

Statement of Basis - Narrative
Title V Permit

Type of Permit Action: New Title V

Facility: Longhorn Compressor Station
Company: XTO Energy Inc
Permit No(s): 8349 and P296
Tempo/IDEA ID No.: 39012 - PRT20200001
Permit Writer: Miranda Baldwin

Permit Review	Date to Enforcement: 10/12/2022	Date of Enforcement Reply: 10/20/2022
	Date to Applicant: TBD	Date of Applicant Reply: TBD
	Date to EPA: TBD or N/A	Date of EPA Reply: TBD or N/A
	Date to Supervisor: TBD	

1.0 Plant Process Description:

The Rincon Compressor Station is located approximately 15 miles northeast of Loving, NM. The Longhorn Compressor Station facility is a typical compressor station with natural gas engines, dehydration, storage tanks, and flares.

2.0 Description of this Modification:

This new Title V permit incorporates the requirements from 8349-M2. This NSR also incorporates 20.2.50 NMAC, which was effective 8/5/22.

3.0 Source Determination:

1. The emission sources evaluated include the entire facility.
2. Single Source Analysis:
 - A. SIC Code: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes
 - B. Common Ownership or Control: Are the facilities under common ownership or control? Yes
 - C. Contiguous or Adjacent: Are the facilities located on one or more contiguous or adjacent properties? Yes
3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes?

4.0 PSD Applicability:

Title V action does not determine PSD applicability; see the History Table for a summary of previous PSD applicability determinations.

5.0 History (In descending chronological order, showing NSR and TV): *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
P296*	TBD	Title V New	New Title V Permit
8349-M2*	02/11/2022 (Signed after Final Order for Hearing)	NSR-Sig Mod	The modification will consist of modification of eleven (11) compressor engines, three(3) reboilers, two (2) flares, one (1) still vent emission, two (2) skim tanks, four (4) condensate tanks, two (2) produced water tanks, two (2) vapor recovery units, three (3) TEG dehydrator units, low pressure separator, truck loading and fugitive emissions. The facility will be removing two (2) engines, two (2) heaters and one (1) flare.
8349-M1	01/16/2020	NSR-Regular	This permit action is to add thirteen (13) natural gas engines, three (3) TEG glycol dehydrators, three (3) glycol regenerators, three (3) heaters, three (3) flares, two (2) skim tanks, four (4) condensate tanks, two (2) produced water tanks, a VRU, a low pressure separator and a vapor combustor to an existing GCP Oil and Gas facility.
8349	06/13/2019	GCP O&G	General Permit COP-Oil and Gas permit was obtained by the facility.

6.0 Public Response/Concerns: As of November 9, 2022, this permit writer is not aware of any public comment or concern.

7.0 Compliance Testing:

Unit No.	Compliance Test	Test Dates
ENG1	Initial compliance test in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ as required by NSR Permit 8349.	10/7/2020
ENG1	Quarterly compliance test in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ as required by NSR Permit 8349.	3/23/2021
ENG2	Initial compliance test in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ as required by NSR Permit 8349.	10/9/2020

ENG2	Quarterly compliance test in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ as required by NSR Permit 8349.	3/23/2021
ENG3	Initial compliance test in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ as required by NSR Permit 8349.	10/7/2020
ENG3	Quarterly compliance test in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ as required by NSR Permit 8349.	3/24/2021
ENG10	Initial compliance test in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ as required by NSR Permit 8349.	10/8/2020
ENG10	Quarterly compliance test in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ as required by NSR Permit 8349.	3/22/2021

8.0 Startup and Shutdown:

- A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? **Yes**
- B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? **Yes**
- C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? **Yes**
- D. Does the facility have emissions due to routine or predictable startup, shutdown, and maintenance? If so, have all emissions from startup, shutdown, and scheduled maintenance operations been permitted? **Yes**

9.0 Compliance and Enforcement Status [Title V and NSR/PSD new or modification. Use this email template:

In an email dated 10/20/2022, Jeremy Espinoza stated, "There is no outstanding notice of violation and no settlement agreement for which all actions have not been completed. No compliance plan needs to be placed in the Title V Permit."

10.0 Modeling:

The modeling report from Rhett Zyla (12/04/19) states: This modeling analysis demonstrates that operation of the facility described in this report neither causes nor contributes to any exceedances of applicable air quality standards. The standards relevant at this facility are NAAQS for CO, NO2, PM10, PM2.5, and SO2; NMAAQs for CO, NO2, and SO2; Class II PSD increments for NO2, PM10, PM2.5, and SO2.

11.0 State Regulatory Analysis(NMAC/AQCR):

<u>STATE REGULATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	If subject, this would normally apply to the entire facility. 20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC The TSP NM ambient air quality standard was repealed by the EIB effective November 30, 2018.
20.2.7 NMAC	Excess Emissions	Yes	Facility	If subject, this would normally apply to the entire facility. If your entire facility or individual pieces of equipment are subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation, this applies. This would not apply to Notices of Intent since these are not permits.
<u>20.2.38</u> NMAC	Hydrocarbon Storage Facility	Yes	OT1-OT4	The site uses a flare to comply with 20.2.38 NMAC.
<u>20.2.39</u> NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	The facility does not operate a sulfur recovery plant.
<u>20.2.50</u> NMAC	Oil and Gas Sector - Ozone Precursor Pollutants	Yes	RICE units ENG1-9, ENG11-12; DEHY1-3; FUG; LOAD; Pig Launching and Receiving; and Compressor Seals, Control devices (condensers & VC1)	20.2.50.113 NMAC – Engines and Turbines. The natural gas-fired spark ignition engines (ENG1-9 and ENG11-12) and are subject to the applicable requirements of this subpart. 20.2.50.114 NMAC – Compressor Seals. Each of the eleven reciprocating compressors will comply with applicable wet seal fluid degassing system emissions control requirements and applicable rod packing replacement requirements. 20.2.50.115 NMAC – Control Devices and Closed Vent Systems – condensers and unit VC1 20.2.50.116 NMAC – Equipment Leaks and Fugitive Monitoring The piping and equipment components at the facility are subject to the applicable audio, visual, and olfactory (AVO) inspections; EPA M21 or optical gas imaging (OGI) inspections; and leak repair and replacement requirements of this subpart. 20.2.50.118 NMAC – Glycol Dehydrators The glycol dehydrators (DEHY1-3) have a PTE of ≥ 2 tpy VOC and are subject to the requirements of this subpart. 20.2.50.119 NMAC – Heaters The fuel line heater (HTR1-3) and the glycol regenerator reboilers (RB1-3) are natural gas-fired heaters with a rated heat input < 20 MMBtu/hr; therefore, they are not subject to the requirements of this subpart. 20.2.50.120 NMAC – Hydrocarbon Liquid Transfers The oil/condensate truck loading (LOAD) is subject to the requirements of this subpart except for facilities meeting an exemptions at 20.2.50.120.A(1)-(3) NMAC. 20.2.50.121 NMAC – Pig Launching and Receiving Individual pipeline pig launcher and receiver operations with PTE ≥ 1 tpy VOC

<u>STATE REGULATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
				located within the property boundary and under common ownership and control is subject to the requirements of this subpart. 20.2.50.122 NMAC – Pneumatic Controllers and Pumps These units are instrument air driven, not natural gas. So, they are not subject. Note future applicability: determination to be made concerning demonstration of compliance with Part 50 for the dehydrator still vents and the tanks.
20.2.70 NMAC	Operating Permits	Yes	Facility	The facility's potential to emit (PTE) is 100 tpy or more of any regulated air pollutant other than HAPs; and/or a HAPs PTE of 10 tpy or more for a single HAP and 25 tpy or more for combined HAP resulting in the facility's classification as being a major source.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	The facility is subject to 20.2.70 NMAC and includes numerical ton per year emission limits; therefore, this facility is subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	Yes	Facility	This facility is currently authorized under NSR 8349, issued on January 16, 2020. This is not an application pursuant to 20.2.72 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	The site is subject to 20.2.72 NMAC.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	N/A	The facility is not a major PSD site.
20.2.75 NMAC	Construction Permit Fees	No	N/A	This is not an application pursuant to 20.2.72, 20.2.73, 20.2.74, and/or 20.2.79 NMAC.
20.2.77 NMAC	New Source Performance	Yes	Units subject to 40 CFR 60	This is a stationary source which is subject to the requirements of 40 CFR Part 60, Subparts A, OOOOa, and JJJJ.
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	No units are subject to the subparts found in 40 CFR 61.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	The facility is not located in a nonattainment area.

<u>STATE REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.80 NMAC	Stack Heights	No	N/A	There are no stacks to which this regulation would apply.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	Units Subject to 40 CFR 63	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63.

12.0 Federal Regulatory Analysis:

<u>FEDERAL REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
Air Programs Subchapte r (40 CFR 50)	National Primary and Secondary Ambient Air Quality Standards	Yes	Entire Facility	Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Units subject to 40 CFR 60	NSPS OOOOa – ENG1-ENG13; FUG NSPS JJJJ – ENG1-ENG13
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	The site was constructed after 9/18/15. See NSPS OOOOa discussion below.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After	Yes	Compres sors for ENG1-9 and ENG11- 12; FUG	The storage tanks were constructed after the applicability date of the rule; however, XTO is requesting emissions be limited by permit to less than 6 tpy. The regulation is not applicable to the storage tanks per 60.5365a(e). The site uses low-bleed pneumatic controllers which are not applicable per 60.5365a(d)(1). The gun barrels are not storage tanks. The site will be subject to leak monitoring from fugitive components per 60.5365a(j) and will comply with 60.5397a. ENG1-9 & ENG11-12 are reciprocating compressor engines and will comply with 60.5385a.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	September 18, 2015			
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	The facility does not operate any affected sources.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	ENG1-9 & ENG11- 12	ENG1-9 and ENG11-12 engines are non-emergency 4SLB Spark Ignition engines. ENG1-9 and ENG11-12 engines are manufactured after 7/1/2010 and have a maximum engine power greater than 500 HP. All engine units are subject to the limitations in Table 1 per 40 CFR 60.4233(e).
MACT 40 CFR 63, Subpart A	General Provisions	Yes	Units Subject to 40 CFR 63	MACT HH – DEHY1-3 MACT ZZZZ – ENG1-ENG13
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	Yes	DEHY1-3	<u>Permit 40 CFR 60, Subpart, the definition of major source is as follows:</u> “means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants,” The facility total HAPs is 28.8 TPY and the single HAPs for Formaldehyde is 19.4 tpy. The dehydrators process more than 3 mmscf (85,000 standard cubic meters per day); however, since benzene emissions are less than 1 tpy (0.9 Mg/year), per §63.764(e)(1) the dehydrators are exempt from the requirements of §63.764(d) except for the recordkeeping requirements in §63.774(d)(1).
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	ENG1-9 & ENG11- 12	The site is a major source of HAP. ENG1-ENG12 engines are 4SLB RICE engines with an engine rating greater than 500 HP. Per §63.6590 (c): “Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.” Per paragraphs (7); “A new or reconstructed

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions." All units meet this criteria.

13.0 Exempt and/or Insignificant Equipment that do not require monitoring:

Title V - Insignificant Activities (Dated March 24, 2005) as defined by 20.2.70.7.Q NMAC:

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)
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)
ROAD	Haul Road Emissions	N/A	N/A	N/A	20.2.72.202.B.5
			N/A	N/A	20.2.72.202.B.5

14.0 New/Modified/Unique Conditions (Format: Condition#: Explanation):

- A. Date of Monitoring Protocol used for Engines and Operating Situation - December 11, 2019
- B. Date of Monitoring Protocol used for Dehydrators and Operating Situation – February 12, 2018
- C. Date of Monitoring Protocol used for Tanks, Loading – September 19, 2017
- D. Date of Monitoring Protocol used for Heaters – August 18, 2017
- E. Date of Monitoring Protocol used for Flares – April 20, 2021 & February 12, 2018
- F.

15.0 For Title V action: Cross Reference Table between NSR Permit 8349M2 and TV Permit P296. NSR permit conditions cross referenced to the TV permit are federally enforceable conditions, and therefore brought forward into the TV permit:

Changed by TV*	NSR Condition #	TV Section #
X	A100 Introduction	A100 Introduction
X	A101 Permit Duration	A101 Permit Duration
	A102 Facility Description	A102 Facility Description
	Table 102.A Total Potential Emissions	Table 102.A Total Potential Emissions

Changed by TV*	NSR Condition #	TV Section #
	Table 102.B Total PTE for HAPs	Table 102.B Total PTE for HAPs
	A103 Facility: Applicable Regulations	A103 Facility: Applicable Regulations
X	A104 Facility: Regulated Sources	A104 Facility: Regulated Sources (added Part 50 applicable units)
	A105 Facility: Control Equipment	A105 Facility: Control Equipment
	A106 Facility: Allowable Emissions	A106 Facility: Allowable Emissions
	A106.B Subpart JJJ Emission Limitations	A106.B Subpart JJJ Emission Limitations
x		Table 106.C 20.20.50 NMAC emission standards (existing engines)
x		Table 106.D 20.20.50 NMAC emission standards (TBD engines)
	A107 Facility: Allowable SSM	A107 Facility: Allowable SSM
	A107.C SSM	A107.C SSM
	A107.D Malfunction	A107.D Malfunction
	A108 Facility: Hours of Operations	A108 Facility: Hours of Operations
	A109 Facility: Reporting Schedules NR for NSR	A109 Facility: Reporting Schedules
x		A109.A TV Semi-Annual
X		A109.B TV ACC
		A109.C NSR Quarterly Reporting
	A110 Facility: Fuel Sulfur Requirements	A110 Facility: Fuel Sulfur Requirements
	A111 Facility: Throughput Limitation	A111 Facility: Throughput Limitation
	A201.A Engines: Periodic Testing (Units ENG1-9, ENG11-12)	A201.A Engines: Periodic Testing (Units ENG1-9, ENG11-12)
	A201.B: Initial Compliance Testing (Unit ENG4-9)	A201.B Initial Compliance Testing (Unit ENG4-9)
	A201.C: Catalytic Converter Operation (ENG1-9, ENG11-12)	A201.C: Catalytic Converter Operation (ENG1-9, ENG11-12)
	A201.D: 40 CFR 60, Subpart JJJ (Potentially ENG4-9)	A201.D: 40 CFR 60, Subpart JJJ (Potentially ENG4-9)
	A201.E : 40 CFR 60, Subpart JJJ (ENG1-3, ENG11-12)	A201.E : 40 CFR 60, Subpart JJJ (ENG1-3, ENG11-12)
	A201.D MACT ZZZZ (Potentially Units ENG4-9)	A201.D MACT ZZZZ (Potentially Units ENG4-9)
	A201.F MACT ZZZZ (Units ENG1-3, ENG11-12)	A201.F MACT ZZZZ (Units ENG1-3, ENG11-12)
	A201.G 40 CFR 63, /subpart ZZZZ	A201.G 40 CFR 63, /subpart ZZZZ
x		A201.H 20.2.50 NMAC /engines
x		A201.I 20.2.50 NMAC compressor /seals
	A202.A Glycol Dehydrator -Extended Gas Analysis & ProMax Calcs	A202.A Glycol Dehydrator -Extended Gas Analysis & ProMax Calcs
	A202.B: Glycol Pump Circulation Rate	A202.B: Glycol Pump Circulation Rate
	A202.C: Control Device Inspection	A202.C: Control Device Inspection

Changed by TV*	NSR Condition #	TV Section #
	A202.D: Vapor Combustor-Control Device for BTEX	A202.D: Vapor Combustor-Control Device for BTEX
	A202.E: 40 CFR 63, Subpart HH	A202.E: 40 CFR 63, Subpart HH
X		A202.F 20.2.50 NMAC- dehys
x		A202.G 20.2.50 NMAC control devices
	A203.A Tanks – condensate throughput	A203.A Tanks – condensate throughput
	A203.B Tanks – skim tank throughput	A203.B Tanks – skim tank throughput
	A203.C Tanks – truck loading	A203.C Tanks – truck loading
	A203.D Tanks – 20.2.38 NMAC	A203.D Tanks – 20.2.38 NMAC
	A203.E Tanks – control devices	A203.E Tanks – control devices
	A203.F tanks – LPS control device	A203.F tanks – LPS control device
	A203.G Tanks – 20.2.50 NMAC	A203.G Tanks – 20.2.50 NMAC
	A204.A Operational Inspection - heaters	A204.A Operational Inspection - heaters
	A204.B Reference to compliance of emission limits	A204.B Reference to compliance of emission limits
	A206.B Flares – flow monitoring	A206.A Flares - visible emissions
	A206.C Flares - calculations	A206.B Flares – flow monitoring
	A206.D Flares -parametric monitoring	A206.C Flares - calculations
	A206.B Flares – flow monitoring	A206.D Flares -parametric monitoring
	A209.A 40 CFR 60, /subpart OOOOa - compressors	A209.A 40 CFR 60, /subpart OOOOa - compressors
	A209.B 40 CFR 60, Subpart OOOOa - /FUG	A209.B 40 CFR 60, Subpart OOOOa - /FUG
X		A209.C -20.20.50 NMAC - FUG
x		A209.D – 20.2.50 NMAC Pig Launching
X	Part B General Conditions	Part B General Conditions, entire Section updated

16.0 Permit specialist’s notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.

- A.
- B.