UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
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HEARING CLERK

Ref: 8ENF-AT

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Jefferey R. Parker
Operations Manager
Marathon Oil Company
3172 Highway 22 North
Dickinson, North Dakota 58601

Re: Notice of Violation to Marathon Oil Company

Dear Mr. Parker:

The U.S. Environmental Protection Agency issues the enclosed Notice of Violation (NOV) to Marathon Oil Company (Marathon) for alleged violations of implementing regulations of the Clean Air Act included in the 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. §§ 49.4161–.4168, at its oil and natural gas production facilities located on the Fort Berthold Indian Reservation.

Section 113(a) of the Clean Air Act provides that whenever, based on any information available to the Administrator of the EPA, the Administrator finds that any person has violated, or is in violation of an applicable implementation plan, the Administrator may issue an administrative compliance order, issue an administrative penalty order, or bring a civil judicial action. 42 U.S.C. § 7413(a).

We are offering Marathon an opportunity to confer with the EPA about the violations alleged in the NOV. The conference will provide an opportunity to present information on the specific alleged violations and any efforts Marathon has taken to comply or prevent future noncompliance. Please contact Jessica Portmess, Sr. Assistant Regional Counsel, at (303) 312-7026 or Portmess.jessica@epa.gov within 30 days of receipt of this NOV if Marathon would like to schedule a meeting.

Sincerely,

Suzanne J. Bohan, Director
Enforcement and Compliance Assurance Division

Enclosure

cc (w/Encl.): Chairman Mark Fox, MHA Nation
Lisa Lonefight, Senior Science Advisor, MHA Nation
Edmund Baker, MHA Environmental Director
Kenny Lyson, MHA Energy Division
Sal Beston, MHA Energy Division
Celia Peressini, Sr. Counsel – HES&S, Marathon Oil Company

Ecc (w/Encl.): Alexis North, EPA
Lauren Hammond, EPA
Jessica Portmess, EPA
Jason Deardorff, EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

2020 JAN -9 PM 2:33

REGION VIII

IN THE MATTER OF:	NOTICE OF VIOLATION
Marathon Oil Company **5555 San Felipe Street** **Houston, TX 77056**	**Docket No.** CAA-08-2020-0003 Proceedings Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401-7671q

NOTICE OF VIOLATION

The U.S. Environmental Protection Agency alleges Marathon Oil Company (Marathon) has violated or is violating implementing regulations of the Clean Air Act included in the 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. §§ 49.4161–4168, at oil and natural gas production facilities located on the Fort Berthold Indian Reservation (FBIR).

I. STATUTORY AND REGULATORY BACKGROUND

1. The Clean Air Act's purpose is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." 42 U.S.C. § 7401(b)(1).

2. The Act directs the EPA to identify air pollutants that "may reasonably be anticipated to endanger public health or welfare" and to issue air quality criteria based "on the latest scientific knowledge about the effects of the pollutants on public health and the environment. These pollutants are known as "criteria pollutants." 42 U.S.C. § 7408.

3. The Act requires the EPA to establish national ambient air quality standards (NAAQS) for criteria pollutants. 42 U.S.C. § 7409.

4. Ground-level ozone, is one of six criteria pollutants for which the EPA has promulgated NAAQS, due to its adverse effects on human health and the environment.

5. Ozone is not emitted directly from sources of air pollution. Ozone is a photochemical oxidant, formed when volatile organic compounds (VOC) and nitrogen oxides (NOx) react in the presence of sunlight. NOx and VOCs are called "ozone precursors." Sources that emit ozone precursors are regulated to reduce ground-level ozone. 62 Fed. Reg. 38,856 (July 18, 1997).

6. In 2013, the EPA finalized the Fort Berthold FIP, codified at 40 C.F.R. §§ 49.4161–.4168, to protect tribal air resources. The Fort Berthold FIP ensures compliance with the NAAQS. 78 Fed. Reg. 17,836 (Mar. 22, 2013).

7. The Fort Berthold FIP "establish[es] legally and practicably enforceable requirements to control and reduce VOC emissions from well completion operations, well recompletion operations, production operations, and storage operations at existing, new and modified oil and natural gas production facilities." 40 C.F.R. § 49.4161(a).

8. The Fort Berthold FIP applies to oil and natural gas production facilities with one or more oil and natural gas wells, for any one of which completion or recompletion operations are or were performed on or after August 12, 2007. *Id.* § 49.4161(b) Compliance with the Fort Berthold FIP is required no later than June 20, 2013, or upon initiation of well completion operations or well recompletion operations, whichever is later. *Id.* § 49.4161(c).

9. An "oil and natural gas production facility" means "all of the air pollution emitting units and activities located on or integrally connected to one or more oil and natural gas wells that are necessary for production operations and storage operations." *Id.* § 49.4163(a)(11).

10. The Fort Berthold FIP provides, in relevant part:

a) "Each owner or operator must operate and maintain all liquid and gas collection, storage, processing and handling operations, regardless of size, so as to minimize leakage of natural gas emissions to the atmosphere." *Id.* § 49.4164(a).

b) Within 90 days of the first date of production, "each owner or operator must . . . [r]oute all standing, working, breathing, and flashing losses from the produced oil storage tanks and any produced water storage tank interconnected with the produced oil storage tanks through a closed vent system to . . . (i) [a]n operating system designed to recover and inject the natural gas emissions into a natural gas gathering pipeline system for sale or other beneficial use; or (ii) an enclosed combustor or utility flare capable of reducing the mass content of VOC…by at least 98.0 percent." *Id.* § 49.4164(d)(2).

c) "Each owner or operator must equip all openings on each produced oil storage tank and produced water storage tank interconnected with produced oil storage tanks with a cover to ensure that all natural gas emissions are efficiently being routed through a closed-vent system to a vapor recovery system, an enclosed combustor, a utility flare, or a pit flare." *Id.* § 49.4165(a).

d) "Each cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves (PRV), and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the produced oil and produced water in the storage tank." *Id.* § 49.4165(a)(1).

e) "Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening [to add

or remove material, inspect or sample material, or inspect or repair equipment]." *Id.* § 49.4165(a)(2).

f) "Each thief hatch cover shall be weighted and properly seated." *Id.* § 49.4165(a)(3).

g) "Each PRV shall be set to release at a pressure that will ensure that natural gas emissions are routed through the closed-vent system to the [control device] under normal operating conditions." *Id.* § 49.4165(a)(4).

h) "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 required by [40 C.F.R. § 49.4165(a)]." *Id.* § 49.4165(b)(1).

i) "All vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain and collect natural gas, vapor, and fumes and transport them to a natural gas sales pipeline and any VOC control equipment must be maintained and operated properly at all times." *Id.* § 49.4165(b)(2).

j) "Each closed-vent system must be designed to operate with no detectable natural gas emissions." *Id.* § 49.4165(b)(3).

k) Each owner or operator must meet requirements for enclosed combustors and utility flares, including ensuring each utility flare is designed and operated in accordance with the requirements of 40 C.F.R. § 60.18(b). *Id.* § 49.4165(c)(4).

l) Each owner or operator must ensure that each enclosed combustor and utility flare is operated with no visible smoke emissions. *Id.* § 49.4165(c)(6)(vii). If visible smoke is observed, owners and operators must use EPA Reference Method 22 of 40 C.F.R. part 60, appendix A, to determine whether visible smoke emissions are present. *Id.* § 49.4166(g)(3).

11. The Fort Berthold FIP also requires each owner or operator of an oil and natural gas production facility to submit an annual report to the EPA on August 15th of every year. *Id.* § 49.4168(b). The report must include "[a] summary of cases where construction or operation was not performed in compliance with the requirements specified in §49.4164, §49.4165, or §49.4166 for each oil and natural gas well at each oil and natural gas production facility, and the corrective measures taken." *Id.* § 49.4168(b)(4)(iii);

II. FACTUAL BACKGROUND & FINDINGS OF VIOLATION

Factual Background

12. Marathon owns or operates 283 oil and natural gas wells (112 oil and natural gas production facilities) on the FBIR in North Dakota, according to the 2018 Fort Berthold FIP Annual Report submitted by Marathon to the EPA, dated August 15, 2019.

13. Oil and water produced from these wells are stored in produced oil and produced water storage tanks. Produced oil storage tanks are kept at or near atmospheric pressure.

14. When pressurized oil is transferred to atmospheric storage tanks, some of the hydrocarbons in the oil, including VOC and hazardous air pollutants, vaporize in a phenomenon known as "flashing." After flashing occurs, the oil continues to emit vapors due to liquid level changes and temperature fluctuations.

15. Vapors from storage tanks are captured and controlled through a series of pipes or vent lines that route vapors to a combustion device. For purposes of this Notice of Violation, the term "vapor control system" refers to the vent lines from a storage tank or group of connected storage tanks to a combustion device, and all connections, fittings, pressure relief devices (including thief hatches), and any other appurtenance used to contain and collect storage tank vapors, and to transport or convey the vapors to a control device.

16. On April 1, 2015, the EPA conducted onsite inspections for compliance with the Fort Berthold FIP at 24 Marathon oil and natural gas production facilities. Using an optical gas-imaging infra-red camera (IR camera), the EPA observed vapor control systems at 10 of the 24 oil and natural gas production facilities were emitting vapors directly to the atmosphere. Oil and natural gas production facilities where emissions were observed are listed on Appendix B.

17. In its annual report for calendar year 2015 (dated August 15, 2016), Marathon reported cases where operation was not performed in compliance with the requirements specified in § 49.4164 and § 49.4165 at oil and natural gas production facilities.

18. In its annual report for calendar year 2016 (dated August 15, 2017), Marathon reported cases where operation was not performed in compliance with the requirements specified in § 49.4164 and § 49.4165 at oil and natural gas production facilities.

19. In its annual report for calendar year 2017 (dated August 16, 2018), Marathon reported cases where operation was not performed in compliance with the requirements specified in § 49.4164 and § 49.4165 at oil and natural gas production facilities.

20. In its annual report for calendar year 2018 (dated August 15, 2019), Marathon reported cases where operation was not performed in compliance with the requirements specified in § 49.4164 and § 49.4165 at oil and natural gas production facilities.

21. On October 8, 2019, the EPA conducted onsite inspections for compliance with the Fort Berthold FIP at eleven Marathon oil and natural gas production facilities. Using an IR camera, the EPA observed vapor control systems at five of the 11 facilities were emitting vapors directly to the atmosphere. Oil and natural gas production facilities where emissions were observed are listed on Appendix A.

22. The oil and natural gas production facilities the EPA inspected in April 2015, and October 2019, are associated with one or more oil and natural gas wells for which completion or recompletion operations were performed after August 12, 2007, and are therefore subject to the requirements of the Fort Berthold FIP.

Alleged Violations

23. Based on the annual reports referenced in Paragraphs 17–20, the EPA alleges Marathon violated the following regulatory requirements at the number of oil and natural gas production facilities listed below and identified in Appendix A.

Regulatory Requirement	Annual Report for Calendar Year 2015 (Dated August 15, 2016)	Annual Report for Calendar Year 2016 (Dated August 15, 2017)	Annual Report for Calendar Year 2017 (Dated August 16, 2018)	Annual Report for Calendar Year 2018 (Dated August 15, 2019)
40 C.F.R. § 49.4164(a)	1	10	3	2
40 C.F.R. § 49.4165(a)(1)	9	18	17	41
40 C.F.R. § 49.4165(b)(1)–(2)	12	5	10	2
40 C.F.R. § 49.4165(c)(4)[1]	1	1		
40 C.F.R. § 49.4166(g)(3)	9	2	2	0

24. Based on the inspections described in Paragraphs 16 and 21, the EPA alleges that Marathon has violated or is violating one or more of the following requirements of the Fort Berthold FIP at one or more of the oil and natural gas production facilities identified on Appendix B:

> a) "Each owner or operator must operate and maintain all liquid and gas collection, storage, processing and handling operations, regardless of size, so as to minimize leakage of natural gas emissions to the atmosphere." 40 C.F.R. § 49.4164(a).
>
> b) Within 90 days of the first date of production, "each owner or operator must . . . [r]oute all standing, working, breathing, and flashing losses from the produced oil storage tanks and any produced water storage tank interconnected with the produced oil storage tanks through a closed vent system to . . . (i) [a]n operating system designed to recover and inject the natural gas emissions into a natural gas gathering pipeline system for sale or other beneficial use; or (ii) an enclosed combustor or utility flare capable of reducing the mass content of VOC . . . by at least 98.0 percent." *Id.* § 49.4164(d)(2).

[1] Marathon reported these cases with a citation to "40 C.F.R. § 49.4165(c)(iv)."

c) "Each owner or operator must equip all openings on each produced oil storage tank and produced water storage tank interconnected with produced oil storage tanks with a cover to ensure that all natural gas emissions are efficiently being routed through a closed-vent system to a vapor recovery system, an enclosed combustor, a utility flare, or a pit flare." *Id.* § 49.4165(a).

d) "Each cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves (PRV), and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the produced oil and produced water in the storage tank." *Id.* § 49.4165(a)(1).

e) "Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening [to add or remove material, inspect or sample material, or inspect or repair equipment]." *Id.* § 49.4165(a)(2).

f) "Each thief hatch cover shall be weighted and properly seated." *Id.* § 49.4165(a)(3).

g) "Each PRV shall be set to release at a pressure that will ensure that natural gas emissions are routed through the closed-vent system to the [control device] under normal operating conditions." *Id.* § 49.4165(a)(4).

h) "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 required by [40 C.F.R. § 49.4165(a)]." *Id.* § 49.4165(b)(1).

i) "All vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain and collect natural gas, vapor, and fumes and transport them to a natural gas sales pipeline and any VOC control equipment must be maintained and operated properly at all times." *Id.* § 49.4165(b)(2).

j) "Each closed-vent system must be designed to operate with no detectable natural gas emissions." *Id.* § 49.4165(b)(3).

III. ENFORCEMENT AUTHORITY

25. Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), provides that whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any requirement of prohibition of an applicable implementation plan, the Administrator may issue an order requiring such person comply with the requirements or prohibition of such plan, issue an administrative penalty order in accordance with section 113(d) of the Act, or bring a civil action in accordance with section 113(b) of the Act for injunctive relief or civil penalties.

26. The issuance of this Notice of Violation does not in any way limit or preclude the EPA from pursuing additional enforcement options concerning inspections or review referenced in this Notice of Violation. This Notice of Violation does not preclude enforcement action for violations not specifically addressed in this Notice of Violation.

Date Issued: 1/9/2020

Suzanne J. Bohan, Director
Enforcement and Compliance Assurance Division

APPENDIX A

Notice of Violation, Marathon Oil Company

Annual Report for Calendar Year 2015 (dated August 15, 2016)			
Well Name	40 C.F.R. § 49.4165(a)(1)	40 C.F.R. § 49.4165(b)(1)–(2)	40 C.F.R. § 49.4165(c)(4)
Elk USA 11-17H	X		
Charging USA 42-35H	X		
Huber USA 41-2H	X		
Pennington 41-4H	X		
One Feather USA 11-17H/Torgerson USA 14-8H	X		
Jones USA 14-14H	X		
Henry Charging USA 21-3H	X		
Windy Boy USA 12-35H	X		
Crow Flies High USA 3 l-41H	X		
Wakelum 21-3H		X	
Wadholm 41 -30H		X	
Bangen 41-27H		X	
Red Feather USA 31 -17H		X	
Shobe 24-20H		X	
Anthony USA 23-14H / Hale USA 23-14H / Melvain Fox USA 14-4TFH		X	
Eagle USA 41-5H		X	
Cummings USA 41-6H		X	
TAT USA 13-23H		X	
TAT USA 34-22H		X	
Debbie Baklenko USA 12-26H		X	
Crow Flies High USA 31-41H		X	
AH 34-23H			X
Henry Charging USA 31-3TFH			
Raymond USA 41-4H			
Sloan 34-32H			
Fisher USA 21-5H			
Keith 44-31TFH			
Jay Sandstrom USA 34-31H			
Everett Fisher USA 31-6H			
Red Feather USA 21-17H			
William USA 31-2TFH/31-2H			
Skogstad 41-28H			
Total	9	12	1

Annual Report for Calendar Year 2016 (dated August 15, 2017)				
Well Name	40 C.F.R. § 49.4164(a)	40 C.F.R. § 49.4165(a)(1)	40 C.F.R. § 49.4165(b)(1)–(2)	40 C.F.R. § 49.4165(c)(4)
Wenninger USA 44-34H	X			
JoAnne Quale USA 21-30H/ 21-30TFH	X			
Wakelum CTB	X			
Good Bear USA CTB	X			
Elk USA CTB	X			
Crow Flies High USA 31-4H	X			
Jones USA CTB	X			
Bingo CTB	X			
Ostlund CTB	X			
Hunts Along USA 12-lH	X			
Pennington 31CTB		X		
Jay Sandstrom USA 34-31H		X		
Everett Fisher USA 41-6H		X		
Charles Shobe USA 44-19H		X		
Mark Sandstrom 14-32H		X		
Lantz CTB		X		
Boy Chief USA CTB		X		
Myrmidon 1-2H		X		
Danks USA 11-3H		X		
Crow Flies High USA 31-4H		X		
Debbie Baklenko USA 12-26H		X		
Tara Jo USA 34-12H		X		
Arvid Bangen USA 31-18		X		
Bangen 41-27H		X		
Reed CTB		X		
Hunts Along USA 12-1H		X		
Windy Boy USA 12-35H		X		
Weninger Cox CTB		X		
Melvain Fox USA CTB			X	
Elk USA CTB			X	
Earl Pennington USA CTB			X	
Pennington USA 41-4H			X	
Elk USA CTB			X	
Driver USA 34-9H				X
Totals	10	18	5	1

Annual Report for Calendar Year 2017 (dated August 16, 2018)			
Well Name	40 C.F.R. § 49.4164(a)	40 C.F.R. § 49.4165(a)(1)	40 C.F.R. § 49.4165(b)(1)–(2)
Luther USA CTB	X		
Frederich USA 43-26H	X		
Bingo CTB	X		
Fedora 34-22H		X	
Thomas Miller USA		X	
Sitting Owl USA CTB		X	
Reed CTB		X	
Randi-Ella USA CTB		X	
William USA 31-2H		X	
Jerry Pennington 34-21H		X	
Hopkins USA CTB		X	
Jones USA CTB		X	
Richard Bangen 21-26H		X	
Reed CTB		X	
Aisenbrey CTB		X	
Weldin 14-24H		X	
Lincoln USA CTB		X	
Mylo Wolding 24-11H		X	
Ostlund USA CTB		X	
Randi-Ella USA CTB		X	
Elk USACTB			X
Bottlenson 34-22H			X
Pearl CTB			X
Earl Pennington USA CTB			X
Red Feather USA CTB			X
Ward-Roehr USA CTB			X
Driver USA CTB			X
Hopkins USA CTB			X
Mylo Wolding 24-11 H			X
Jerry Pennington 34-21 H			X
Total	3	17	10

Annual Report for Calendar Year 2018 (dated August 15, 2019)			
Well Name	40 C.F.R. § 49.4164(a)	40 C.F.R. § 49.4165(a)(1)	40 C.F.R. § 49.4165(b)(1)–(2)
Cummings USA 41-6H	X		
Gladys USA 21-2H	X		
Point USA Pad			X
Elk USA CTB			X
William USA 31-2H		X	
Weninger Cox CTB		X	
Tara Jo USA 34-12H		X	
Reed CTB		X	
Quale USA 31-20H		X	
Luther USA CTB		X	
Joanne Quale USA CTB		X	
Jay Sandstrom USA 34-31H		X	
Jahnke USA CTB		X	
Goodall USA 11-29H		X	
Gladys USA 21-2H		X	
Galen Fox USA 24-7H		X	
Elk USA CTB		X	
Eagle USA 41-SH		X	
Debbie Balenko		X	
Darrel Quale USA CTB		X	
Danks USA 11-3H		X	
Crow Flies Hlgh USA 31-4H		X	
Baker USA CTB		X	
Arvid Bangen USA 31-18H		X	
Annie USA CTB		X	
Bears Ghost USA 31 CTB		X	
Danks USA 11-3H		X	
Driver USA CTB		X	
Eagle USA 41-SH		X	
Goodbird USA CTB		X	
Lincoln USA 16-1H		X	
Tat USA 34-22H		X	
Torgerson USA CTB		X	
Veronica USA CTB		X	
HuntsAlong USA 12-1H		X	
Fredericks USA 43-26H		X	
Gary Bell USA 23-36H		X	
Ward-Roehr USA CTB		X	
Point USA Pad		X	
Martinez USA 24-8H		X	
Hubber 41-2H CTB		X	
Charging USA 42-35H		X	
Arvid Bargen USA 31-18H		X	
Hunts Along USA CTB		X	
Jay Sandstrom USA 34-31H		X	
Total	2	41	2

Annual Report: Method 22 Monitoring				
	2015	2016	2017	2018
Total number of control devices that did not pass Method 22 monitoring (40 C.F.R. § 49.4166(g)(3))	9	2	2	0

APPENDIX B

Notice of Violation, Marathon Oil Company

Well Name	4/1/2015 EPA CAA Inspection, Emissions Observed	10/8/2019 EPA CAA Inspection, Emissions Observed
Henry Charging USA 31-3TFH	X	
Raymond USA 41-4H	X	
Sloan 34-32H	X	
Fisher USA 21-5H	X	
Keith 44-31TFH	X	
Jay Sandstrom USA 34-31H	X	
Everett Fisher USA 31-6H	X	
Red Feather USA 21-17H	X	
William USA 31-2TFH/31-2H	X	
Skogstad 41-28H	X	
Moline 14-32H, Lacey USA 11-5H		X
Cummings USA (41-6H, 6TFH, 44-31TFH)		X
Oren USA 31-6TFH and Rhoda 24-31H		X
Tara Jo USA 34-12TFH, 12H		X
Jessica USA 21-6TFH, Everett Fisher USA 31-6H		X
Total	10	5