Technical Support Document
Synthetic Minor New Source Review Permit
Permit R6-NSR-NM-004
XTO Energy, Inc.
Jicarilla Apache Operations
May 2017

I. SUMMARY

This document serves as the technical support document (TSD) that provides an analysis of the application and the legal and factual basis for the XTO Energy, Inc. (XTO) Jicarilla Compressor Station draft permit conditions. This document includes references to the statutory or regulatory provisions, and provisions under 40 CFR §§ 49.151 - 49.161 that would apply if the permit is finalized. This document is intended for use by all parties interested in the permit.

XTO acquired the Jicarilla Compressor station (facility) from Marathon Oil (Marathon) and has operated it since 2002. The facility is located south east of Aztec in Rio Arriba County, New Mexico, and located on the Jicarilla Apache reservation. The facility compresses and dehydrates natural gas prior to entering the natural gas pipeline. The feed to the facility inlet separator is from the well sites owned and operated by XTO that have existed prior to the effective date of tribal minor New Source Review regulation. The majority of the emissions are from the compressor engines, flare and tanks at the facility. The permit includes the air emissions of three aggregated well sites, owned and operated by XTO Energy within one quarter mile of the Jicarilla Compressor Station.

On February 22, 2012, XTO applied for a synthetic minor permit for the facility pursuant to 40 CFR § 49.158. On November 17, 2016, XTO updated the original application with current process and operational information; and provided emission and process information on the three well sites that were aggregated with the compressor station. Additional discussion is provided in Section II, Regulatory Applicability.

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Permitting Authority:
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II. REGULATORY APPLICABILITY

1. Synthetic Minor Permit Requirements

On July 1, 2011, the EPA promulgated a Federal Implementation Plan (FIP) under the Clean Air Act for Indian Country. The FIP includes two New Source Review (NSR) regulations for the protection of air resources in Indian country. The first rule applies to new and modified minor stationary sources (minor sources) and to minor modifications at existing major stationary sources (major sources) throughout Indian country. The second rule (nonattainment major NSR rule) applies to new and modified major sources in areas of Indian Country that are designated as not attaining the National Ambient Air Quality Standards (NAAQS). Currently, EPA directly implements these rules on reservation lands within Region 6, which includes Pueblos and tribally-owned trust lands. However, in the 2011 FIP, EPA postponed requiring oil and gas facilities to obtain permits until EPA issued a new rule,[1] which became effective on August 2, 2016.

40 CFR § 49.158 codifies the tribal minor NSR rule which requires existing sources operating under the EPA's 1999 transition memorandum (Transition Memo),[2] to submit a synthetic minor permit application to the Regional office by September 4, 2012. The Transition Memo allowed for treatment of a major source for the purposes of the Federal Operating Permits Program (Part 71) as a minor source if its actual emissions are and remain below 50 percent of the potential to emit (PTE) thresholds for major source status, for every consecutive 12-month period (beginning with the 12 months immediately preceding March 1999). In response to the Transition Memo, on December 15, 2000, Marathon (previous owner of the facility) informed EPA of the potential installation of a triethylene glycol (TEG) dehydrator with a flare that would process natural gas. Marathon stated that the emissions would be maintained at less than 50 % of the major source threshold hazardous air pollutant (HAP) requirement for the Part 71 (Title V) program, and therefore would be an area source of HAPs and a synthetic minor source. The Transition Memo specifies that the PTE transition policy terminates when EPA adopts and implements a mechanism that can limit PTE, or EPA explicitly provides such a mechanism. XTO acquired this facility from Marathon and has been operating the facility since 2002. XTO maintains that the emissions from the compressor station and dehydrator have met the requirements of the Transition Memo.

[1] Source Determination for Certain Emission Units in the Oil and Natural Gas Sector; Final Rule (81 FR 35622, June 3, 2016), available at: https://www.federalregister.gov/documents/2016/06/03/2016-11968/source-determination-for-certain-emission-units-in-the-oil-and-natural-gas-sector

[2] 1999 Potential to Emit (PTE) Transition Policy for Part 71 Implementation in Indian Country, by John Seitz and Eric Schaeffer, available at: https://www.epa.gov/sites/production/files/2015-08/documents/indian6.pdf

2. PTE Limitations

The proposed permit contains enforceable, operational limitations on the TEG dehydrator and its associated flare that will result in facility-wide annual emissions for VOC and HAP emissions that are below the PTE thresholds for major sources. The TEG dehydrator will also be required to comply with the NESHAP rule at 40 CFR Part 63, Subpart HH. To establish a synthetic minor NSR permit the PTE may be limited through "any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed if the limitation is enforceable as a practical matter[1]." The provisions in the proposed permit meet requirements for practical enforceability, as they specify the emission units and activities subject to the limitations, the time period for the limitations, and the methods to determine compliance. Additionally, the emission calculations in the permit application indicate that all criteria pollutants are limited by the maximum design capacity of the TEG dehydrator at 4.5 million standard cubic feet per day (SCFD).

In XTO's revised permit application, XTO has permanently removed one of the compressor engines, and the emissions from the facility have been limited through an operational limitation on the TEG dehydrator's capacity and its associated flare. Other emission units at the facility are regulated independently under other applicable Federal NSPS or NESHAP requirements, which contribute towards limiting the facility's emissions. These requirements are generally identified in the discussion at Section II, Regulatory Applicability and in the special conditions of Section V in the permit. The facility is an area source of HAP emissions with the operation of the TEG dehydrator and its associated flare. In its May 4, 2017 permit application supplement, XTO provided HAP emissions estimates that stated that the highest HAP component is formaldehyde from the compressor engine, and the total quantity of HAP from the source is 3.255 tpy (including 0.8 tpy from the dehydrator/regenerator flare). The criteria pollutants of both the well sites and the compressor station are 65% of major source PTE for Part 71 permit. This permit will provide for the practical enforceability of ensuring the HAP emissions are always below the 10 tpy/25 tpy major threshold with the use of a flare during all operations of the dehydrator (40 CFR Part 63, Subpart HH). The facility-wide VOC emissions will be below 100 TPY as a result of the limited capacity and operation of the dehydrator at 4.5 million SCFD.

3. Applicability of Other EPA Regulations

a) 40 CFR § 60.5365a [NSPS OOOOa] applies to modified well completions and applies to the fugitive emission components[3] at the JA-14G well site that was modified/fractured in March 2016. The well site will meet the fugitive emission requirements in 40 CFR § 60.5397a(a)(i)(2) and (3)(iii). "Fugitive emissions component" is defined at 40 CFR § 60. 5430a: "Fugitive emissions component means any component that has the potential to emit fugitive emissions of methane or VOC at a well site or compressor station, including but not limited to valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to § 60.5411a, thief hatches or other openings on a controlled storage vessel not subject to § 60.5395a, compressors, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device's vent is not considered a

[3] October 2016 EPA-453/B-16-01 Control Techniques Guidelines for the Oil and Natural Gas Industry available at: https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/2016-control-techniques-guidelines-oil-and

fugitive emission. Emissions originating from other than the vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions." On April 4, 2017, the EPA announced it is reviewing the 2016 Oil and Gas New Source Performance Standards[4]. If EPA's review concludes that suspension, revision, or rescission of the rule is necessary, EPA will work with XTO to initiate the appropriate permit amendment as necessary to amend the permit.

b) The HAP emissions from the facility are less than 10 tpy for a single HAP pollutant and 25 tpy for combination of HAP as specified in Section 112(a) of the CAA, and the facility is an area source of HAPs, as indicated in the permit application documents. See Appendix A.

c) The TEG dehydrator was installed in 2002 and uses a flare to reduce emissions. The facility is not a major source of HAP emissions and therefore the TEG dehydrator is exempt from the control requirements of the oil and gas regulations 40 CFR § 63.764(e)(1), [FR 49501, August 16, 2012]. The benzene, toluene, ethyl-benzene and xylene (BTEX), HAP-emissions from the dehydrator/regenerator vent is controlled with the use of the flare, resulting in benzene emissions less than 1 tpy.

d) The TEG dehydrator shall maintain its HAP exemption by the recordkeeping requirement of 40 CFR § 63.774(d)(1)(ii). Test methods and procedures will meet the requirements of 40 CFR § 63.772(b)(2).

e) The flare shall meet the requirements of 40 CFR § 60.11(b).

f) The natural gas compressor engine [E1] was constructed and operated in 2002 and is a remote 4SLB engine which is exempt as in 40 CFR § 63.6675(a)(2). See drawing in Appendix B. E1 is subject to the emission standards, monitoring, testing, recordkeeping and reporting rules of 40 CFR § 63.6603(a) Table 2d(1)(iii).

g) All of the tanks at the compressor station and the well sites are less than 20,000 gallons and are exempt from 40 CFR Part 60, Subpart K_b.

h) The heaters at the facility are between 0.5 - 1.0 MMBtu/hr each and are below the threshold of any regulatory requirement for heaters.

i) The wells owned and operated by XTO within one-quarter of a mile of the compressor station have been aggregated into the source determination with the compressor station in accordance with the June 3, 2016 source determination for certain emission units in the oil and natural gas sector rule.

j) This is a minor NSR source and therefore does not have any requirements for limiting GHG emissions[5].

4. Attainment Demonstration

[4] See 82 FR 16631 (April 4, 2017) available at: https://www.gpo.gov/fdsys/pkg/FR-2017-04-04/pdf/2017-06658.pdf

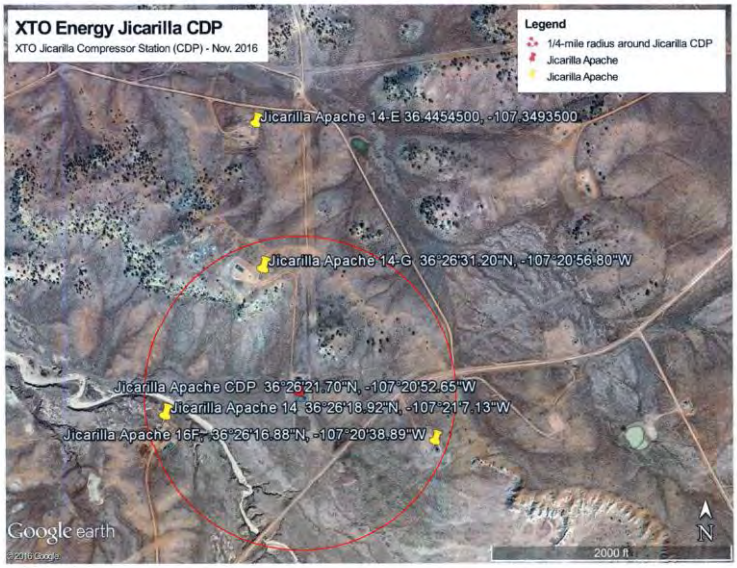
[5] Memorandum from Janet McCabe and Cynthia Giles to the Regional Administrators dated July 24, 2014 regarding Next Steps and Preliminary Views on the Application of Clean Air Act Permitting Programs to Greenhouse Gases Following the Supreme Court's Decision in *Utility Air Regulatory Group v. Environmental Protection Agency*. https://www.epa.gov/sites/production/files/2015-07/documents/2014scotus.pdf

Rio Arriba County, New Mexico is currently designated as an unclassified/attainment area. The synthetic minor source will restrict the emissions to remain an area source of HAP (under CAA § 112(a)) thereby not requiring a Part 71 Title V permit. Additionally, there are no designated non-attainment areas near the facility. This location in Indian Country has no known air quality monitoring stations. The closest EPA approved monitoring stations are maintained by the City of Albuquerque-Bernalillo County as an air pollution control authority. An evaluation of the air quality impact of this facility is given later in this TSD.

5. Location

The compressor station is located in Rio Arriba County at 36.43905 latitude and -107.34797 longitude. The coordinates of the gas well production sites that are within a quarter mile from the compressor station and will be part of this permit are:

API	Well Name	County	State	Latitude	Longitude
3003920140	JICARILLA APACHE 14	RIO ARRIBA	NEW MEXICO	36.4384800	-107.3519900
3003929658	JICARILLA APACHE 14G	RIO ARRIBA	NEW MEXICO	36.4420000	-107.3491100
3003929657	JICARILLA APACHE 16F	RIO ARRIBA	NEW MEXICO	36.4379700	-107.3436700



III. SOURCE DESCRIPTION

On February 22, 2012, the initial application from XTO included two compressor engines and one glycol dehydration unit with the associated ancillary tanks, blowdowns and loading stations. The application was updated on November 17, 2016 for oil and gas facilities "source determination" purposes. Also in the update, XTO indicated that one of the compressors was removed from the facility permanently.

The existing facility and well production sites have been operating prior to the tribal NSR rule and the 2016 oil and gas rule. The three well production sites (which are aggregated with the compressor station facility) have their own separator and storage tanks to remove the liquids initially from the produced gas. See Figure 1 for a typical well head plot plan.

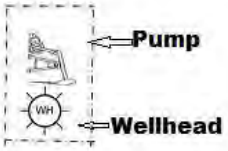
The gas (pressurized at approximately 30 psig) enters the compressor station via a pressurized inlet separator. Due to the pressure drop, the liquid portion of the stream drops out in two atmospheric condensate tanks [EPNs TK1 & TK2] and two produced water tanks [EPNs TK3 & TK4]. The produced water tanks also receive scrubber dumps off the compressor engine. Liquids from these tanks are periodically collected by tank truck and sent offsite for further processing and disposal.

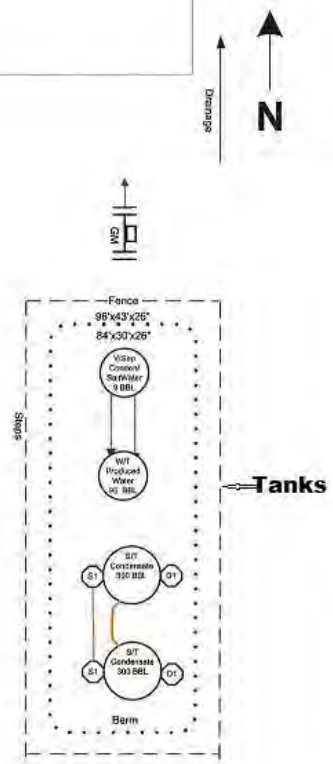
The gaseous stream from the inlet separator is routed to the Reciprocating Internal Combustion Engine (RICE) (screw compressor) [EPN E1] and compressed prior to entering the TEG dehydrator, for further water removal. After dehydration, the natural gas steam exits the station via pipeline. The rich glycol (saturated with water) enters a flash tank where the flashed vapors are sent to the reboiler as fuel. The remaining rich glycol is routed into the TEG regenerator column where the entrained water and other constituents are removed and the lean TEG is circulated back in the dehydration unit. The regenerator overhead vent is routed to the flare having a 98% control efficiency. The condensable liquids are routed to two produced water tanks [EPNs TK5 & TK6]. Heaters are used for the separator, tanks and dehydration reboiler [EPNs H1 - H4]. A schematic of the compressor station's operation is in Figure 2.

Figure 1

Plot Plan/Facility

Well Name: Jicarilla Apache # 14
Field: Rio Arriba County, NM.
Serial Number: Lease # JIC-154, API # 30-039-20140
Section: SW/SW Sec. 34 (M), T-26N, R-5W
Updated by: Kurt Hoekstra Date: 4-15-2015

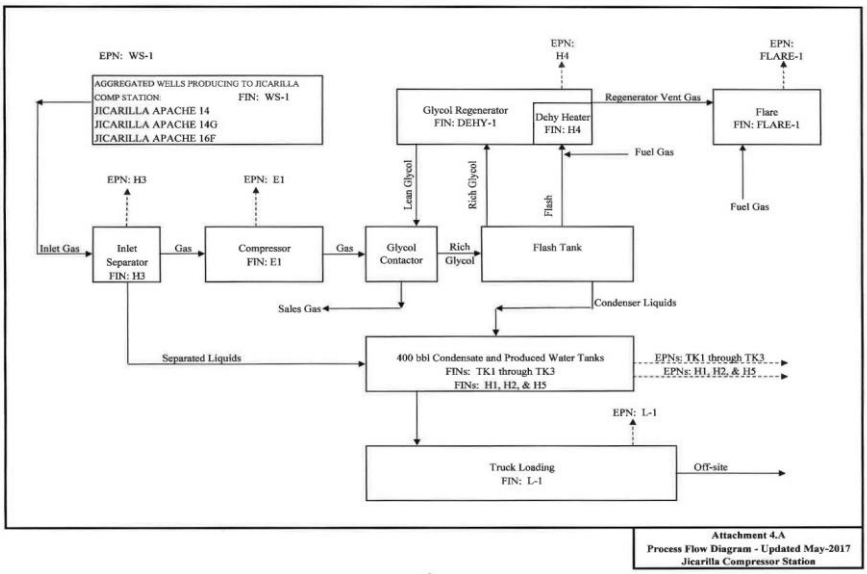




Production
Oil
Water
Equalizing Line
Catch Basin
Flow Lines
Buried Flow Lines

General sealing of valves, sales by tank gauging
Production phase: Drain valve D1 and sales valve S1 sealed closed.
Sales phase: Drain valve D1 sealed closed. Sales valve S1 open.
Draining phase: Drain valve D1 open. Sales valve S1 closed.

This lease is subject to the site security plan for San Juan Basin Area. The plan is located at:
XTO ENERGY INC.
382 Road 3100
Aztec, NM 87410



Equipment Type	EPN	Construction date	Capacity	Content/Fuel	Serial No/Manufacturer
1004 HP RICE (Screw Compressor) Engine 4-stroke-lean burn	E1	6/19/2003	1004hp 7.1MMBtu/hr	Fuel gas	SN 7NJ00895 Caterpillar 3512
4.5 MMSCFD TEG Dehydrator Controlled by Flare	FL1	Pre 7/2002	0.5 MMSCFH	Fuel Gas	PESCO
Two Tank Heaters	H1 H2	Pre 7/2003	0.5 MMBtu/hr each	Fuel gas	
Separator Heater	H3	Pre 7/2004	0.5 MMBtu/hr	Fuel gas	
Dehydrator Heater/Reboiler	H4	Pre 7/2005	1.06 MMBtu/hr	Fuel gas	
Condensate Tanks	TK1 TK2	Pre 7/2002	400 BBL each	Condensate	
Produced Water Tank	TK3	Pre 7/2002	100 BBL each	Water from Separator and Engine scrubber	
Produced Water Tanks	TK5 TK6	Pre 7/2002	30 BBL	Water from dehydrator	
Three Production Well Sites and Equipment	WS-1	12/1/2006	Oil throughput 1.5 bbl/day	Oil and gas operations	

~~VII.~~V. CONTROL TECHNOLOGY REVIEW

This is an existing operation and the facility will meet all the applicable regulations for the compressor, TEG dehydrator, and well sites. The emissions are below the major NSR source threshold and therefore no Best Available Control Technology (BACT) review is necessary. However, pursuant to 40 CFR § 49.151(c)(ii)(D), EPA has conducted a control technology evaluation to determine NAAQS and minimum requirements or applicable requirements of CAA Sections 111 and 112 for this facility.

The facility is located in an NAAQS attainment area for all criteria pollutants and a further air quality analysis is provided in Section IX. Additionally, emissions from this facility have been reduced with the permanent removal of one compressor.

The facility is an oil and gas production unit, and the one fractured well site (JA-14G) will meet the required fugitive monitoring requirements as specified in 40 CFR Part 60, Subpart OOOOa. XTO will develop a fugitive emissions monitoring plan pursuant to 40 CFR § 60.5397a(c) and (d).

The facility is utilizing only field fuel gas which is considered a clean fuel for the compressor and the heaters. The compressor engine (EPN E1) will meet the requirements for a non-emergency, non-remote four stroke lean burn RICE >500 HP engine in 40 CFR § 63.6603(a) Table 2d.9 [Subpart ZZZZ].

The TEG Dehydrator is controlled by a flare with a destruction efficiency of 98% as required by 40 CFR Part 63, Subpart HH to control the HAP emissions.

~~VIII.~~VI. CONDITIONS PROPOSED IN THE DRAFT PERMIT

a. Permit Standards And Limits

The permit specifies the relevant regulatory standards for the equipment with the practically enforceable conditions and emissions limits as required by 40 CFR § 49.154(c)(3) and § 49.155(2). These conditions are in the table below and in Section V of the draft permit.

1. The PTE emissions in the permit table below are based on the calculations provided in the original and amended applications and establish the source's baseline allowable emissions for future NSR applicability purposes. [40 CFR §49.152(d)].

Equipment Type	[1]EPN	PTE Emissions in TPY NO_x	PTE Emissions in TPY SO_2	PTE Emissions in TPY [3]VOC	PTE Emissions in TPY CO	PTE Emissions in TPY $PM_{10/2.5}$
1004 HP Compressor 4-stroke-lean burn Maximum firing rate is 7.2 MMBtu/hr	E1	17.9	<0.1	6.4	23.5	<0.1
[2]Five auxiliary heaters. Maximum firing rate is 3.0 MMBtu/hr for all heaters	H1-H5	1.3	<0.1	0.1	1.1	0.3
TEG Dehydrator Controlled by Flare	FLARE-1	0.3	<0.1	2.2	1.3	0.1
Two 400 bbl Condensate Tanks	TK1 TK2			24.2		

Equipment Type	[1]EPN	PTE Emissions in TPY NO_x	PTE Emissions in TPY SO_2	PTE Emissions in TPY [3]VOC	PTE Emissions in TPY CO	PTE Emissions in TPY $PM_{10/2.5}$
[2] One 400 bbl Produced Water Tank	TK3			0.24		
[2]Production Well Sites, JA-4, JA-14G, JA-16F, 4-Tanks and Pump	WS-1	5.2	0.02	12.63	3.28	0.21
Truck Loading Emissions	L-1			0.7		
Fugitives for Facility	FUG			14.7		
Maintenance Operations	M-Fac.			3.7		
Total Facility Emissions (estimated)		24.7	< 0.5	64.9	29.2	<0.8

1. Emission Point Number
2. These are insignificant emission units that do not require monitoring for individual unit operations.
3. The emissions in the table include startup and shutdown emissions and are based on maximum TEG capacity of 4.5 MMSCFD.
4. Regulation may be revised. Refer to Section II 3 a): Regulatory Applicability NSPS OOOOa.

2. HAP emissions will be less than 10 TPY for a single pollutant and 25 tpy for the aggregate of HAPs.

3. Special conditions for the facility are specified in Section V of the permit. Section VI specifies the compliance tests required for the facility.

4. Any addition or modification to the above pieces of equipment or changes to the process will require a minor NSR analyses as stated in General Condition 7 of the permit. [40 CFR § 49.152(d)]

5. The requirement for reporting and recordkeeping for the criteria pollutants is to maintain the synthetic minor source requirements for purposes of 40 CFR § 71.2.

6. The permit specifies the MACT requirements for the compressor and TEG dehydrator.

b. Monitoring And Recordkeeping Requirements

Monitoring and recordkeeping requirements are specified to keep the cumulative criteria pollutant and HAP emissions (including startup, shutdown and maintenance emissions) below the major source threshold for a Part 71 permit. Section VII of the permit provides the recordkeeping and monitoring requirements for the facility.

1. All records will be maintained for 5 years from the date the record is created.

2. Other monitoring and recordkeeping requirements specified in the permit are compliance requirements pursuant to 40 CFR Part 60, Subpart OOOOa; and 40 CFR Part 63, Subparts HH and ZZZZ.

3. The equipment at the facility is “grandfathered” since the construction and operation occurred prior to the Tribal minor NSR regulation, and only required the registration requirements of 40 CFR § 49.160.

4. XTO will calculate the VOC emissions and criteria pollutant emissions based on the maximum capacity of the equipment as indicated in the permit application and other supporting information. Maximum throughput for the facility/on the dehydrator is measured at the outlet sales gas meter. The volumes/rates used to calculate the emissions from storage tanks and loading operations is based on the sales/load tickets of the facility. The tank emissions are calculated using the E & P tank simulation program.

Commented [OJ1]: I have a similar comment on page 14 of this TSD: what is E & P?

Commented [BB2R1]: That is the " name" of the program. Exactly what the company indicates and universally accepted similarly to PROSYM etc- not really an acronym.

c) Reporting Requirements

40 CFR § 49.155(5) specifies that annual reports of monitoring and prompt reporting of deviations from permit requirements including upset conditions causing the probable deviation of the permit conditions should be reported. These conditions are in Section VIII of the draft permit and these reports should be sent electronically as indicated below.

1. The permit specifies that the reports can be electronically submitted to EPA Compliance and Assurance Division at R6TribalNSRCompliance@epa.gov with a copy to R6AirPermits@epa.gov

2. The permit contains the 40 CFR Part 60, Subpart OOOOa; and 40 CFR Part 63, Subparts HH and ZZZZ. reporting requirements.

VII. AIR QUALITY REVIEW

Rio Arriba and neighboring counties are in attainment for all NAAQS criteria pollutants. The facility is an existing operation and the NSR permitting requirements applicable to Indian Country do not specifically require an air quality impact analysis (AQIA) for sources constructed prior to the effective date of the Tribal NSR permitting program [September 2, 2014] that are seeking minor NSR permits. In addition, one compressor at the facility has been permanently removed and shut down. Two well sites have been in operation prior to the effective date of the oil and gas regulations. One well site that was recently fractured had been in operation in 1968, and meets the EPA oil and gas regulations of 40 CFR Part 60, Subpart OOOOa. This permit does not authorize any construction activities or an increase in emissions and with the removal of one compressor engine there should be a decrease in criteria pollutants from previous operation of this source, and therefore will not adversely affect the air quality in the county. However, EPA Region 6 evaluated the existing air quality monitoring data [e.g., the Bloomfield and 3 CRD Coyote Ranger District sites listed in Figure 1] from stations that are closest to the facility indicating that the area is below the NAAQS as shown in Figure 2.
Figure 1 below shows the compressor station [red block] and the monitoring stations [green circle].

Figure 1

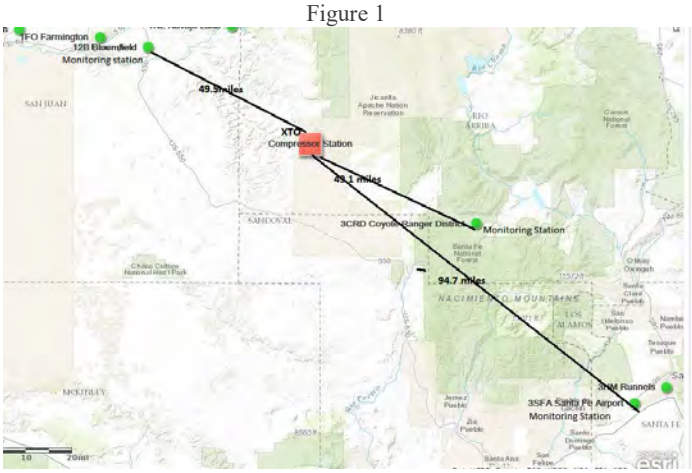
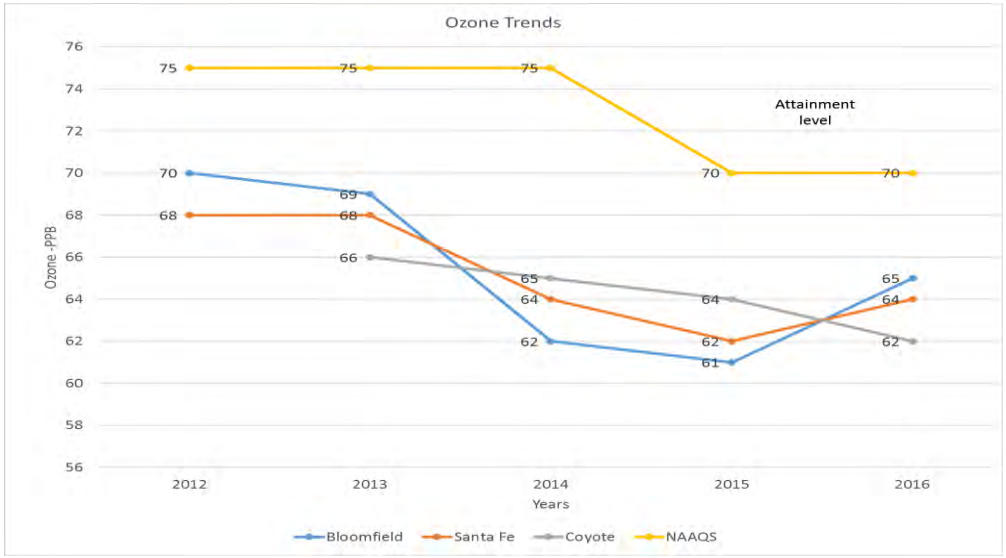


Figure 2 shows the applicable ozone standard, and the ozone level readings from the local monitoring stations listed in Figure 1, including the monitoring stations located in or near Santa Fe, New Mexico.

Figure 2



VIII. TRIBAL AND STATE NOTIFICATIONS:

In compliance with 40 CFR § 49.157(b), the public notice shall be sent to New Mexico Environment Department, Jicarilla Apache nation, Southern Ute nation, and the Navajo Nation. Additionally, on February 10, 2017, 12 early consultation opportunities were sent to tribes that may have had a

historical interest in the area of the facility. EPA received four responses that did not have concerns with the issuance of the permit.

IX. ENDANGERED SPECIES ACT

Pursuant to Section 7(a)(2) of the Endangered Species Act (ESA) (16 U.S.C. 1536) and its implementing regulations at 50 CFR Part 402, EPA is required to insure that any action authorized, funded, or carried out by EPA is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species or result in the destruction or adverse modification of such species' designated critical habitat.

This is an existing facility with multiple well sites, one well that has been in operation since 1968. The site also includes an existing compressor station that has been in operation since 2002. No construction activities will occur with the issuance of this permit. The purpose of this permit is to establish operating parameters for this facility under new applicable federal regulations pursuant to 40 CFR §§ 49.151-49.161. The facility includes the three well sites as required by the oil and gas regulation [1]. XTO provided an ESA analysis for EPA's review. As such, EPA has concluded that issuance of the proposed synthetic minor NSR permit will have "no effect" on any of the eight listed species within the county.

X. NATIONAL HISTORIC PRESERVATION ACT (NHPA)

Section 106 of the NHPA requires EPA to consider the effects of this permit action on properties listed on or eligible for inclusion in the National Register of Historic Places. EPA has determined that issuance of this permit constitutes an "undertaking" as defined in 36 CFR § 300.16(y). However, pursuant to 36 CFR § 800.3(a)(1), EPA has determined that the continued operation of the facility does not have the potential to cause effects on historic properties, since the permit does not allow any construction activities. The facility is located within the extent of the Jicarilla Apache land, and the permit area has been evaluated previously by the United States Department of the Interior (DOI). DOI issued a concurrence letter dated December 5, 2005 to the Bureau of Land Management. The letter addressed nine proposed well locations and their pipeline right-of-ways and a finding of no significant impact (FONSI) indicating "No effects to cultural/archeological resources in the project area". Further, the site has been subject to disturbances associated with previous construction and continued operational activities and any archeological resources would have been compromised many years ago.

XI. ENVIRONMENTAL JUSTICE CONSIDERATIONS

Executive Order (EO) 12898, 59 FR 7629 (Feb. 16, 1994), establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. EPA has applied this directive when reviewing Major NSR permitting actions. This is not a Major NSR permitting action.

Region 6 did perform an EJSCREEN analysis on this project which suggested that environmental justice concerns are unlikely to be raised in connection with the permitting decision. Region 6

selected a 10-mile buffer area for the analysis. The population within the 10- mile buffer is only 18 individuals. The facility is located on an Indian Reservation and is remote to any municipality. All environmental factor values were under the 70th percentile. The demographic data showed a high minority population at 93%. This analysis has been added to the supporting file for this permit and may be revised as necessary before any final decision on the application.

EPA has provided early consultation opportunities to all the neighboring tribal communities regarding this permitting action, and will provide any additional information upon request. EPA maintains an ongoing commitment to ensure environmental justice for all people, regardless of race, color, national origin, or income. Ensuring environmental justice means not only protecting human health and the environment for everyone, but also ensuring that all people are treated fairly and are given the opportunity to participate meaningfully in the development, implementation, and enforcement of environmental laws, regulations, and policies.

XIII. PERMIT PROCESSING PROCEDURES:

In accordance with 40 CFR § 49.157:

1. EPA provided the draft permit and technical support document to the Permittee for review on April 20, 2017, via email. Changes to the permit were sent to EPA on May 4, 2017 that represented the current configuration of the facility and the associated emission changes. See next section for changes.

2. Public notice will be posted at the XTO facility as well as in the Jicarilla Apache Library, and EPA will have an e-Notice on the national EPA website and links to all public documents on the Region 6 public website at: http://www.epa.gov/caa-permitting/tribal-nsr-permits-epas-south-central-region

3. As indicated in Section VIII, notifications providing public notice will be sent to the adjacent agency and tribes.

XIV. RECONCILATION ON THE PERMIT - NEW INFORMATION FROM XTO

XTO recommended several changes to the original and amended permit application on review of the draft permit. XTO has provided the configuration of the current facility as in the field today, which replaces the previous design configurations that were in the original applications. These changes were minor: removal of the smaller tanks and reconfiguring piping to larger tanks for operational and monitoring needs.

In addition, XTO provided new emission calculations using a more conservative E & P tank calculation method that XTO believes is more representative of its oil and gas operations. The original application used the EPA 4.09d tank program that required separate flash tank calculations. These changes are not considered actual emission changes, but are the result of the change in method for calculation of the emissions.

Table of Acronyms

4SLB	4 Stroke Lean Burn
4SRB	4 Stroke Rich Burn
BACT	Best Available Control Technology
bhp	Brake Horse Power
Btu/hr	British Thermal Units per Hour
CFR	Code of Federal Register
CH_4	Methane
CAA	Clean Air Act
CO	Carbon Monoxide
dscf	Dry Standard Cubic Feet
FIP	Federal Implementation Plan
FR	Federal Register
GHG	Greenhouse Gases
HHV	High Heating Value
HAP	Hazardous Air Pollutants
hr	Hour
kW	Kilowatt
lb	Pound(s)
lb/yr	Pounds per year
MACT	Maximum Achievable Control Technology
MMBtu/hr	Million British Thermal Units per hour
MMSCFD	Million Standard Cubic Feet per day
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standard
NOx	Oxides of Nitrogen
NSR	New Source Review
PTE	Potential to Emit
RICE	Reciprocating Internal Combustion Engine
tpy	Tons per year
VOC	Volatile Organic Compounds
%	Percent

Appendix A

HAP Emissions from XTO Facility

HAP Estimate
Synthetic Minor XTO Permit

Source	TPY		[1]HAP component	TPY
	VOC	HAP		
Compressor SSM	1.9	1.	Benzene	1.025
Loading operations	0.6738	<0..001	undetecable	
Tanks	24.48	0.076	Benzene	0.1
Dehyd/Regen -Flare	2,2	0.8	Toluene	0.4
Compressor engine	6.4	2.1	Formaldehyde	2.1
Well sites	12.63	0.278	Hexane	0.2
Total	46.384	3.255		

[1] Highest quantity of HAP component <10tpy

Based on data Table 3-1 from XTO dated 5-4-17

Appendix B

XTO Map of Remote Compressor Location