



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

JAN 31 2018

Ref: 8ENF-AT

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Bill Walker
Director of Environmental Health and Safety
Halcón Resources Corporation
1000 Louisiana Street, Suite 6700
Houston, Texas 77002

Kennon Doyle
Vice President of Operations
Bruin E&P Partners, LLC
602 Sawyer Street, Suite 710
Houston, Texas 77007

Dear Mr. Walker and Mr. Doyle:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) to Halcón Resources Corporation and Bruin E&P Partners, LLC for alleged violations arising under the Federal Implementation Plan (FIP) for the Fort Berthold Indian Reservation (FBIR), 40 C.F.R. §§ 49.4161-4168, at oil and natural gas production well pads located on the FBIR.

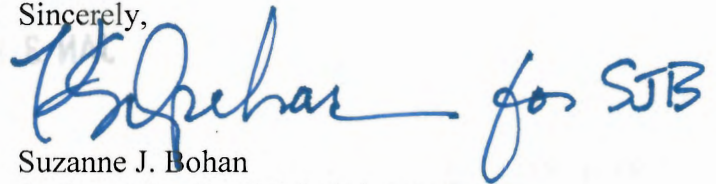
Section 113(a) of the Clean Air Act provides that whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of an applicable implementation plan, the Administrator may issue an administrative compliance order, issue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

We are offering you 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 findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney present at this conference. You may contact Alexis North at (303) 312-7005 or by email at north.alexis@epa.gov to request a conference. Any

request for a conference should be made within 20 calendar days following receipt of this letter. Any conference should be held within 45 calendar days following receipt of this letter.

Sincerely,



Suzanne J. Bohan
Assistant Regional Administrator
Office of Enforcement, Compliance
and Environmental Justice

cc: Alexis North, Environmental Scientist, 8ENF-AT
Jessica Portmess, Attorney, 8ENF-L
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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

2018 FEB 1 PM 1:44

<p>IN THE MATTER OF:</p> <p>Halcón Resources Corporation and Bruin E&P Partners, LLC Fort Berthold Indian Reservation</p> <p>Proceedings Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401 et seq.</p>	<p>FILED EPA REGION VIII HEARING CLERK</p> <p>NOTICE OF VIOLATION</p> <p>CAA-08-2018-0002</p>
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NOTICE OF VIOLATION

The U.S. Environmental Protection Agency alleges that Halcón Resources Corporation, through one or more affiliates (collectively Halcón), and Bruin E&P Partners, LLC, through one or more affiliates (collectively Bruin), have violated or are violating implementing regulations of the Clean Air Act (CAA) included in the Federal Implementation Plan for Oil and Natural Gas Well Production Facilities; Fort Berthold Indian Reservation (Mandan, Hidatsa and Arikara Nation) (FBIR FIP), 40 C.F.R. §§ 49.4161–4168, at oil and natural gas production operations located on the FBIR.

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. Also, this Notice of Violation does not preclude enforcement action for violations not specifically addressed in this Notice of Violation.

Regulatory Authority

1. In 2013, the EPA finalized the FBIR FIP, which includes basic air quality regulations for the protection of public health and the environment. Among other things, the FBIR FIP requires owners and operators of oil and natural gas production facilities to control and reduce volatile organic compound (VOC) emissions from production and storage operations.
2. As set forth in the FBIR FIP:
 - 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.” 40 C.F.R. § 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.” 40 C.F.R. § 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.” 40 C.F.R. § 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].” 40 C.F.R. § 49.4165(a)(2).
- f. “Each thief hatch cover shall be weighted and properly seated.” 40 C.F.R. § 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.” 40 C.F.R. § 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)].” 40 C.F.R. § 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.” 40 C.F.R. § 49.4165(b)(2).
- j. “Each closed-vent system must be designed to operate with no detectable natural gas emissions.” 40 C.F.R. § 49.4165(b)(3).

Findings of Fact

3. Halcón owned or operated 196 well sites on the FBIR in North Dakota, according to the 2016 FBIR FIP Annual Report submitted by Halcón to the EPA on October 30, 2017. A “well pad” may contain multiple well sites.

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

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

6. 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.

7. The EPA conducted onsite inspections for compliance with the FBIR FIP at seven Halcón well pads in November of 2015. Using an optical gas-imaging infra-red camera (IR camera), the EPA observed vapor control systems at many well pads were emitting vapors directly to the atmosphere. Well pads where emissions were observed are listed on Appendix A.

8. Upon information and belief, on or around July 2017, Halcón and its subsidiaries entered into an agreement to sell all oil and natural gas production assets in the Williston Basin in North Dakota to Bruin. The sale closed on or around September 7, 2017.

9. The EPA conducted onsite inspections for compliance with the FBIR FIP at ten Bruin well pads on September 19, 2017. Using an IR camera, the EPA observed that vapor control systems at eight of ten well pads inspected were emitting vapors directly to the atmosphere. Well pads where emissions were observed are listed on Appendix A.

10. The six original wells on the Sneffels Pad were drilled in July 2014. In December of 2015, an additional four wells were added to the existing six wells, for a total of ten wells. In the first quarter of 2017, an additional five wells were drilled, bringing the total well count on the pad to fifteen wells. Upon information and belief, additional storage capacity was not added to the Sneffels Pad to accommodate additional produced oil from the well sites added in December 2015, or the first quarter of 2017.

11. EPA inspected the Sneffels Pad on September 19, 2017. Using an IR camera the EPA observed vapor control systems emitting vapors directly to the atmosphere.

Alleged Violations

12. Based on the above Findings of Fact, the EPA alleges that Halcón and Bruin have violated or are violating one or more of the following requirements of the FBIR FIP at one or more of the well pads identified on Appendix A:

- 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.” 40 C.F.R. § 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.” 40 C.F.R. § 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.” 40 C.F.R. § 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].” 40 C.F.R. § 49.4165(a)(2).
- f. “Each thief hatch cover shall be weighted and properly seated.” 40 C.F.R. § 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.” 40 C.F.R. § 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)].” 40 C.F.R. § 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." 40 C.F.R. § 49.4165(b)(2).
- j. "Each closed-vent system must be designed to operate with no detectable natural gas emissions." 40 C.F.R. § 49.4165(b)(3).

Enforcement Authority

13. Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), 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 or prohibition of an applicable implementation plan, the Administrator may issue an order requiring such person to comply with the requirements or prohibition of such plan, issue an administrative penalty order in accordance with Section 113(d), or bring a civil action in accordance with Section 113(b) for injunctive relief or civil penalties.

1/31/2018
Date

Suzanne J. Bohan for SJB
Suzanne J. Bohan
Assistant Regional Administrator
Office of Enforcement, Compliance and
Environmental Justice

APPENDIX A

Date of Inspection	Well Pad/Well Site(s)
9/19/2017	(Maroon Pad) FORT BERTHOLD 152-93-7D-6-1H
	FORT BERTHOLD 152-93-7D-6-2H
	FORT BERTHOLD 152-93-7D-6-3H
	FORT BERTHOLD 152-93-7D-6-4H
9/19/2017	(Vermejo Pad) FORT BERTHOLD 152-93-7C-6-10H
	FORT BERTHOLD 152-93-7C-6-11H
	FORT BERTHOLD 152-93-7C-6-12H
	FORT BERTHOLD 152-93-7C-6-13H
	FORT BERTHOLD 152-93-7C-6-14H
	FORT BERTHOLD 152-93-7C-6-5H
	FORT BERTHOLD 152-93-7C-6-6H
	FORT BERTHOLD 152-93-7C-6-7H
	FORT BERTHOLD 152-93-7C-6-8H
	FORT BERTHOLD 152-93-7C-6-9H
9/19/2017	(Sneffels Pad) FORT BERTHOLD 148-94-35C-26-5H
	FORT BERTHOLD 148-94-35C-26-3H
	FORT BERTHOLD 148-94-35C-26-4H
	FORT BERTHOLD 147-94-2B-11-3H
	FORT BERTHOLD 147-94-2B-11-4H
	FORT BERTHOLD 147-94-2B-11-5H
9/19/2017	(Atlantic Pad) FORT BERTHOLD 147-94-3A-10-10H
	FORT BERTHOLD 147-94-3A-10-12H
	FORT BERTHOLD 147-94-3A-10-1H
	FORT BERTHOLD 147-94-3A-10-6H
9/19/2017	(Tabeguache Pad) FORT BERTHOLD 148-94-27C-22-3H
	FORT BERTHOLD 148-94-27C-22-4H
	FORT BERTHOLD 148-94-27C-22-6H
	FORT BERTHOLD 148-94-27C-22-7H
	FORT BERTHOLD 148-94-27C-22-8H
9/19/2017	(Wilson Pad) FORT BERTHOLD 148-94-33D-28-4H
	FORT BERTHOLD 148-94-33D-28-5H
	FORT BERTHOLD 148-94-33D-28-6H
	FORT BERTHOLD 148-94-33D-28-7H
9/19/2017	(Princeton Pad) FORT BERTHOLD 148-94-33C-28-10H
	FORT BERTHOLD 148-94-33C-28-9H
	FORT BERTHOLD 148-94-33C-28-8H
	FORT BERTHOLD 148-94-33C-28-3H
9/19/2017	(Grizzly Pad) FORT BERTHOLD 148-94-19D-18-1H

	FORT BERTHOLD 148-94-19D-18-2H
	FORT BERTHOLD 148-94-30A-31-1H
	FORT BERTHOLD 148-94-30A-31-2H
11/11/2015	(Sherman Pad) Fort Berthold 148-94-17C-8-3H
	Fort Berthold 148-94-17C-8-4H
	Fort Berthold 148-94-17C-8-5H
	Fort Berthold 148-94-17C-8-6H
	Fort Berthold 148-94-17C-8-7H
11/11/2015	(Fletcher Pad) Fort Berthold 148-94-17D-8-13H
	Fort Berthold 148-94-17D-8-12H
	Fort Berthold 148-94-17D-8-1H
	Fort Berthold 148-94-17D-8-2H
11/11/2015	(Oxford Pad) Fort Berthold 148-94-21A-20-1H
	Fort Berthold 148-94-21A-20-2H
	Fort Berthold 148-94-21A-20-3H

CERTIFICATE OF MAILING

I, Elizabeth Archer, certify that I sent a Notice of Violation, CAA-08-2018-0002, by Certified Mail, Return Receipt Requested, to:

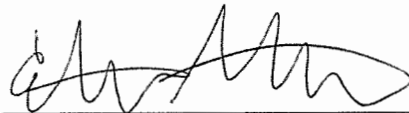
Bill Walker
Director of Environmental Health and Safety
Halcón Resources Corporation
1000 Louisiana Street, Suite 6700
Houston, Texas 77002

Kennon Doyle
Vice President of Operations
Bruin E&P Partners, LLC
602 Sawyer Street, Suite 710
Houston, Texas 77007

I also certify that I sent copies of the Notice of Violation by first-class mail to:

Chairman Mark Fox
Edmund Baker, Environmental Director
Sal Beston, MHA Energy Division
Kenny Lyson, MHA Energy Division
Lisa Lonefight, Senior Science Advisor
MHA Nation
404 Frontage Road
New Town, North Dakota 58763-9404

On the 1 day of February 2018



Elizabeth Archer
Administrative Assistant
8ENF-L

CERTIFIED MAIL RECEIPT
NUMBERS:

7012 2210 0000 5369 3979;
7012 2210 0000 5369 3962