or Reported as Excess Emissions

(a) All emissions due to routine or predictable SSM must be recorded and shall not exceed the 10 tpy VOC emission limit in this permit.

(b) For malfunction emissions, the permittee may include those emissions with the predictable SSM emissions subject to the 10 tpy VOC emission limit in Table 107.A.

(c) Alternatively, the permittee may report malfunction emissions as excess emissions (due no later than ten days after the end of the excess emissions event) in accordance with 20.2.7.110.A(2) NMAC.

(d) Once emissions from a malfunction emission event are submitted in the excess emissions final report,

the event is considered an excess emission and cannot be applied toward the 10 tpy SSM/M limit in this permit.

(3) Emissions Exceeding the Permit Limit

If the monthly rolling 12-month total of SSM/M exceeds the permitted emission limits, the permittee shall report the emissions as excess emissions in accordance with 20.2.7.110 NMAC.

(4) Emissions Due to Preventable Events

Emissions that are due entirely or in part to poor maintenance, careless operation, or any other preventable equipment breakdown shall be reported as excess emissions of the emission limit in Table 107.A in accordance with 20.2.7 NMAC.

(5) Emissions due to SSM from equipment not listed in Table 107.A or Table 107.D

Emissions due to SSM other than those represented in Table 107.A or Table 107.D shall be reported as excess emission events.

Monitoring:

(1) The permittee shall perform an extended gas analysis at the facility inlet at least once per year.

(2) The permittee shall monitor and record each event, shall identify the cause of the event, the specific equipment that was vented, and shall record the information required for the appropriate calculations used for that event.

(3) Each month, the permittee shall monitor and record the cumulative total VOC emissions resulting from SSM/M events during the first 12 months and, thereafter the monthly rolling 12-month total VOC emissions from all SSM/M events. Any malfunction emissions that have been reported in a final excess emissions report per 20.2.7.110.A(2) NMAC shall be excluded from this total.

(4) The permittee shall monitor in accordance with Condition B108 of this permit.

Recordkeeping:

(1) **Recording for Compliance Determination**

(a) For each SSM/M event, the permittee shall keep records of:

(i) the extended gas analysis documenting the %VOC,

(ii) the volumetric total gas vented in scf or MMscf,

(iii) the emission calculation, and the data used for that calculation which shall be based on the calculation methodology required above.

(b) For each SSM/M event, the permittee shall identify the equipment and shall identify the cause of the event that is the source of emissions.

(c) The permittee shall record each SSM/M event and the total number of events each year.

(d) Each month, the permittee shall record the cumulative total VOC emissions from SSM/M events during the first 12 months and, thereafter of the monthly rolling 12-month total VOC emissions from SSM/M

events. The permittee shall record the calculations performed to determine the VOC emissions. Any malfunction emissions that have been reported in a final excess emissions report per 20.2.7.110.A(2) NMAC, shall be excluded from this total.

(2) **Condition B109 Records**

The permittee shall keep records in accordance with Condition B109 of this permit.

Reporting: The permittee shall report in accordance with Section B110.

Table 107.D: Process Vessel/ Equipment Blowdown Volumes, MW, and VOC Wt%

Process Vessel/ Equipment	Vented Volume @ Operating Pressure (scf/event)	Vented Volume @ Flare or LPS Pressure (scf/event)	MW (lb/lbmol)	VOC (wt%)
Slug Catcher Blowdowns	39,933	4,437	25	35
Inlet Filter Coalescer Blowdowns	5,088	565	25	35
Discharge Filter Coalescer Blowdowns	14,897	115	25	35
Low Pressure Separator Blowdowns	4,659	3,328	40	75
High Pressure Separator Blowdowns	7,640	306	25	35
Discharge Scrubber/Separator Blowdowns	16,089	124	25	35
Gas Lift Scrubber Blowdowns	16,089	124	25	35
Sales Scrubber Blowdowns	23,835	183	25	35
Fuel Gas Scrubber Blowdowns (1st Pass)	3,507	41	25	35
Fuel Gas Scrubber Blowdowns (2nd Pass)	660	55	25	35
Dehydrator Contactor Blowdowns	7,334	293	25	35
Dehydrator Flash Tank Blowdowns	809	90	25	35
HP Flare Knockout Blowdowns	287	287	25	35
LP Flare Knockout Blowdowns	29	29	55	100
Suction Header Blowdowns	14,081	1565	25	35
Fuel Gas Header Blowdowns	1,173	98	25	35
Discharge Header Blowdowns	35,312	272	25	35

If you have any further comments, please submit them to Melinda Owens, New Mexico Environment Dept., Air Quality Bureau, Permit Section, 525 Camino de los Marquez Suite 1, Santa Fe, NM 87505-1816, or submit by email to Julia.kuhn@env.nm.gov. Also, please feel free to contact me in Santa Fe at 505-629-2893.

Sincerely,

Julia Kuhn Digitally signed by Julia Kuhn
Date: 2024.05.08 08:20:07 -06'00'

Julia Kuhn M.S.
Supervisor – Major Source TV Permitting Unit
NMED – Air Quality Bureau

RTC Attachments:
Exhibit A Re-Proposed Wildcat Compressor Station Permit P290, Parts B and C of TV permit, SOB.