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**U.S. EPA REGION 8  
HEARING CLERK**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

<b>IN THE MATTER OF:</b>	)	<b>NOTICE OF VIOLATION</b>
	)	
<b>Kraken Operating, LLC</b>	)	<b>EPA Docket No. CAA-08-2024-0004</b>
<b>9805 Katy Freeway, Ste. 300</b>	)	
<b>Houston, TX 77024</b>	)	Proceedings Pursuant to
	)	the Clean Air Act,
	)	42 U.S.C. §§ 7401-7671q, and
	)	Montana Code, Title 17,
	)	Chapter 8

**NOTICE OF VIOLATION**

The U.S. Environmental Protection Agency (EPA) alleges that Kraken Operating, LLC (Kraken) has violated the Clean Air Act (the Act) at oil and natural gas production operations located in the Bakken Basin. Specifically, the EPA alleges Kraken has violated Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015, 40 C.F.R. Part 60, Subpart OOOOa (NSPS OOOOa). The EPA also alleges violations of Montana Administrative Rules 17.8.1710 and 17.8.1711, promulgated under the authority of the Clean Air Act of Montana, Montana Code, Title 17, Chapter 8, Subchapter 17 for the oil and gas industry for facilities within the State of Montana.

**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. Section 108 of the Act, 42 U.S.C. § 7408, directs the EPA to identify 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."

3. Section 109 of the Act, 42 U.S.C. § 7409, requires the EPA to establish national ambient air quality standards (NAAQS) for criteria pollutants. The primary standard must be set at a level "requisite to protect the public health" with

an adequate margin of safety, and the secondary standard is intended to protect the “public welfare.”

4. Ground-level ozone is one of six criteria pollutants for which the EPA has promulgated national standards, due to its adverse effects on human health and the environment. Short-term exposures (1 to 3 hours) to ground-level ozone can cause acute health effects observed even at low concentrations, including temporary pulmonary inflammation. Long-term exposure (months to years) may cause permanent damage to lung tissue. Children and adults who are active outdoors are particularly susceptible to the adverse effects of exposure to ozone. *See National Ambient Air Quality Standards for Ozone*, 73 Fed. Reg. 16,436 (Mar. 27, 2008).

5. Ozone is not emitted directly from sources of air pollution. Ozone is a photochemical oxidant, formed when volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>) react in the presence of sunlight. NO<sub>x</sub> and VOCs are known as “ozone precursors.” Sources that emit ozone precursors are regulated to reduce ground-level ozone. *See National Ambient Air Quality Standards for Ozone*, 62 Fed. Reg. 38,856, 38,858 (July 18, 1997).

6. Section 110(a)(2)(C) of the Act requires that every state implementation plan for national primary and secondary ambient air quality standards include a program to regulate the construction and modification of stationary sources; this includes a permitting program as required by parts C and D of Title I of the Act. *See 42 U.S.C. § 7410(a)(2)(C)*.

7. Section 111(b) of the Act authorizes the Administrator of the EPA to promulgate standards of performance applicable to “new sources” within categories of sources that cause “air pollution which may reasonably be anticipated to endanger public health or welfare.” 42 U.S.C. § 7411(b).

8. A “stationary source” is a building, structure, facility, or installation that emits or may emit any air pollutant. 42 U.S.C. § 7411(a)(3).

9. In 1979, the EPA listed “Crude Oil and Natural Gas Production” as a source category that contributes significantly to air pollution and for which standards of performance would be established. *See Priority List and Additions to the List of Categories of Stationary Sources*, 44 Fed. Reg. 49,222 (Aug. 21, 1979).

10. It is unlawful for owners and operators of any new source to operate in violation of applicable standards of performance after the standards have gone into effect. 42 U.S.C. § 7411(e).

**A. New Source Performance Standards**

11. A “new source” is any stationary source, the construction or modification of which is commenced after the promulgation of the standards of performance that will apply to such source. 42 U.S.C. § 7411(a)(2).

***i. 40 C.F.R. Part 60, Subpart OOOOa (NSPS OOOOa)***

12. In 2016, the EPA promulgated “Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015” under Section 111 of the Act. 81 Fed. Reg. 35,824 (June 3, 2016). These standards are set forth in 40 C.F.R Part 60, Subpart OOOOa, which includes 40 C.F.R. §§ 60.5360a–5432a (NSPS OOOOa).<sup>1</sup>

13. Each of these standards is a “standard of performance” within the meaning of Section 111(a)(1) of the Clean Air Act, 42 U.S.C. § 7411(a)(1), or a “design, equipment, work practice, or operational standard, or combination thereof” under Section 111(h) of the Clean Air Act, 42 U.S.C. § 7411(h).

14. NSPS OOOOa applies to “affected facilities” for which owners or operators commence construction, modification or reconstruction after September 18, 2015. 40 C.F.R. § 60.5365a.

15. A “storage vessel affected facility” under NSPS OOOOa includes a single storage vessel that has the potential for VOC emissions equal to or greater than 6 tons per year (“tpy”), as determined according to 40 C.F.R. § 60.5365a(e).

16. “VOCs” is defined as “any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart. 40 C.F.R. § 60.2.

17. NSPS OOOOa requires “[a]t all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.” 40 C.F.R. § 60.5370a(b).

18. NSPS OOOOa requires storage vessel affected facilities that utilize a control device to be equipped with a cover that meets the requirements of 40 C.F.R.

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<sup>1</sup> Following promulgation of the 2016 final rule, the EPA granted reconsideration of fugitive emission requirements at well sites and compressor stations, well-site pneumatic pump standards, and the requirements for professional engineer certification of closed vent systems. 82 Fed. Reg. 25,730 (June 5, 2017); 83 Fed. Reg. 52,056 (Oct. 15, 2018). This reconsideration does not affect the allegations in this Notice of Violation.

§ 60.5411a(b) and is connected through a closed vent system that meets the requirements of § 60.5411a(c) and (d), and emissions must be routed to a control device that meets the conditions specified in § 60.5412a(c) and (d). 40 C.F.R. § 60.5395a(b)(1).

19. Owners and operators must comply with the following requirements for closed vent systems associated with storage vessel affected facilities under NSPS OOOOa:

- a. 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. 40 C.F.R. § 60.5411a(c)(1).
- b. Design and operate a closed vent system with no detectable emissions, as determined using olfactory, visual and auditory inspections. 40 C.F.R. § 60.5411a(c)(2).

20. Owners and operators must comply with the following requirements for control devices to reduce emissions from storage vessel affected facilities under NSPS OOOOa:

- a. Install and operate a continuous burning pilot flame. 40 C.F.R. §§ 60.5412a(d)(1)(ii), 60.5413a(e)(2).
- b. Operate a flare in accordance with the requirements of § 60.18. 40 C.F.R. § 60.5412a(d)(3). Flares shall be operated with a flame present at all times when emissions may be vented to them. 40 C.F.R. § 60.18(c)(2), 40 C.F.R. § 60.18(e).
- c. Operate each control device used to comply with NSPS OOOOa at all times when gases, vapors, and fumes are vented from storage vessel affected facilities through the closed vent system to the control device. 40 C.F.R. § 60.5412a(d)(4).
- d. Each control device must be operated following the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing emissions. 40 C.F.R. § 60.5417a(h)(3).

**B. State of Montana Air Quality Regulations for the Oil & Gas Industry**

**i. Registration of Air Contaminant Sources**

21. The EPA approved the State of Montana's Registration of Air Contaminant Sources requirements into Montana's State Implementation Plan minor source review program. 78 Fed. Reg. 6,9296 (Nov. 19, 2013). Requirements in registrations are set forth in Montana Administrative Rules Title 17, Chapter 8, Subchapter 17 are therefore federally enforceable. *See* 40 C.F.R. § 52.1370(c)(73). Potential sources of air pollution subject to the State of Montana's regulations may register with the Montana Department of Environmental Quality (MDEQ) instead of submitting an application for a Montana air quality permit. Mont. Admin. R. 17.8.1702.

**ii. Requirements for Registered Air Contaminant Sources**

22. "Oil or gas well facility" means a well that produces oil or natural gas. The term includes: (i) equipment associated with the well and used for the purpose of producing, treating, separating, or storing oil, natural gas, or other liquids produced by the well; and (ii) a group of wells under common ownership or control that produce oil or natural gas and that share common equipment used for the purpose of producing, treating, separating, or storing oil, natural gas, or other liquids produced by the wells. Mont. Code Ann. § 75-2-103(14)(a)(i)-(ii) (2023).

23. "Oil or gas well facility equipment" includes, but is not limited to, wellhead assemblies, amine units, prime mover engines, phase separators, heater treatment units, dehydrator units, tanks, and connecting tubing, but does not include equipment such as compressor engines used for transmission of oil or natural gas. *Id.* at 75-2-103(14)(b)-(c).

24. "Registered facility" means any registration eligible facility that has been registered for operation under the requirements of subchapter 17. Mont. Admin. R. 17.8.1701(3).

25. "Volatile organic compounds (VOC)" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. This does not include methane and ethane, which are excluded because they have negligible photochemical reactivity. Mont. Admin. R. 17.8.101; 40 C.F.R. § 51.100(s).

26. The owner or operator of a registered oil or gas well facility shall operate all emissions control equipment to provide the maximum air pollution control for which it was designed. Mont. Admin. R. 17.8.1710(3).

27. The owner or operator of a registered oil or gas well facility shall install and operate air pollution control equipment and comply with air pollution control practices beginning at the time of registration, in compliance with the following: VOC vapors of 200 Btu/scf or greater from each piece of oil or gas well facility equipment, with a PTE greater than 15 tpy, must be captured and routed to a gas pipeline, routed to a smokeless combustion device equipped with an electronic ignition device or a continuous burning pilot system, meeting the requirements of 40 CFR § 60.18, and operating at a 95% or greater control efficiency, or routed to air pollution control equipment with equal or greater control efficiency than a smokeless combustion device. Mont. Admin. R. 17.8.1711(1)(a).

## **II. FACTUAL BACKGROUND & FINDINGS OF VIOLATION**

### **A. Factual Background**

28. Kraken is a privately-held corporation incorporated in the State of Texas and at all relevant times to this NOV is doing business in the State of Montana.

29. Kraken is a “person” within the meaning of Section 302(e) of the Clean Air Act, 42 U.S.C. § 7602(e).

30. Kraken owns and operates the oil and natural gas facility, Williams CTB.

31. Oil and water produced from the Williams CTB are stored in produced oil and produced water storage tanks. Produced oil and produced water storage tanks are kept at or near atmospheric pressure.

32. When pressurized oil is transferred from higher-pressure separators or heater treaters to lower-pressure atmospheric storage tanks, some of the hydrocarbons in the oil, including VOC and hazardous air pollutants, vaporize in a process known as “flashing.” After flashing occurs, the oil continues to emit vapors due to liquid level changes and temperature fluctuations (commonly known “working,” “standing,” or “breathing” losses).

33. Vapors from storage tanks are captured and controlled through a series of pipes or vent lines, often referred to as a closed vent system or CVS, that route vapors to a combustion device.

34. Williams CTB is considered an “oil or gas well facility” as defined by Montana Code Ann. § 75-2-103(14)(a)(i)-(ii).

35. On July 12, 2023, MDEQ issued Registration No. 5293 to Kraken for the Williams CTB oil and gas well facility, which produces from the following three

oil and natural gas wells: Williams 11-12 #2H; Williams 11-12 #3H; and Williams 11-12 #4H.

36. The Tanks, Separators, and the Heater Treater at the site are “oil or gas well facility equipment” as defined by Mont. Admin. R. 17.8.1711(1)(a).

37. According to Kraken’s Williams CTB Registration No. 5293, the site meets the criteria in Mont. Admin. R. 17.8.1710(3) and 17.8.1711(1)(a), requiring a lit flare to control VOCs at the site.

38. Based on well production data reported in Kraken’s Williams CTB Registration No. 5293 and/or production data reported by Kraken to the Montana Board of Oil and Gas Conservation, EPA has determined that storage vessels at the Williams CTB are subject to requirements for storage vessel affected facilities in NSPS OOOOa.

39. Between October 16 and October 28, 2023, EPA’s contractor, Toeroek Associates, Inc. (Toeroek)/ChampionX Emissions Technologies Group (ChampionX) performed aerial monitoring surveys of oil and gas facility operations in Montana. The aerial surveys were conducted using a helicopter operating at approximately 250 feet above ground level and an Optical Gas Imaging (OGI) camera.

40. On October 19, 2023, Toeroek/Champion X observed extensive hydrocarbon emissions from an unlit flare at the Williams CTB.

41. On November 3, 2023, after reviewing the information provided by Toeroek/Champion X, EPA contacted Kraken representatives to inform them of the unlit flare at the Williams CTB, which was identified in the aerial survey on October 19, 2023.

**B. Alleged Violations**

***i. NSPS OOOOa***

42. Based on aerial survey findings at the Williams CTB oil and gas facility, Kraken violated requirements under 40 C.F.R. § 60.5370a(b) to maintain and operate at all times, including periods of startup, shutdown, and malfunction, an affected facility and the associated flare air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions, because the flare was unlit and venting uncontrolled VOC emissions to the atmosphere. 40 C.F.R. § 60.5370a(b).

43. Based on aerial survey findings at the Williams CTB, Kraken violated requirements under 40 C.F.R. § 60.5395a(b)(1) to route emissions from storage vessel affected facilities to a control device that meets the conditions specified in

§ 60.5412a(c) and (d), because the flare was unlit and venting uncontrolled VOC emissions to the atmosphere. 40 C.F.R. § 60.5395a(b)(1).

44. Based on aerial survey findings at the Williams CTB, Kraken violated requirements under 40 C.F.R. § 60.5411a(c)(1) and (c)(2) to design and operate, with no detectable emissions as determined using optical gas imaging inspections, a 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(d) or to a process, because the flare was unlit and venting uncontrolled VOC emissions to the atmosphere. 40 C.F.R. § 60.5411a(c)(1)-(2).

45. Based on aerial survey findings at the Williams CTB, Kraken violated requirements under 40 C.F.R. §§ 60.5412a(d)(1)(ii) and 60.5413a(e)(2) to install and operate a continuous burning pilot flame in the facility flare, because the flare was unlit and venting uncontrolled VOC emissions to the atmosphere. 40 C.F.R. §§ 60.5412a(d)(1)(ii), 60.5413a(e)(2).

46. Based on aerial survey findings at the Williams CTB, Kraken violated requirements under 40 C.F.R. § 60.18(c)(2) and 40 C.F.R. § 60.18(e) to operate its flare in accordance with the requirements of § 60.18. 40 C.F.R. §§ 60.5412a(d)(3), and specifically to operate its flare with a flame present at all times when emissions were vented to it, because the flare was unlit and venting uncontrolled VOC emissions to the atmosphere. 40 C.F.R. § 60.18(c)(2), 40 C.F.R. § 60.18(e).

47. Based on aerial survey findings at the Williams CTB, Kraken violated requirements under 40 C.F.R. § 60.5412a(d)(4) to operate each control device used to comply with NSPS OOOOa at all times when gases, vapors, and fumes are vented from storage vessel affected facilities through the closed vent system to the control device, because the flare was unlit and venting uncontrolled VOC emissions to the atmosphere. 40 C.F.R. § 60.5412a(d)(4).

48. Based on aerial survey findings at the Williams CTB, Kraken violated requirements under 40 C.F.R. § 60.5417a(h)(3) to 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, because the flare was unlit and venting uncontrolled VOC emissions to the atmosphere. 40 C.F.R. § 60.5417a(h)(3).

49. Each of the violations alleged in Paragraphs 42-48 are violations of Section 111 of the Clean Air Act, 42 U.S.C. § 7411(e).



**ii. Montana Air Quality Regulations for the Oil and Gas Industry**

50. Based on aerial survey findings at the Williams CTB oil and gas facility of an unlit flare venting uncontrolled VOC emissions to atmosphere, Kraken violated requirements under Administrative Rules of Montana 17.8.1710(3) to operate all emissions control equipment at a registered oil or gas well facility to provide the maximum air pollution control for which it was designed. Mont. Admin. R. 17.8.1710(3).

51. Based on aerial survey findings at the Williams CTB oil and gas facility of an unlit flare venting uncontrolled VOC emissions to atmosphere, Kraken violated requirements under Montana Administrative Code 17.8.1711(1)(a) to operate air pollution control equipment at a registered oil or gas well facility which has a continuous burning pilot system, meets the requirements of 40 C.F.R. § 60.18, and operates at 95% or greater control efficiency. Mont. Admin. R. 17.8.1711(1)(a).

**III. ENFORCEMENT AUTHORITY**

52. Section 113(a) of the Act authorizes the Administrator of the EPA, after notification is provided, to issue an order requiring any person who has violated or violates any requirement or prohibition of an applicable State implementation plan or permit to: (a) issue an order requiring such person to comply with the requirements or prohibitions of such plan or permit; (b) issue an administrative order to comply with Section 113(d) of the Act; or (c) bring a civil action in accordance with Section 113(b) of the Act. *See* 42 U.S.C. § 7413(a)(1).

53. Section 113(a)(3) of the Act, 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 or prohibition of the Clean Air Act, the Administrator may issue an order requiring such person comply with the requirements or prohibition of the Act, 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.

54. 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.

Date Issued: \_\_\_\_\_

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Suzanne J. Bohan, Director  
Enforcement and Compliance Assurance  
Division  
Environmental Protection Agency, Region 8