



June 19, 2023

UPS Tracking #1Z5V32101302843127

Attn: Ms. Melinda Owens
Title V Program Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505

Re: **Initial Title V Operating Permit Application (Supplemental Information)**
Wildcat Compressor Station
Agency Interest No. 38056
XTO Energy Inc.

Dear Ms. Owens,

XTO Energy Inc. is submitting the enclosed supplemental information requested for the initial Title V Operating Permit application for the Wildcat Compressor Station. The Wildcat Compressor Station is currently authorized under NSR Permit No. 7474-M2. The enclosed supplemental information includes the following:

- Updated Table 2-B
- Updated Table 2-F
- SSM Venting Emission Calculations
- Proposed SSM/M Language for Permit Condition A107
- RO Certification Form

If you have any questions concerning this application, please contact me at 346-566-9345 or at james.barron@exxonmobil.com.

Sincerely,

A handwritten signature in blue ink that reads 'James Barron'.

James Barron
Environmental & Regulatory Advisor
XTO Energy Inc.

cc: Joe Landry, Environmental Advisor—Air Quality, XTO Energy, Inc.

Enclosures:

Table 2-B: Insignificant Activities¹ (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.env.nm.gov/aqb/permit/aqb_pol.html), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <http://www.env.nm.gov/aqb/forms/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
ROAD	Haul Road Emissions	N/A	N/A	N/A	20.2.72.202.B.5	N/A	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	N/A	20.2.72.202.B.5	N/A	
PIGGING	Pig Launchers/Receivers Emissions	N/A	N/A	N/A	20.2.72.202.B.5	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	N/A	20.2.72.202.B.5	N/A	
TANKGAUGE	Tank Gauging Emissions	N/A	N/A	N/A	20.2.72.202.B.5	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	N/A	20.2.72.202.B.5	N/A	
SMALL-EQUIP	Small Equipment/Piping/Piping Component Emissions	N/A	N/A	N/A	20.2.72.202.B.5	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	N/A	20.2.72.202.B.5	N/A	
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
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							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced

¹ Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

² Specify date(s) required to determine regulatory applicability.

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

□ This table is intentionally left blank since all emissions at this facility due to routine or predictable startup, shutdown, or scheduled maintenance are no higher than those listed in Table 2-E and a malfunction emission limit is not already permitted or requested. If you are required to report GHG emissions as described in Section 6a, include any GHG emissions during Startup, Shutdown, and/or Scheduled Maintenance (SSM) in Table 2-P. Provide an explanation of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine or predictable startup, shutdown or scheduled maintenance (SSM)¹, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (https://www.env.nm.gov/aqb/permit/aqb_pol.html) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

[illegible]

¹ For instance, if the short term steady-state Table 2-E emissions are 5 lb/hr and the SSM rate is 12 lb/hr, enter 7 lb/hr in this table. If the annual steady-state Table 2-E emissions are 21.9 TPY, and the number of scheduled SSM events result in annual emissions of 31.9 TPY, enter 10.0 TPY in the table below.

² **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

XTO ENERGY, INC.

WILDCAT COMPRESSOR STATION

STARTUP, SHUTDOWN, MAINTENANCE (SSM) VENTING EMISSIONS

Equipment Blowdowns & Purging - Emission Calculations ⁽¹⁾

Vessel/ Equipment	Estimated Events per Year	Vented Volume (scf/event)	Total Vented Volume (scf/yr)	MW (lb/lbmol)	VOC (wt%)	Total Vented Mass (TPY)	VOC Emissions (TPY)
Compressor Blowdowns (Model JGT 4)	24	1,310	31,434	25	35	1.02	0.36
Compressor Blowdowns (Model KBZ 6)	108	1,588	171,456	25	35	5.56	1.95
Tank Degassing (500 BBL Tank)	6	3,163	18,980	55	100	1.36	1.36
Tank Degassing (1000 BBL Tank)	2	6,415	12,830	55	100	0.92	0.92
Process Equipment Blowdowns ⁽²⁾	40	11,928	477,119	25	35	15.48	5.42
Totals	180	203,898	711,819			24.52	10.00

Standard Pressure	14.7
Standard Temperature (°R)	527.7
Molar Volume at Standard Conditions (scf/lbmol)	385.2

Calculation Methodology
Total Vented Mass = Total Vented Volume * MW / Molar Volume
VOC Emissions = Total Vented Mass * VOC Component Weight%

Notes:

(1) Event frequency, volume, MW, and VOC wt% are estimates and not intended to represent permit limits. Compliance with the 10 tpy VOC emission limit for SSM Venting will be demonstrated in accordance with Permit Condition A107.

(2) Process equipment blowdowns includes various process vessels, headers, and piping. Vented volume per event represents an average volume per piece of equipment. The actual volume vented for each event will be calculated and recorded in accordance with Permit Condition A107.

XTO ENERGY, INC.

WILDCAT COMPRESSOR STATION

STARTUP, SHUTDOWN, MAINTENANCE (SSM) VENTING EMISSIONS - EXEMPT SOURCES & ACTIVITIES ⁽¹⁾

Equipment Blowdowns & Purging - Emission Calculations ⁽²⁾

Vessel/ Equipment	Estimated Events per Year	Vented Volume (scf/event)	Total Vented Volume (scf/yr)	MW (lb/lbmol)	VOC (wt%)	Total Vented Mass (TPY)	VOC Emissions (TPY)
Pig Launchers/Receivers	84	458	38,506	25	35	1.25	0.44
Tank Guaging	176	39	6,929	55	100	0.49	0.49
Small Equipment/Piping/Piping Component Opening ⁽³⁾	430	100	43,109	25	35	1.40	0.49

Standard Pressure	14.7
Standard Temperature (°R)	527.7
Molar Volume at Standard Conditions (scf/lbmol)	385.2

Calculation Methodology
Total Vented Mass = Total Vented Volume * MW / Molar Volume
VOC Emissions = Total Vented Mass * VOC Component Weight%

Notes:

(1) Activities are exempt from permitting per 20.2.72.202.B.(5) NMAC.

(2) Event frequency, volume, MW, and VOC wt% are estimates and not intended to represent permit limits.

(3) Vented volume per event represents an estimated average volume per piece of small equipment, piping, or piping component.

A. Startup, Shutdown, & Maintenance (SSM) and Malfunction (M) Venting Emissions
(This is State Only Enforceable)

This is State Only Enforceable

Requirement: The permittee shall comply with this condition to determine compliance with the allowable emission limits in Table 107.A. The allowable emission limit in Table 107.A was based upon the applicant's worst-case scenario and was calculated using the maximum volume of gas that can be vented from each event. The permittee shall calculate the emissions from each SSM/M event using the calculation 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 and the cause of the event and shall record the specific information as required below.
- (c) The permittee shall calculate the emissions from each SSM/M event using the following calculations.
- (d) Each calendar month, the permittee shall calculate the total monthly emissions from all SSM/M events.
- (e) 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) (VOC): $[1,588 \text{ (scf/event)}] \times [\text{Stream Molecular Weight (lb/lb-mol)}] \times [\text{weight \% Pollutant}] / ([385.2 \text{ scf/lb-mol}] \times [2,000 \text{ lb/ton}]) = \text{Pollutant emissions per event (ton/event)}$

Compressor Blowdowns (Model JGT 4) (VOC): $[1,310 \text{ (scf/event)}] \times [\text{Stream Molecular Weight (lb/lb-mol)}] \times [\text{weight \% Pollutant}] / ([385.2 \text{ scf/lb-mol}] \times [2,000 \text{ lb/ton}]) = \text{Pollutant emissions per event (ton/event)}$

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

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

Process Equipment Venting Emissions (VOC):** $[11,928 \text{ (scf/event)}] \times [\text{Stream Molecular Weight (lb/lb-mol)}] \times [\text{weight \% Pollutant}] / ([385.2 \text{ scf/lb-mol}] \times [2,000 \text{ lb/ton}]) = \text{Pollutant emissions per event (ton/event)}$

****Note:** Process Equipment Venting includes various process vessels, process headers, and associated piping within the facility. The vented volume per event is an average per piece of

equipment. The actual volume vented for each event will be calculated and recorded in accordance with this permit condition.

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

- (a) All emissions due to routine or predictable SSM must be included and shall not exceed the emission limit in this permit. For emissions due to malfunctions, the permittee has the option to report these as excess emissions of the emission limit Table 107.A in accordance with 20.2.7 NMAC, or include the emissions under the 10 tpy limit.
- (b) Once emissions from a malfunction event are submitted in the excess emissions final report (due no later than ten days after the end of the excess emissions event) per 20.2.7.110.A(2) NMAC, the event is considered an excess emission and cannot be applied toward the 10 tpy SSM/M limits 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 other than those represented in Table 107.A 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 SSM/M event and shall record the specific information as required in the condition below.
- (3) The permittee shall monitor and record the specific equipment causing the event and shall identify the cause of the event.
- (4) 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.
- (5) 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, 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 for each.
- (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.

Section 22: Certification

Company Name: XTO Energy Inc.

I, KARTIKEYA GARG, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 19 day of June, 2023, upon my oath or affirmation, before a notary of the State of

New Mexico.

*Signature Karth

19 JUNE 2023
Date

KARTIKEYA GARG
Printed Name

NM PRODUCTION MGR
Title

Scribed and sworn before me on this 19 day of June, 2023.

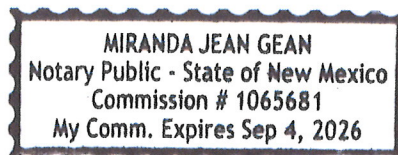
My authorization as a notary of the State of New Mexico expires on the

4 day of September, 2026.

Miranda Jean Gean
Notary's Signature

6/19/2023
Date

Miranda Jean Gean
Notary's Printed Name



*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.