



REGION 8

DENVER, CO 80202

**XTO Energy, Inc. – Various Well Pads and Facilities
Located on Tribal Lands
Partial Compliance Evaluation (PCE)
On-Site Clean Air Act (CAA) Inspections**

Inspection Date(s): October 23 and 24, 2024

Inspection Report Date: December 27, 2024

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Tribal Representatives: Dwight Bruce, MHA Energy

Company Representatives: None

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Inspection Report Reviewed By: Scott Patefield, Manager, Enforcement and Compliance Assurance Division, Air and Toxics Enforcement Branch

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Date: 2024.12.27 15:52:05 -07'00'

Applicable Rules: 40 C.F.R Part 49, Subpart K – Federal Implementation Plan for Oil and Natural Gas Well Production Facilities; Fort Berthold Indian Reservation (Mandan, Hidatsa and Arikara Nation), North Dakota (Fort Berthold FIP)

40 C.F.R. Part 60, Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015

40 C.F.R Part 60, Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 (NSPS OOOOa)

40 C.F.R Part 60, Subpart OOOOb – Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022 (NSPS OOOOb)

Compliance Assistance

None

Enforcement History

XTO Energy, Inc. (XTO) was issued a Notice of Violation (NOV) on August 28, 2024, under Docket Number CAA-08-2024-0015.

Areas of Concern

1. The EPA detected hydrocarbon emissions from the storage tanks co-located with the following well pads:
 - FBIR Stephen 31X-9
 - FBIR Walker 34X-25
2. The EPA detected unburned hydrocarbon (UBHC) emissions from an operating utility flare at the following well pad:
 - FBIR Bird 21X-19A

See Table 1 below for more details regarding inspected locations and Tables 2 and 3 for inspection observation details for all pads. A log of images and videos captured during the inspections is provided in Appendix A.

General Inspection Information

Unannounced well pad inspections were conducted jointly by U.S. EPA and Fort Berthold Indian Reservation (FBIR) Tribal inspectors on October 23, and 24, 2024, at multiple XTO facilities located on the FBIR. XTO is a wholly-owned subsidiary of Exxon Mobil that operates under the XTO Energy name.

The EPA inspectors evaluated each well site listed in Table 1 using audio, visual, and olfactory (AVO) inspection methods including the use of an optical gas imaging (OGI) camera and EPA Reference Method 22. At each facility, inspectors scanned the crude and/or water storage tanks, closed vent system and flares onsite for any detectable emissions. Specifically, inspectors scanned storage tank covers and closed vent systems for hydrocarbon emissions to determine compliance with the Clean Air Act, including the Fort Berthold FIP and NSPS regulations.

Each well pad inspection followed the approach below:

1. Record the entry sign of the well pad when available. Survey the entire well pad with OGI camera.
2. Record the number and type of site process equipment such as well heads, tanks, and emission control devices.
3. Record AVO indications of emissions from the storage tanks, closed vent system to the control devices and control devices.
4. Using the OGI camera, survey each process in infrared modes (auto, manual, and/or high-sensitivity modes). Record any uncontrolled emissions with the OGI camera and describe the frequency and magnitude of emissions in the field notebook.
5. Observe control devices (enclosed combustor or utility flare) for visible emissions. If there is visible emissions present, conduct Method 22 and record the observations.
6. Using another OGI camera, if available, confirm any observations of uncontrolled emissions with another inspector.
7. If there are operators present onsite, share any Areas of Concern.

Table 1 lists general inspection and well pad details for each inspected well pad. The well pad information located in Table 1 is from the North Dakota Industrial Commission (NDIC) well index located online at <https://www.dmr.nd.gov/oilgas/>.

Table 1: Inspection and Facility Details of Facilities Inspected						
Date	Arrival Time	Departure Time	Well Pad Name	API Number	Latitude	Longitude
10/23/2024	10:44	10:49	FBIR Blackmedicine 24X-21A Pad	3302501341 3302503068 3302503069 3302503070 3302503071 3302503072 3302503073 3302503074 3302503076 3302503107 3302503148	47.705035	-102.33685
10/23/2024	12:23	12:33	FBIR Stephen 31X-9	3302501197 3302501198 3302501872 3302501873 3302501874 3302501875 3302501876 3302501919	47.716519	102.37429
10/23/2024	12:36	12:46	FBIR Bird 21X-19A	3302503637 3302503638 3302503639 3302503640 3302503641	47.717218	-102.37586

				3302503642 3302503643 3302503644		
10/23/2024	12:53	12:59	FBIR Walker 34X-25	3302501142 3302501143 3302501820 3302501821 3302501822 3302503740 3302503741 3302503742 3302503743	47.688776	-102.39458
10/23/2024	13:02	13:20	FBIR Walker 31X-36D	3302503353 3302503354 3302503390 3302503391 3302503399	47.687643	-102.39305
10/23/2024	13:35	13:41	FBIR Lawrence 24X-26A	3302501250 3302502360 3302503876 3302503877 3302503878 3302503879 3302503880 3302503881	47.689433	-102.41931
10/24/2024	8:10	8:17	FBIR Ironwoman 21X-10	3302501219 3302501220 3302501882 3302501883 3302501884 3302501885 3302501886 3302501887 3302503493 3302503494	47.659883	-102.38812
10/24/2024	8:20	8:24	FBIR Yellowwolf 31X-10C	3302503433 3302503434 3302503435 3302503456 3302503457 3302503458 3302503459	47.659644	-102.3843
10/24/2024	8:31	8:37	FBIR Youngbear 31X-9A	3302501248 3302502136 3302502137 3302502138 3302503511 3302503512 3302503513	47.6592	-102.40756

				3302503514		
				3302503515		

Observations and Regulatory Applicability

Fort Berthold FIP, NSPS OOOO, NSPS OOOOa, and NSPS OOOOb regulations which are potentially relevant to the Areas of Concern observed during inspections are summarized in this section.

Tables 2 and 3 at the end of this report summarize inspection observations and findings. Table 2 summarizes storage tank observations. Table 3 includes details of control devices and related observations. See Appendix A for a log of images and videos taken during the inspections.

Fort Berthold FIP Applicability

Based on drilling information reported to the NDIC well index by XTO, the facilities listed in Table 1 were completed after the August 12, 2007, applicability date (per 40 C.F.R. § 49.4161) and are producing from the Bakken Pool (per 40 C.F.R § 49.4163(a)(1)) and are thus subject to the Fort Berthold FIP.

Closed Vent System Equipment Requirements [§ 49.4165(b)]

Per § 49.4165(b)(1), “Each closed-vent system must route all produced natural gas and natural gas emissions from production and storage operations to the natural gas sales pipeline or the control devices...”. The EPA, using an OGI camera, detected natural gas emissions from production and storage tanks at the FBIR Stephen 31X-9 and FBIR Walker 34X-25 Pads. See Area of Concern #1 above.

Utility Flare Requirements [§ 49.4165(c)]

Per § 49.4165(c)(1), “For each enclosed combustor or utility flare, the owner or operator must follow the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing emissions.” The EPA noted UBHC emissions indicating poor air pollution control practices from a lit flare at the FBIR Bird 21X-19A Pad. See Area of Concern #2 above.

NSPS OOOO Applicability

Based on well production information reported by XTO to the NDIC and the date of construction, reconstruction, or modification of the storage vessels, the EPA believes that storage vessels and associated emissions control equipment at the FBIR Stephen 31X-9 Pad are potentially subject to requirements for storage vessel affected facilities in NSPS OOOO.

Closed Vent System Equipment Requirements [§ 60.5411(c)(1)]

Per § 60.5411(c)(1), owners and operators must “design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that meets the requirements specified in § 60.5412(c) and (d), or to a process.” The EPA, using an OGI camera, observed emissions from the closed vent system at the FBIR Stephen 31X-9 Pad. See Area of Concern #1 above.

NSPS OOOOa Applicability

Based on XTO's NSPS OOOOa annual reporting, the EPA believes that storage vessels and associated emissions control equipment at the FBIR Walker 34X-25 Pad are potentially subject to requirements for storage vessel affected facilities in NSPS OOOOa.

Closed Vent System Equipment Requirements [§ 60.5411a(c)]

Per § 60.5411a(c)(1), owners and operators must "Design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that meets the requirements specified in § 60.5412a(c) and (d), or to a process."

The EPA, using an OGI camera, observed emissions from the closed vent system at the FBIR Walker 34X-25 Pad. See Area of Concern #1 above.

NSPS OOOOb Applicability

Based on well production information reported by XTO to the NDIC; and the date of construction, reconstruction, or modification of the storage vessels; the EPA believes that storage vessels and associated emissions control equipment at the FBIR Bird 21X-19A Pad are potentially subject to requirements for storage vessel affected facilities in NSPS OOOOb.

Utility Flare Requirements [§ 60.5413b(e)]

Per § 60.5413b(e)(8), owners and operators must, "Operate each control device following the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing emissions." The EPA noted UBHC emissions indicating poor air pollution control practices from a lit flare at the FBIR Bird 21X-19A facility. See Area of Concern #2 above.

Table 2: Inspection Details: Storage Tank Observations				
Well Pad Name	Number of Storage Tanks	AVO (Audio, visual, olfactory) Observations	Emissions Description	Media File Name
FBIR Stephen 31X-9	20	None	Continuous emissions from the thief hatch.	MOV_3544.mp4 MOV_3545.mp4
FBIR Walker 34X-25	6	None	Continuous emissions from the top of the tank.	MOV_3547.mp4

Table 3: Inspection Details: Control Devices and AVO/OGI Observations								
Well or Well Pad Name	Number of Control Device(s)	Control Device Type(s)	Visible Pilot Flame (Y/N)	Active Flaring (Y/N)	Method 22 Observations	Emission Observation Description	Media File Name	Slope to K/O Drum
FBIR Black-medicine 24X-21A Pad	3	Air Assisted Steffes	N	N	None	N/A	N/A	
		Air Assisted Steffes	N	N	None			
		Air Assisted Steffes	N	N	None			
FBIR Stephen 31X-9	2	Air Assisted Steffes	Y	Y	None	N/A	N/A	
		Air Assisted Steffes	Y	Y	None			
FBIR Bird 21X-19A	2	Air Assisted Steffes	Y	N	None	Continuous emissions from pilot gas piping next to the flare tip.	MOV_3546.mp4	
		2-Prong HP	Y	N	None			

FBIR Walker 34X-25	2	Air Assisted Steffes	Y	Y	None	N/A	N/A	
		2-Prong HP	Y	N	None			
FBIR Walker 31X-36D	2	Air Assisted Steffes	Y	Y	None	N/A	N/A	
		2-Prong HP	Y	Y	None			
FBIR Lawrence 24X-26A	2	Air Assisted Steffes	Y	Y	None	N/A	N/A	
		2-Prong HP	Y	Y	None			
FBIR Ironwoman 21X-10	3	Air Assisted Steffes	Y	Y	None	N/A	N/A	
		2-Prong HP	Y	N	None			
		LP	Y	N	None			
FBIR Yellowwolf 31X-10C	2	Air Assisted Steffes	Y	Y	None	N/A	N/A	
		2-Prong HP	Y	Y	None			
FBIR Youngbear 31X-9A	2	Air Assisted Steffes	Y	Y	None	N/A	N/A	
		2-Prong HP	Y	Y	None			

APPENDIX A: Photograph and Video Log

Media File	Description	Well Pad Name
MOV_3544.mp4* MOV_3545.mp4*	Continuous emissions from the thief hatch.	FBIR Stephen 31X-9
MOV_3547.mp4*	Continuous emissions from the top of the tank.	FBIR Walker 34X-25
MOV_3546.mp4*	Continuous emissions from pilot gas piping next to the flare tip.	FBIR Bird 21X-19A
entrysign-20241023-154528.jpg	Entry Sign	FBIR Blackmedicine 24X-21A Pad
entrysign-20241023-172421.jpg	Entry Sign	FBIR Stephen 31X-9
entrysign-20241023-173545.jpg	Entry Sign	FBIR Bird 21X-19A
entrysign-20241023-175402.jpg	Entry Sign	FBIR Walker 34X-25
entrysign-20241023-180330.jpg	Entry Sign	FBIR Walker 31X-36D
entrysign-20241023-183626.jpg	Entry Sign	FBIR Lawrence 24X-26A
entrysign-20241024-131031.jpg	Entry Sign	FBIR Ironwoman 21X-10
entrysign-20241024-132042.jpg	Entry Sign	FBIR Yellowwolf 31X-10C
entrysign-20241024-133234.jpg	Entry Sign	FBIR Youngbear 31X-9A

*In addition to recording metadata through the OGI camera's system, EPA collected metadata for the media files recorded during the inspections, including the date, time, and location of the recorded media, in the Survey123 ArcGIS application at the time of the inspections. Due to a technical issue experienced with the OGI camera's metadata captured for the .mp4-type files, the Survey123 metadata was used as the primary reference for verifying inspection media file data.