IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

Civil Action No. 2:24-cv-1675

UNITED STATES OF AMERICA and
COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF ENVIRONMENTAL
PROTECTION,

Plaintiffs,

v.

PENNENERGY RESOURCES, LLC,

Defendant.

COMPLAINT

Plaintiffs, the United States of America, by authority of the Attorney General of the United States and acting at the request of the Administrator of the United States Environmental Protection Agency ("EPA"), and the Commonwealth of Pennsylvania, Department of Environmental Protection ("PADEP") (collectively "Plaintiffs") allege:

NATURE OF ACTION

1. This is a civil action against PennEnergy Resources, LLC ("PennEnergy" or "Defendant") pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), and Section 4(1), (10) of the Pennsylvania Air Pollution Control Act, Act of January 8, 1960, P.L. 2119 (1959), *as amended*, 35 P.S. § 4004(1), (10).

2. Plaintiffs seek injunctive relief and civil penalties for violations of the Clean Air Act and the Standards of Performance for Crude Oil and Natural Gas Facilities set forth at 40

C.F.R. Part 60, Subparts OOOO ("NSPS OOOO") and OOOOa ("NSPS OOOOa").

JURISDICTION AND VENUE

3. This Court has jurisdiction over the subject matter of this action pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), and pursuant to 28 U.S.C. §§ 1331 (Federal Question), 1345 (United States as Plaintiff), and 1355 (Fine, Penalty, or Forfeiture).

4. This Court has supplemental jurisdiction over the state law claims asserted by PADEP pursuant to 28 U.S.C. § 1367.

5. Venue is proper in this District under Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and 1395(a), because the violations that are the basis of this Complaint occurred in this District and the well pads at issue are operated by PennEnergy in this District.

NOTICES

6. Notice has been given to PennEnergy and the appropriate air pollution control agency in the Commonwealth of Pennsylvania in accordance with Section 113 of the Clean Air Act, 42 U.S.C. § 7413.

DEFENDANT

7. PennEnergy is an oil and natural gas exploration and production company incorporated in the State of Delaware. PennEnergy's corporate headquarters are located in Cranberry Township, Pennsylvania.

8. PennEnergy owns and operates wells in the Appalachian Basin in western Pennsylvania that extract condensate (a type of oil) and natural gas from the Marcellus and Utica shale formations.

9. PennEnergy is a "person" as defined in Section 302(e) of the Clean Air Act, 42

U.S.C. § 7602(e).

STATUTORY AND REGULATORY BACKGROUND

The Clean Air Act

10. The Clean Air Act establishes a regulatory scheme to protect and enhance the quality of the nation's air to promote the public health and welfare and the productive capacity of its population. 42 U.S.C. § 7401(b)(1).

New Source Performance Standards

11. The Clean Air Act requires EPA to establish performance standards for certain categories of new stationary sources of air pollution. 42 U.S.C. § 7411(b)(1). These standards are known as "new source performance standards."

12. EPA has established new source performance standards for crude oil and natural gas production facilities. *See* 40 C.F.R. Part 60, Subparts OOOO and OOOOa. These standards apply to specified facilities (referred to as "affected facilities"), including storage vessels, that are, in the case of NSPS OOOO, constructed or modified after August 23, 2011 and on or before September 18, 2015, or, in the case of NSPS OOOOa, constructed or modified after September 18, 2015 and on or before December 6, 2022.

13. The NSPS OOOO standards provide, in relevant part:

a. Each owner or operator must reduce VOC emissions by 95 percent unless, following at least 12 consecutive months of operation, uncontrolled actual VOC emissions are less than 4 tons per year without considering controls. 40 C.F.R. § 60.5395(d).

b. Each owner or operator using a control device to reduce emissions from a storage vessel affected facility "must equip the storage vessel with a cover

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

c. Each owner or operator must "demonstrate continuous compliance with standards" as specified in 40 C.F.R. § 60.5415(e)(3). 40 C.F.R. § 60.5395(g)(2).

d. "The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel or wet seal fluid degassing system." 40 C.F.R. § 60.5411(b)(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, inspect or repair equipment, or vent vapors through a closed vent system to a control device]." 40 C.F.R. § 60.5411(b)(2).

f. "Each storage vessel thief hatch shall be equipped, maintained and operated with a weighted mechanism or equivalent, to ensure that the lid remains properly seated." 40 C.F.R. § 60.5411(b)(3).

g. Each owner or operator "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." 40 C.F.R. § 60.5411(c)(1).

h. Each owner or operator "must design and operate a closed vent system with no detectable emissions, as determined using olfactory, visual and auditory inspections." 40 C.F.R. § 60.5411(c)(2).

i. Each owner or operator must submit a certified annual report containing information on each storage vessel affected facility. 40 C.F.R. § 60.5420(b).

j. "At 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. § 60.5370(b).

14. The NSPS OOOOa standards provide, in relevant part:

a. Each owner or operator must reduce VOC emissions by 95 percent unless, following at least 12 consecutive months of operation, uncontrolled actual VOC emissions are less than 4 tons per year without considering controls. 40 C.F.R. § 60.5395a(a).

b. Each owner or operator using a control device to reduce VOC emissions "must equip the storage vessel with a cover that meets the requirements of § 60.5411a(b) and is connected through a closed vent system that meets the requirements of § 60.5411a(c) and (d), and . . . route emissions to a control device that meets the conditions specified in § 60.5412a(c) or (d)." 40 C.F.R. § 60.5395a(b)(1).

c. Each owner or operator must "demonstrate continuous compliance with standards" as specified in 40 C.F.R. § 60.5415a(e)(3). 40 C.F.R. § 60.5395a(d)(2).

d. "The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief devices and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel or wet seal fluid degassing system." 40 C.F.R. § 60.5411a(b)(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, inspect or repair equipment, or vent vapors through a closed vent system to a control device]." 40 C.F.R. § 60.5411a(b)(2).

f. "Each storage vessel thief hatch shall be equipped, maintained and operated with a weighted mechanism or equivalent, to ensure that the lid remains properly seated and sealed under normal operating conditions, including such times when working, standing/breathing, and flash emissions may be generated." 40 C.F.R. § 60.5411a(b)(3).

g. Each owner or operator "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." 40 C.F.R. § 60.5411a(c)(1).

h. Each owner or operator "must design and operate a closed vent system

with no detectable emissions, as determined using olfactory, visual, and auditory inspections or optical gas imaging inspections as specified in § 60.5416a(c)." 40 C.F.R. § 60.5411a(c)(2).

i. Each owner or operator "must conduct an assessment that the closed vent system is of sufficient design and capacity to ensure that all emissions from the affected facility are routed to the control device and that the control device is of sufficient design and capacity to accommodate all emissions from the affected facility, and have it certified by a qualified professional engineer or an in-house engineer with expertise on the design and operation of the closed vent system in accordance with [§ 60.5411a(d)(1)(i) and (ii)]." 40 C.F.R. § 60.5411a(d).

j. Each owner or operator must submit a certified annual report containing information on each storage vessel affected facility. 40 C.F.R. § 60.5420a(b).

k. "At 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).

15. It is unlawful to operate a source in violation of an applicable new source performance standard. 42 U.S.C. § 7411(e).

16. The Commonwealth of Pennsylvania has been delegated authority to implement and enforce NSPS OOOO and NSPS OOOOa. 50 Fed. Reg. 34,140, 34,142 (Aug. 23, 1985).

EPA also has the authority to enforce NSPS OOOO and NSPS OOOOa whenever it deems such enforcement necessary to carry out the purposes of the Clean Air Act. *Id. See also* 42 U.S.C. § 7411(c)(2).

Title V Operating Permits

17. Title V of the Clean Air Act, 42 U.S.C. §§ 7661-7661f, establishes an operating permit program for certain sources, including "major sources." The purpose of Title V is to ensure that all "applicable requirements" for compliance with the Clean Air Act are collected in one place.

18. Pursuant to Section 502(a) of the Clean Air Act, 42 U.S.C. § 7661a(a), it is unlawful for a major source to operate without or in violation of a permit issued pursuant to Title V of the Clean Air Act, 42 U.S.C. § 7661 *et seq. See also* 40 C.F.R. § 70.7(b).

19. The Pennsylvania Title V operating permit program was approved by EPA on July 30, 1996. *See* 61 Fed. Reg. 39,597 (July 30, 1996). These regulations are currently codified at 25 Pa. Code § 127.501-127.543.

FACTUAL BACKGROUND

A. Marcellus and Utica Formation

20. The Marcellus and Utica shale formations are rock formations within the Appalachian Basin that underlie large portions of Pennsylvania, Ohio, and West Virginia. The Marcellus formation lies at various depths from the surface to approximately 8,000 feet. The Utica formation is located below the Marcellus formation. In Pennsylvania, the Marcellus and Utica formations contain trillions of cubic feet of natural gas and millions of barrels of natural gas liquids, known as "condensate."

B. PennEnergy Well Pads

21. PennEnergy is one of many companies that extract natural gas and condensate from the Marcellus and Utica shale formations via extraction wells.

22. The surface site from which a well is drilled is known as a "well pad." PennEnergy often drills multiple wells from the same well pad.

23. PennEnergy owns and operates dozens of well pads in western Pennsylvania that produce a mixture of condensate, natural gas, and produced water. This mixture flows up the well under pressure to the well-head at the surface. After the gas is separated from the liquids, it goes to a sales pipeline. The liquids are separated into condensate and produced water.

24. Condensate is stored in a condensate storage tank. Produced water is stored in a produced water storage tank. The storage tanks at PennEnergy's well pads are kept near atmospheric pressure and hence are often referred to as atmospheric storage tanks.

25. When pressurized condensate and produced water is transferred from a separator to an atmospheric storage tank, the pressure drops quickly. This causes some of the hydrocarbons in the liquids, including VOC, Hazardous Air Pollutants ("HAP"), and methane, to vaporize in a phenomenon known as "flashing." After flashing occurs, the condensate and produced water (which still contains some condensate, even after initial separation) continue to emit vapors due to liquid level changes and temperature fluctuations. These are known as "working" and "breathing" losses.

26. PennEnergy is required to capture and control the vapors from "affected" storage tanks. PennEnergy does this by routing the vapors through a series of pipes or vent lines to a control device.

27. The terms "vapor control system" and "closed vent system" are used herein

interchangeably to refer to the vent lines from a storage tank or group of connected storage tanks to a control device, and all connections, fittings, pressure relief devices (including thief hatches on the storage tanks), and any other appurtenance used to contain and collect storage tank vapors, and to transport or convey the vapors to a control device.

C. Storage Tank Thief Hatches

28. The tops of storage tanks have openings called "thief hatches." Thief hatches are equipped with gaskets that are supposed to seal tight when closed.

29. Thief hatches serve two primary purposes. First, they provide access to the contents of a storage tank for taking samples and measuring the liquid level in the tank (known as "gauging"). Second, they provide a means of (a) relieving pressure from a storage tank to prevent over pressurization and (b) eliminating excessive vacuum.

30. To prevent over pressurization, thief hatches are designed to open (i.e., vent) when the pressure inside the tank exceeds the pressure setting of the thief hatch.

31. PennEnergy uses "spring loaded" thief hatches. The pressure setting is determined by the stiffness of the pressure spring.

32. When the pressure inside a storage tank approaches the pressure setting of the thief hatch, the spring begins to compress, causing the thief hatch to open. When the pressure drops below the pressure setting, the spring expands causing the thief hatch to close.

D. EPA Inspection and Follow-Up Investigation

33. In October 2018, EPA inspected 16 PennEnergy well pads in Butler County, Pennsylvania. Using an optical gas-imaging infrared camera ("IR camera") and a photoionization detector ("PID"), EPA observed that storage tanks at the Bloom, Burr, Dunmire, Hamilton, Michael, and other well pads were emitting vapors to the atmosphere from thief hatches or other

openings on the tanks, bypassing the required control device.

34. Further investigation indicated that PennEnergy had failed to conduct a formal engineering analysis to ensure that each of its vapor control systems was adequately designed and sized to route all storage tank vapors to an emissions control device. On information and belief, in some cases, storage tanks were connected to systems that were not adequate to route all vapors from the storage tanks to emissions controls, forcing vapors to be emitted directly to the atmosphere from thief hatches on the tanks rather than being conveyed to a control device as required by NSPS OOOO and NSPS OOOOa.

GENERAL ALLEGATIONS

35. At all times relevant to the Complaint, PennEnergy conducted oil and natural gas production operations in the Appalachian Basin in Pennsylvania.

36. PennEnergy owns and/or operates the well pads identified in Table A, below.

37. Each of the well pads in Table A is located in Butler County, Pennsylvania.

38. Each of the well pads in Table A is in the "crude oil and natural gas source category" within the meaning of NSPS OOOO, 40 C.F.R. § 60.5430, and NSPS OOOOa, 40 C.F.R. § 60.5430a.

39. Each of the well pads in Table A has one or more storage vessels constructed or modified after August 23, 2011 that has (or had) the potential for VOC emissions equal to or greater than six tons per year.

40. Each storage vessel located at a well pad listed in Table A that (a) was constructed or modified after August 23, 2011 and (b) has (or had) the potential for VOC emissions equal to or greater than six tons per year is subject to either NSPS OOOO (in the case of facilities constructed or modified after August 23, 2011 and on or before September 18, 2015)

or NSPS OOOOa (in the case of facilities constructed or modified after September 18, 2015 and on or before December 6, 2022).

Table A. PennEnergy Well Pads

Facility Name	Street Address	County	Latitude	Longitude
Bloom	949 Whitestown Road, Butler, PA	Butler	40.86033	-79.99798
Burr	175 Lower Harmony Road, Prospect, PA	Butler	40.86982	-80.05056
Dunmire	340 East Portersville Road, Portersville, PA	Butler	40.92349	-80.11782
Hamilton	517 Scott Ridge Road, Harmony, PA	Butler	40.8594	-80.15221
Michael	1047 Evans City Road, Renfrew, PA	Butler	40.83788	-79.99954

FIRST CLAIM FOR RELIEF
(Title V Violations)

41. Paragraphs 1 through 40 are incorporated herein by reference.

42. The Bloom, Burr, Hamilton, and Michael well pads, which are identified in Table A above, are or were "major sources" of VOC for purposes of the Title V operating permit program.

43. PennEnergy failed to obtain Title V operating permits for the Bloom, Burr, Hamilton, and Michael well pads, in violation of Section 502(a) of the Clean Air Act, 42 U.S.C. § 7661a, and 25 Pa. Code §§ 127.402(a) and 127.501.

44. Pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b),

PennEnergy is liable for injunctive relief and civil penalties up to the statutory maximum per day for each violation. *See* 88 Fed. Reg. 89,309, 89,312 (Dec. 27, 2023).

SECOND CLAIM FOR RELIEF
(NSPS Subpart OOOO and OOOOa Storage Vessel Violations)

45. Paragraphs 1 through 40 are incorporated herein by reference.

46. One or more of the storage vessels at the well pads identified in Table A are storage vessel affected facilities as that term is defined in NSPS Subparts OOOO and OOOOa.

47. At the well pads identified in Table A, PennEnergy violated one or more of the following requirements of NSPS Subpart OOOO or OOOOa, as applicable:

a. the requirements applicable to storage vessel covers in 40 C.F.R. § 60.5411(b) or 60.5411a(b);

b. the requirements applicable to closed vent systems in 40 C.F.R. § 60.5411(c) or 60.5411a(c);

c. the requirements for controlling VOC emissions from storage vessel affected facilities in 40 C.F.R. § 60.5395(d)(1) and (e)(1) or 40 C.F.R. § 60.5395a(a)(2) and (b)(1);

d. the continuous compliance requirements referenced in 40 C.F.R. § 60.5395(g)(2) and 60.5415(e)(3) or 40 C.F.R. § 60.5395a(d)(2) and 60.5415a(e)(3);

e. the emissions determination requirement referenced in 40 C.F.R. § 60.5365(e) or 40 C.F.R. § 60.5365a(e);

f. the annual reporting requirements specified in 40 C.F.R. § 60.5420(b)(1) and (6) or 40 C.F.R. § 60.5420a(b)(1) and (6); and

g. the good air pollution control practice requirements in 40 C.F.R. § 60.5370(b) or 40 C.F.R. § 60.5370a(b).

48. Each of the violations alleged in Paragraph 47 is a violation of Section 111(e) of the Clean Air Act, 42 U.S.C. § 7411(e).

49. Pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), PennEnergy is liable for injunctive relief and civil penalties up to the statutory maximum per day for each violation. *See* 88 Fed. Reg. 89,309, 89,312 (Dec. 27, 2023).

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs request that this Court:

A. Permanently enjoin Defendant from further violating the Clean Air Act, NSPS OOOO and NSPS OOOOa;

B. Order Defendant to take appropriate actions to remedy, mitigate, and offset the harm to public health and the environment caused by its violations of the Clean Air Act, NSPS OOOO, and NSPS OOOOa;

C. Assess a civil penalty against Defendant for each violation of the applicable provisions of the Clean Air Act and NSPS OOOO and NSPS OOOOa up to the statutory maximum per day for each violation;

D. Award Plaintiffs their costs of this action; and

E. Grant such other and further relief as the Court deems just and proper.

Respectfully submitted,

TODD KIM
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice

/s/ Nicholas Morales
Nicholas Morales, DC Bar No. 1003942
Environmental Enforcement Section
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044
Phone: (202) 616-8860
Fax: (202) 514-8865
Email: Nicholas.Morales@usdoj.gov

ERIC G. OLSHAN
United States Attorney
Western District of Pennsylvania

PAUL SKIRTICH, Bar No. 30440
Assistant United States Attorney
U.S. Post Office and Courthouse
700 Grant Street, Suite 4000
Pittsburgh, Pennsylvania 15219
Phone: (412) 894-7418
Fax: (412) 644-6995
Email: Paul.Skirtich@usdoj.gov

OF COUNSEL:

ALEX CHEN
Attorney Advisor
Air Enforcement Division
Office of Civil Enforcement
U.S. Environmental Protection Agency

HUMANE ZIA
Senior Assistant Regional Counsel
Office of Regional Counsel, Air & Toxics Branch
U.S. Environmental Protection Agency

COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

/s/ Carl D. Ballard
Carl D. Ballard, PA I.D. No. 320830
Assistant Counsel
Northwest Regional Counsel
230 Chestnut Street
Meadville, PA 16335-3407
Phone: 814-332-6070
Fax: 814-332-6996
Email: caballard@pa.gov