Revision to

Allegheny County Health Department Rules and Regulations Article XXI, Air Pollution Control -the addition of §2105.87, "Control of VOC Emissions from Unconventional and Conventional Oil and Natural Gas Sources"

and

ALLEGHENY COUNTY'S portion of the PENNSYLVANIA STATE IMPLEMENTATION PLAN

for the Attainment and Maintenance of the National Ambient Air Quality Standards

(Revision Tracking No. 94)

(Document date: July 14, 2023)

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1. Revision

§2105.87 is being added to Article XXI and is printed in regular type to enhance readability. Text shown in strikethrough is not being submitted as part of the SIP Revision Request.

PART E - SOURCE EMISSION AND OPERATING STANDARDS

Subpart 7 – Miscellaneous VOC Sources

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§2105.87 CONTROL OF VOC EMISSIONS FROM UNCONVENTIONAL AND CONVENTIONAL OIL AND NATURAL GAS SOURCES *{Section added by amendment January 26, 2023, effective February 5, 2023.}*

- a. Incorporation by Reference. Except as otherwise specifically provided under this Section, this Section shall be applied consistent with the provisions of the state regulations for "Control of VOC Emissions from Unconventional Oil and Natural Gas Sources," and for "Control of VOC Emissions from Conventional Oil and Natural Gas Sources," promulgated under the Air Pollution Control Act at 25 Pa. Code §§ 129.121—129.130 and 25 Pa. Code §§ 129.131—129.140, respectively, which are hereby incorporated by reference into this Article. All terms used in 25 Pa. Code §§ 129.121—129.140 and defined in 25 Pa. Code § 121.1 are hereby incorporated by reference, except as explicitly set forth herein. Additions, revisions, or deletions to such regulation by the Commonwealth are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.
- b. For purposes of this Section:
 - 1. "Department" shall mean Department as defined under this Article;
 - 2. References in 25 Pa. Code § 129.127, § 129.130, § 129.137, and § 129.140, to the appropriate Department Regional Office" shall mean the Allegheny County Health Department;
 - 3. "Plan approval" shall mean Installation Permit;
 - 4. References in 25 Pa. Code § 121.1, in the definition of "Responsible Official," to Chapter 127 (relating to construction, modification, reactivation and operation of sources), or Chapter 129 (relating to standards for sources), shall mean Article XXI, Parts B and C, and Article XXI, Part E, respectively.

2. Technical Support Document

A. General

The change to Article XXI adds regulations addressing the Control Techniques Guidelines (CTG) for 'Control of VOCs from Oil and Natural Gas Sources,' as new Article XXI §2105.87.

The Clean Air Act requires that state implementation plans (SIPs) for ozone non-attainment areas and ozone transport regions include reasonably available control measures, including reasonably available control technology (RACT), for sources of volatile organic compound (VOC) emissions. VOCs are precursors to the formation of ground-level ozone, a public health and welfare hazard. CTGs are promulgated by the United States Environmental Protection Agency (EPA) to provide state and local air pollution control authorities information to assist them in determining RACT. Air programs must revise their SIPs to include RACT for sources of VOC emissions covered by a CTG. The EPA mandates that state and local air pollution control agencies implement regulatory requirements consistent with the recommendations of the CTGs for the covered source category. The Allegheny County Health Department (ACHD) has adopted regulations consistent with all applicable CTGs issued prior to 2016.

On October 27, 2016, EPA issued the CTG for the Oil and Natural Gas Industry for emissions of VOC from existing sources. The Pennsylvania Department of Environmental Protection (DEP) developed proposed regulations to be promulgated at 25 Pa. Code §§ 129.121—120.130, to meet the requirements of the CTG for existing sources at oil and natural gas facilities. Sources covered by the regulations are storage vessels, natural gas-driven pneumatic controllers, natural gas-driven diaphragm pumps, centrifugal and reciprocating compressors, and fugitive emissions. While the proposed DEP regulations differ to some extent from the EPA CTG, the DEP has evaluated each source to be regulated to ensure alignment with EPA's CTG.

On March 15, 2022, the Pennsylvania Environmental Quality Board (EQB) approved the DEP final-form rulemaking (EQB #7-544). That final-form rulemaking would have addressed the above-mentioned sources at both "unconventional" and "conventional" oil and natural gas facilities. On May 4, 2022, the EQB withdrew final-form rulemaking EQB #7-544 from consideration by the Pennsylvania Independent Regulatory Review Commission (IRRC). On June 14, 2022, DEP submitted to the EQB a revised final-form rulemaking (EQB #7-544), "Control of VOC Emissions from <u>Unconventional</u> Oil and Natural Gas Sources." That rulemaking consisted of the final-form 25 Pa. Code §§ 129.121—120.130 presented to the EQB on March 15, 2022, revised to address only <u>unconventional</u> oil and natural gas sources. The EQB adopted the revised final-form rulemaking #7-544 on June 14, 2022, and the IRRC approved it as final on July 21, 2022. It was published in the Pennsylvania Bulletin on December 10, 2022 (52 PaB 7587).

On November 30, 2022, DEP submitted to the EQB a separate, emergency-certified final-omitted rulemaking (EQB #7-580) for the RACT requirements for sources of VOC emissions installed at <u>conventional</u> oil and natural gas facilities. The DEP's emergency-certified final omitted rulemaking EQB #7-580 added 25 Pa. Code §§ 129.131—120.140. Final-omitted 25 Pa. Code §§ 129.131—129.140 are consistent with 25 Pa. Code §§ 129.121—129.130 presented to

the EQB on March 15, 2022, revised to address only <u>conventional</u> oil and natural gas sources. The EQB adopted the emergency-certified final-omitted rulemaking EQB #7-580 on November 30, 2022, and it too was published in the Pennsylvania Bulletin on December 10, 2022 (52 PaB 7635).

ACHD is incorporating by reference the DEP regulations for both "unconventional" and "conventional" oil and natural gas sources promulgated on December 10, 2022. In so doing, these Article XXI proposed regulations will have requirements similar to those of the federal CTG, as explained above.

ACHD is submitting the addition of §2105.87 to Article XXI as a change to the Allegheny County portion of the Pennsylvania SIP for the control of ozone, with the exception of the last sentence of §2105.87.a:

Additions, revisions, or deletions to such regulation by the Commonwealth are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.

This submission will fulfill the County's obligations under the Clean Air Act to include requirements consistent with the recommendations of the Oil and Natural Gas Industry CTG in its portion of the Pennsylvania SIP.

B. Information on what is being incorporated by reference

Attached, for illustrative purposes only, are the Pennsylvania Department of Environmental Protection's strikethrough copy of each final rulemaking notice Annex A to show what language was submitted to the EPA as a revision to the SIP by PA DEP on December 12, 2022, via SPeCS. These documents are attached to assist in illustrating the regulations that are being incorporated by reference into Article XXI at §2105.87.

RULES AND REGULATIONS

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES

CHAPTER 121. GENERAL PROVISIONS

§ 121.1. Definitions

The definitions in section 3 of the act (35 P.S. § 4003) apply to this article. In addition, the following words and ns, when used in this article, have the following meanings, unless the context clearly indicates otherwise:

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CPMS continuous parameter monitoring system. The equipment necessary to meet the data acquisition and availability requirements to monitor process and control device operational parameters (for example, control device ry voltages and electric currents), and other information (for example, gas flow rate, O2 or CO2 concentrations), and to record average operational parameter val-

Fugitive emissions - Emissions which could not reasonably pass through a stack, chimney, vent or other func-tionally equivalent opening.

PM 10 Particulate matter with an effective acrody-namic diameter of less than or equal to a nominal 10 micrometer body as measured by the applicable reference method or an equal method.

ppm-Parts per million.

ues on a continuous basis.

ppmvd-Parts per million dry volume.

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Responsible official—An individual who is:

(i) For a corporation: a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or another person who performs similar policy or decision making functions for the corporation, or an authorized representative of the person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for, or subject to, a permit and one of the following applies:

(A) The facility employs more than 250 persons or has gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars).

(B) The delegation of authority to the representative is approved, in advance, in writing, by the Department.

(ii) For a partnership or sole proprietorship: a general partner-or-the-proprietor,-respectively.

(iii) For a municipality, State, Federal or other public agency: a principal executive officer or ranking elected official. A principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency for example, a regional administrator of the EPA.

(iv) For affected sources:

(A) The designated representatives in so far as acti standards, requirements or prohibitions under Title IV of the Clean Air Act (42 U.S.C.A. §§ 7641 and 7642) or the regulations thereunder are concerned.

(B) The designated representative or a person meeting provisions of subparagraphs (i) (iii) for any other pur-pose under 40 CFR Part 70 (relating to operating permit programs), Chapter 127 (relating to construction, modifi-ention, reactivation and operation of sources) or Chapter

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CHAPTER 129. STANDARDS FOR SOURCES

CONTROL OF VOC EMISSIONS FROM UNCONVENTIONAL OIL AND NATURAL GAS SOURCES

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§ 129.121. General provisions and applicability.

(a) Applicability. Beginning December 10, 2022, this section and §§ 129.122—129.130 apply to an owner or operator of one or more of the following unconventional oil and natural gas sources of VOC emissions installed at an unconventional well site, a gathering and boosting station or a natural gas processing plant in this Commonwealth which were constructed on or before December 10, 2022:

- (1) Storage vessels at:
- (i) An unconventional well site.
- (ii) A gathering and boosting station.
- (iii) A natural gas processing plant.
- (iv) The natural gas transmission and storage segment.
- (2) Natural gas-driven continuous bleed pneumatic controllers.
 - (3) Natural gas-driven diaphragm pumps.
- (4) Reciprocating compressors and centrifugal compres-
- (5) Fugitive emissions components.

(b) Existing RACT permit. Compliance with the requirements of this section and §§ 129.122—129.130 assures compliance with the requirements of a permit issued under $\S\S$ 129.91—129.95 (relating to stationary sources of NO_x and VOCs) or $\S\S$ 129.96—129.100 (relating to additional RACT requirements for major sources of NO_x and VOCs) to the owner or operator of a source subject to subsection (a) prior to December 10, 2022, to control, reduce or minimize VOC emissions from oil and natural gas sources listed in subsection (a), except to the extent the operating permit contains more stringent requirements.

§ 129.122. Definitions, acronyms and EPA methods.

(a) Definitions and acronyms. The following words and terms, when used in this section, \S 129.121 (relating to

general provisions and applicability) and 129.123— 129.130, have the following meanings, unless the context clearly indicates otherwise:

AVO—Audible, visual and olfactory.

Bleed rate—The rate in standard cubic feet per hour at which natural gas is continuously vented from a natural gas-driven continuous bleed pneumatic controller.

Centrifugal compressor—

- (i) A machine for raising the pressure of natural gas by drawing in low-pressure natural gas and discharging significantly higher-pressure natural gas by means of mechanical rotating vanes or impellers.
- (ii) The term does not include a screw compressor, sliding vane compressor or liquid ring compressor.

Closed vent system—A system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Condensate—Hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature, pressure, or both, and remains liquid at standard conditions.

Connector-

- (i) A flanged fitting, screwed fitting or other joined fitting used to connect two pipes or a pipe and a piece of process equipment or that closes an opening in a pipe that could be connected to another pipe.
- (ii) The term does not include a joined fitting welded completely around the circumference of the interface.

Control device—An enclosed combustion device, vapor recovery system or flare.

Custody transfer—The transfer of natural gas after processing or treatment, or both, in the producing operation or from a storage vessel or an automatic transfer facility or other equipment, including a product loading rack, to a pipeline or another form of transportation.

Deviation—An instance in which the owner or operator of a source subject to this section, §§ 129.121 and 129.123—129.130 fails to meet one or more of the following:

- (i) A requirement or an obligation established in this section, § 129.121 or §§ 129.123—129.130, including an emission limit, operating limit or work practice standard.
- (ii) A term or condition that is adopted to implement an applicable requirement in this section, § 129.121 or §§ 129.123—129.130 and which is included in the operating permit for the affected source.
- (iii) An emission limit, operating limit or work practice standard in this section, § 129.121 or §§ 129.123— 129.130 during startup, shutdown or malfunction, regardless of whether a failure is permitted by this section, § 129.121 or §§ 129.123—129.130.

FID—Flame ionization detector.

First attempt at repair—For purposes of § 129.127 (relating to fugitive emissions components):

- An action using best practices taken to stop or reduce fugitive emissions to the atmosphere.
 - (ii) The term includes:
 - (A) Tightening bonnet bolts.
 - (B) Replacing bonnet bolts.

- (C) Tightening packing gland nuts.
- (D) Injecting lubricant into lubricated packing.

Flare-

- A thermal oxidation system using an open flame without an enclosure.
- (ii) The term does not include a horizontally or vertically installed ignition device or pit flare used to combust otherwise vented emissions from completions.

Flow line—A pipeline used to transport oil or gas, or both, to processing equipment, compression equipment, storage vessel or other collection system for further handling or to a mainline pipeline.

Fugitive emissions component—

- (i) A piece of equipment that has the potential to emit fugitive emissions of VOC at a well site, a gathering and boosting station or a natural gas processing plant, including the following:
 - (A) A valve.
 - (B) A connector.
 - (C) A pressure relief device.
 - (D) An open-ended line.
 - (E) A flange.
 - (F) A compressor.
 - (G) An instrument.
 - (H) A meter.
- (I) A cover or closed vent system not subject to § 129.128 (relating to covers and closed vent systems).
- (J) A thief hatch or other opening on a controlled storage vessel not subject to § 129.123 (relating to storage vessels).
- (ii) The term does not include a device, such as a natural gas-driven continuous bleed pneumatic controller or a natural gas-driven diaphragm pump, that vents as part of normal operations if the gas is discharged from the device's vent.

GOR—gas-to-oil ratio—The ratio of the volume of gas at standard temperature and pressure that is produced from a volume of oil when depressurized to standard temperature and pressure.

Gathering and boosting station—

- (i) A permanent combination of one or more compressors that collects natural gas from one or more well sites and moves the natural gas at increased pressure into a gathering pipeline to the natural gas processing plant or into the pipeline.
- (ii) The term does not include the combination of one or more compressors located at a well site or located at an onshore natural gas processing plant.

Hard-piping—Pipe or tubing that is manufactured and properly installed using good engineering judgment and standards.

Hydraulic fracturing—The process of directing pressurized fluids containing a combination of water, proppant and added chemicals to penetrate tight formations, such as shale or coal formations, that subsequently require high rate, extended flowback to expel fracture fluids and solids during a completion.

Hydraulic refracturing—Conducting a subsequent hydraulic fracturing operation at a well that has previously undergone a hydraulic fracturing operation.

In-house engineer—An individual who is both of the following:

- (i) Employed by the same owner or operator as the responsible official that signs the certification required under § 129.130(k) (relating to recordkeeping and reporting)
- (ii) Qualified by education, technical knowledge and expertise in the design and operation of a natural gas-driven diaphragm pump or closed vent system to make the technical certification required under § 129.125(c)(3)(ii) (relating to natural gas-driven diaphragm pumps) or § 129.128(c)(3), or both, as applicable.

Intermediate hydrocarbon liquid—A naturally occurring, unrefined petroleum liquid.

LDAR-Leak detection and repair.

Leak—An emission detected using one or more of the following methods:

- (i) Through audible, visual or odorous evidence during an AVO inspection.
- (ii) By OGI equipment calibrated according to § 129.127(h) (relating to fugitive emissions components).
- (iii) With a concentration of 500 ppm or greater as methane or equivalent by a gas leak detector calibrated according to § 129.127(i).
- (iv) Using an alternative leak detection method approved by the Department in § 129.127(c)(2)(ii)(C), (c)(3)(ii)(C) or (e)(2)(iii).

Maximum average daily throughput—The single highest daily average throughput during the 30-day potential to emit evaluation period employing generally accepted methods.

Monitoring system malfunction—

- (i) A sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data.
- (ii) The term does not include a system failure caused by poor maintenance or careless operation.

Natural gas distribution segment—The delivery of natural gas to the end user by a distribution company after the distribution company receives the natural gas from the natural gas transmission and storage segment.

Natural gas-driven diaphragm pump-

- (i) A positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid.
- (ii) The term does not include either of the following:
- (A) A pump in which a fluid is displaced by a piston driven by a diaphragm.
- (B) A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor.

Natural gas-driven continuous bleed pneumatic controller—An automated instrument used for maintaining a process condition such as liquid level, pressure, deltapressure or temperature powered by a continuous flow of pressurized natural gas.

Natural gas liquids—The hydrocarbons, such as ethane, propane, butane and pentane, that are extracted from field gas. Natural gas processing plant-

- (i) A processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.
- (ii) The term does not include a Joule-Thompson valve, a dew point depression valve or an isolated or standalone Joule-Thompson skid.

Natural gas transmission and storage segment—The term includes the following:

- The pipelines used for the long-distance transport of natural gas, excluding processing.
- (ii) The natural gas transmission stations which include the following:
- (A) The land, mains, valves, meters, boosters, regulators, storage vessels, dehydrators and compressors.
- (B) The driving units and appurtenances associated with the items listed in clause (A).
- (C) The equipment used for transporting gas from a production plant, delivery point of purchased gas, gathering system, storage area or other wholesale source of gas to one or more distribution areas.
- (iii) The aboveground storage facilities and underground storage facilities that transport and store natural gas between the natural gas processing plant and natural gas distribution segment.

OGI-Optical gas imaging.

Open-ended valve or line—A valve, except a safety relief valve, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Produced water—Water that is extracted from the earth from an oil or natural gas production well or that is separated from crude oil, condensate or natural gas after extraction

Qualified professional engineer—

- (i) An individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the required specific technical certification.
- (ii) The individual making this certification must be currently licensed in this Commonwealth or another state in which the responsible official, as defined in § 121.1 (relating to definitions), is located and with which the Commonwealth offers reciprocity.

Quality assurance or quality control activity—An activity such as a system accuracy audit and a zero and span adjustment that ensures the proper calibration and operation of monitoring equipment.

Reciprocating compressor—A piece of equipment that employs linear movement of a driveshaft to increase the pressure of a process gas by positive displacement.

Reciprocating compressor rod packing—

- (i) A series of flexible rings in machined metal cups that fit around the reciprocating compressor piston rod to create a seal limiting the amount of compressed natural gas that escapes to the atmosphere.
- (ii) Another mechanism that provides the same func-

Removed from service—A storage vessel that has been physically isolated and disconnected from the process for a purpose other than maintenance.

Repaired—A piece of equipment that is adjusted or otherwise altered to eliminate a leak and is remonitored to verify that emissions from the equipment are at or below the applicable leak limitation.

Returned to service—A storage vessel that was removed from service which has been:

- Reconnected to the original source of liquids or has been used to replace another storage vessel.
- (ii) Installed in another location and introduced with crude oil, condensate, intermediate hydrocarbon liquids or produced water.

Routed to a process or route to a process—The emissions are conveyed by means of a closed vent system to an enclosed portion of a process that is operational where the emissions are controlled in one or more of the following ways:

- Predominantly recycled or consumed, or both, in the same manner as a material that fulfills the same function in the process.
- (ii) Transformed by chemical reaction into materials that are not regulated.
 - (iii) Incorporated into a product.
 - (iv) Recovered for beneficial use.

Sensor—A device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH or liquid level.

Storage vessel-

- (i) A container used to collect crude oil, condensate, intermediate hydrocarbon liquids or produced water that is constructed primarily of non-earthen materials which provide structural support.
- (ii) The term includes a container described in subparagraph (i) that is skid-mounted or permanently attached to something that is mobile which has been located at a site for 180 or more consecutive days.
 - (iii) The term does not include the following:
- (A) A process vessel such as a surge control vessel, bottoms receiver or knockout vessel.
- (B) A pressure vessel used to store a liquid or a gas and is designed to operate in excess of 204.9 kilopascals (29.7 pounds per square inch, absolute) and to not vent to the atmosphere as a result of compression of the vapor headspace during filling of the vessel.
- (C) A container described in subparagraph (i) with a capacity greater than 100,000 gallons used to recycle water that has been passed through two-stage separation.

Surface site—A combination of one or more graded pad sites, gravel pad sites, foundations, platforms or the immediate physical location upon which equipment is physically affixed.

TOC—total organic compounds—The results of EPA Method 25A.

UIC-Underground injection control.

UIC Class I oilfield disposal well—A well with a UIC Class I permit that meets the definition in 40 CFR 144.6(a)(2) (relating to classification of wells) and receives eligible fluids from oil and natural gas exploration and production operations.

UIC Class II oilfield disposal well—A well with a UIC Class II permit where wastewater resulting from oil and natural gas production operations is injected into underground porous rock formations not productive of oil or gas and sealed above and below by unbroken, impermeable strata.

Unconventional formation—A geological shale formation existing below the base of the Elk Sandstone or its geologic equivalent stratigraphic interval where natural gas generally cannot be produced at economic flow rates or in economic volumes except by vertical or horizontal well bores stimulated by hydraulic fracture treatments or by using multilateral well bores or other techniques to expose more of the formation to the well bore.

Unconventional well—A bore hole drilled or being drilled for the purpose of or to be used for the production of natural gas from an unconventional formation.

Unconventional well site—A location with one or more unconventional wells.

VRU—vapor recovery unit—A device used to recover vapor and route it to a process, flow line or other equipment

Well—A hole drilled for producing oil or natural gas or into which a fluid is injected.

Wellhead-

- The piping, casing, tubing and connected valves protruding above the earth's surface for an oil or natural gas well.
- (ii) The wellhead ends where the flow line connects to a wellhead valve.
- (iii) The term does not include other equipment at the well site except for a conveyance through which gas is vented to the atmosphere.

Well site-

- (i) One or more surface sites that are constructed for the drilling and subsequent operation of an unconventional well or injection well.
- (ii) For purposes of the fugitive emissions standards in § 129.127, the term also means a separate tank battery surface site collecting crude oil, condensate, intermediate hydrocarbon liquids or produced water from a well not located at the well site, for example, a centralized tank battery.
- (iii) For purposes of the fugitive emissions standards in § 129.127, the term does not include:
- (A) A UIC Class I oilfield disposal well.
- (B) A UIC Class II oilfield disposal well and disposal facility.
- (C) The flange immediately upstream of the custody meter assembly.
- (D) Equipment, including fugitive emissions components, located downstream of the flange in clause (C).
- (b) EPA methods. The EPA methods referenced in this section and §§ 129.123—129.130 are those listed as follows, unless the context clearly indicates otherwise:
- EPA Method 1—EPA Method 1, 40 CFR Part 60, Appendix A-1 (relating to test methods 1 through 2F), regarding sample and velocity traverses for stationary sources.

EPA Method IA—EPA Method 1A, 40 CFR Part 60, Appendix A-1, regarding sample and velocity traverses for stationary sources with small stacks or ducts.

- EPA Method 2—EPA Method 2, 40 CFR Part 60, Appendix A-1, regarding determination of stack gas velocity and volumetric flow rate (Type S pitot tube).
- EPA Method 2A—EPA Method 2A, 40 CFR Part 60, Appendix A-1, regarding direct measurement of gas volume through pipes and small ducts.
- EPA Method 2C—EPA Method 2C, 40 CFR Part 60, Appendix A-1, regarding determination of gas velocity and volumetric flow rate in small stacks or ducts (standard pitot tube).
- EPA Method 2D—EPA Method 2D, 40 CFR Part 60, Appendix A-1, regarding measurement of gas volume flow rates in small pipes and ducts.
- EPA Method 3A—EPA Method 3A, 40 CFR Part 60, Appendix A-2 (relating to test methods 2G through 3C), regarding determination of oxygen and carbon dioxide concentrations in emissions from stationary sources (instrumental analyzer procedure).
- EPA Method 3B—EPA Method 3B, 40 CFR Part 60, Appendix A-2, regarding gas analysis for the determination of emission rate correction factor or excess air.
- EPA Method 4—EPA Method 4, 40 CFR Part 60, Appendix A-3 (relating to test methods 4 through 51), regarding determination of moisture content in stack gases.
- EPA Method 18—EPA Method 18, 40 CFR Part 60, Appendix A-6 (relating to test methods 16 through 18), regarding measurement of gaseous organic compound emissions by gas chromatography.
- EPA Method 21—EPA Method 21, 40 CFR Part 60, Appendix A-7 (relating to test methods 19 through 25E), regarding determination of volatile organic compound leaks
- EPA Method 22—EPA Method 22, 40 CFR Part 60, Appendix A-7, regarding visual determination of fugitive emissions from material sources and smoke emissions from flares.
- EPA Method 25A—EPA Method 25A, 40 CFR Part 60, Appendix A-7, regarding determination of total gaseous organic concentration using a flame ionization analyzer.

§ 129.123. Storage vessels.

- (a) Applicability.
- (1) Potential VOC emissions. Except as specified in subsections (c) and (d), this section applies to the owner or operator of a storage vessel subject to § 129.121(a)(1) (relating to general provisions and applicability) that has the potential to emit 2.7 TPY or greater VOC emissions.
 - (2) Calculation of potential VOC emissions.
- (i) The potential VOC emissions in paragraph (1) must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput as defined in § 129.122 (relating to definitions, acronyms and EPA methods) prior to February 8, 2023, for an existing storage vessel.
- (ii) The determination of potential VOC emissions may consider requirements under a legally and practically enforceable limit established in an operating permit or plan approval approved by the Department.
- (iii) Vapor from the storage vessel that is recovered and routed to a process through a VRU is not required to be included in the determination of potential VOC emissions for purposes of determining applicability, if the owner or operator meets the following:

- (A) The cover requirements in § 129.128(a) (relating to covers and closed vent systems).
- (B) The closed vent system requirements in § 129.128(b).
- (iv) If the apparatus that recovers and routes vapor to a process is removed from operation or is operated inconsistently with § 129.128, the owner or operator shall determine the storage vessel's potential VOC emissions under this paragraph within 30 calendar days of the date of apparatus removal or inconsistent operation.
- (b) VOC emissions limitations and control requirements. Except as specified in subsections (c) and (d), beginning December 10, 2023, the owner or operator of a storage vessel subject to this section shall reduce VOC emissions by 95.0% by weight or greater. The owner or operator shall comply with paragraph (1) or paragraph (2) as applicable.
- Route the VOC emissions to a control device. The owner or operator shall do the following:
- (i) Equip the storage vessel with a cover that meets the requirements of § 129.128(a).
- (ii) Connect the storage vessel to a control device or process through a closed vent system that meets the requirements of § 129.128(b).
- (iii) Route the emissions from the storage vessel to a control device or a process that meets the applicable requirements of § 129.129 (relating to control devices).
- (iv) Demonstrate that the VOC emissions are reduced as specified in § 129.129(k).
- (2) Equip the storage vessel with a floating roof. The owner or operator shall install a floating roof that meets the requirements of 40 CFR 60.112b(a)(1) or (2) (relating to standard for volatile organic compounds (VOC)) and the relevant monitoring, inspection, recordkeeping and reporting requirements in 40 CFR Part 60, Subpart Kb (relating to standards of performance for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984).
 - (c) Exceptions.
- (1) The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a storage vessel that maintains actual VOC emissions less than 2.7 TPY determined as a 12-month rolling sum. An owner or operator claiming this exception shall perform the compliance demonstration requirements under paragraph (2) and maintain the records under subsection (g), as applicable.
- (2) The owner or operator of a storage vessel claiming exception under this subsection shall perform the following:
- (i) Beginning on or before January 9, 2023, calculate the actual VOC emissions once per calendar month using a generally accepted model or calculation methodology. The monthly calculations must meet the following:
- (A) Be separated by at least 15 calendar days but not more than 45 calendar days.
- (B) Be based on the monthly average throughput for the previous 30 calendar days.
- (ii) Comply with subsection (b) within 1 year of the date of the monthly calculation showing that actual VOC emissions from the storage vessel have increased to 2.7 TPY VOC or greater.

- (d) Exemptions. The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a storage vessel that meets one or more of the following:
- (1) Is skid-mounted or permanently attached to something that is mobile for which records are available to document that it has been located at a site for less than 180 consecutive days. An owner or operator claiming this exemption shall maintain the records under subsection (g), as applicable.
- (2) Is used in the natural gas distribution segment.
- (3) Is controlled under 40 CFR Part 60, Subpart Kb or 40 CFR Part 63, Subpart G, Subpart CC, Subpart HH or Subpart WW.
- (e) Requirements for a storage vessel removed from service. A storage vessel subject to this section that is removed from service is not an affected source for the period that it is removed from service if the owner or operator performs the following:
- (1) Completely empties and degasses the storage vessel so that the storage vessel no longer contains crude oil, condensate, produced water or intermediate hydrocarbon liquids. A storage vessel where liquid is left on walls, as bottom clingage or in pools due to floor irregularity is considered to be completely empty.
- (2) Submits a notification in the next annual report required under § 129.130(k)(1) (relating to recordkeeping and reporting) identifying each storage vessel removed from service during the reporting period and the date of its removal from service.
- (f) Requirements for a storage vessel returned to service. The owner or operator of a storage vessel identified in subsection (e) that is returned to service shall submit a notification in the next annual report required under § 129.130(k)(1) identifying each storage vessel that has been returned to service during the reporting period and the date of its return to service.
- (g) Recordkeeping and reporting requirements. The owner or operator of a storage vessel subject to this section shall maintain the records under § 129.130(b) and submit the reports under § 129.130(k)(3)(i).

§ 129.124. Natural gas-driven continuous bleed pneumatic controllers.

- (a) Applicability. This section applies to the owner or operator of a natural gas-driven continuous bleed pneumatic controller subject to § 129.121(a)(2) (relating to general provisions and applicability) located prior to the point of custody transfer of oil to an oil pipeline or of natural gas to the natural gas transmission and storage segment.
- (b) Exception. An owner or operator may use a natural gas-driven continuous bleed pneumatic controller subject to this section with a bleed rate greater than the applicable requirements in subsection (c) based on functional requirements. An owner or operator claiming this exception shall perform the compliance demonstration requirements under subsection (d) and maintain the records under subsection (e), as applicable.
- (c) VOC emissions limitation requirements. Except as specified in subsection (b), beginning December 10, 2023, the owner or operator of a natural gas-driven continuous bleed pneumatic controller subject to this section shall do the following:
- (1) Ensure each natural gas-driven continuous bleed pneumatic controller with a natural gas bleed rate

- greater than 6.0 standard cubic feet per hour, at a location other than a natural gas processing plant, maintains a natural gas bleed rate of less than or equal to 6.0 standard cubic feet per hour.
- (2) Ensure each natural gas-driven continuous bleed pneumatic controller maintains a natural gas bleed rate of zero standard cubic feet per hour, if located at a natural gas processing plant.
- (3) Perform the compliance demonstration requirements under subsection (d).
- (d) Compliance demonstration requirements. The owner or operator shall tag each natural gas-driven continuous bleed pneumatic controller affected under subsection (c) with the following:
- (1) The date the natural gas-driven continuous bleed pneumatic controller is required to comply with this section.
- (2) An identification number that ensures traceability to the records for that natural gas-driven continuous bleed pneumatic controller.
- (e) Recordkeeping and reporting requirements. The owner or operator of a natural gas-driven continuous bleed pneumatic controller affected under subsection (c) shall maintain the records under § 129.130(c) (relating to recordkeeping and reporting) and submit the reports under § 129.130(k)(3)(ii).

§ 129.125. Natural gas-driven diaphragm pumps.

- (a) Applicability. This section applies to the owner or operator of a natural gas-driven diaphragm pump subject to § 129.121(a)(3) (relating to general provisions and applicability) located at a well site or natural gas processing plant.
- (b) VOC emissions limitation and control requirements. Except as specified in subsections (c) and (d), beginning December 10, 2023, the owner or operator of a natural gas-driven diaphragm pump subject to this section shall comply with the following:
- (1) Unconventional well site. The owner or operator of a natural gas-driven diaphragm pump located at a well site shall reduce the VOC emissions by 95.0% by weight or greater. The owner or operator shall do the following:
- (i) Connect the natural gas-driven diaphragm pump to a control device or process through a closed vent system that meets the applicable requirements of § 129.128(b) (relating to covers and closed vent systems).
- (ii) Route the emissions from the natural gas-driven diaphragm pump to a control device or a process that meets the applicable requirements of § 129.129 (relating to control devices)
- (iii) Demonstrate that the VOC emissions are reduced as specified in § 129.129(k).
- (2) Natural gas processing plant. The owner or operator of a natural gas-driven diaphragm pump located at a natural gas processing plant shall maintain an emission rate of zero standard cubic feet per hour.
- (c) Exceptions. The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a natural gas-driven diaphragm pump located at a well site which meets one or more of the following:
- (1) Routes emissions to a control device which is unable to reduce VOC emissions by 95.0% by weight or

greater and there is no ability to route VOC emissions to a process. An owner or operator that claims this exception shall do the following:

- Maintain the records under § 129.130(d)(4) (relating to recordkeeping and reporting).
- (ii) Connect the natural gas-driven diaphragm pump to the control device through a closed vent system that meets the requirements of § 129.128(b).
- (iii) Demonstrate the percentage by which the VOC emissions are reduced as specified in § 129.129(k).
- (2) Has no available control device or process. An owner or operator that claims this exception shall do the following:
- (i) Maintain the records under § 129.130(d)(5).
- (ii) Certify that there is no available control device or process in the next annual report required by § 129.130(k)(1).
- (iii) Route emissions from the natural gas-driven diaphragm pump within 30 days of the installation of a control device or process. Once the emissions are routed to a control device or process, the certification of subparagraph (ii) is no longer required and the applicable requirements of this section shall be met.
- (3) Is technically infeasible of connecting to a control device or process. An owner or operator that claims this exception shall do the following:
- (i) Maintain the records under § 129.130(d)(6).
- (ii) Perform an assessment of technical infeasibility which must meet the following:
- (A) Be prepared under the supervision of an in-house engineer or qualified professional engineer.
- (B) Include a technical analysis of safety considerations, the distance from an existing control device, the pressure losses and differentials in the closed vent system and the ability of the control device to handle the increase in emissions routed to them.
- (C) Be certified, signed and dated by the engineer supervising the assessment, including the statement: "I certify that the assessment of technical infeasibility was prepared under my supervision. I further certify that the assessment was conducted and this report was prepared under the requirements of 25 Pa. Code § 129.125(c)(3). Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information."
- (d) Exemptions. The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a natural gas-driven diaphragm pump located at a well site which operates less than 90 days per calendar year. An owner or operator claiming this exemption shall maintain the records under § 129.130(d)(3).
- (e) Removal of control device or process. The owner or operator of a natural gas-driven diaphragm pump located at a well site that routes emissions to a control device or process which is removed or is no longer available shall comply with one of the exceptions in subsection (c), as applicable.
- (f) Recordkeeping and reporting requirements. The owner or operator of a natural gas-driven diaphragm

pump subject to this section shall maintain the records under § 129.130(d) and submit the reports under § 129.130(k)(3)(iii).

§ 129.126. Compressors.

- (a) Applicability. This section applies to the owner or operator of a reciprocating compressor or centrifugal compressor subject to § 129.121(a)(4) (relating to general provisions and applicability) that meets the following:
- Reciprocating compressor. Each reciprocating compressor located between the wellhead and point of custody transfer to the natural gas transmission and storage segment.
- (2) Centrifugal compressor. Each centrifugal compressor using wet seals that is located between the wellhead and point of custody transfer to the natural gas transmission and storage segment.
- (b) VOC emissions control requirements for a reciprocating compressor. Beginning December 10, 2023, the owner or operator of a reciprocating compressor subject to this section shall meet one of the following:
- Replace the reciprocating compressor rod packing on or before one of the following:
- (i) The reciprocating compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning on the later of:
- (A) The date of the most recent reciprocating compressor rod packing replacement.
- (B) December 10, 2022, for a reciprocating compressor rod packing that has not yet been replaced.
- (ii) The reciprocating compressor has operated for 36 months. The number of months of operation must be continuously monitored beginning on the later of:
- (A) The date of the most recent reciprocating compressor rod packing replacement.
- (B) December 10, 2025, for a reciprocating compressor rod packing that has not yet been replaced.
- (2) Route the VOC emissions to a control device or a process that meets § 129.129 (relating to control devices) by using a reciprocating compressor rod packing emissions collection system that operates under negative pressure and meets the cover requirements of § 129.128(a) (relating to covers and closed vent systems) and the closed vent system requirements of § 129.128(b).
- (c) VOC emissions limitation and control requirements for a centrifugal compressor. Except as specified in subsection (d), the owner or operator of a centrifugal compressor subject to this section shall perform the following:
- (1) Reduce the VOC emissions from each centrifugal compressor wet seal fluid degassing system by 95.0% by weight or greater.
- (2) Equip the wet seal fluid degassing system with a cover that meets the requirements of § 129.128(a) through a closed vent system that meets the requirements of § 129.128(b) to a control device or a process that meets the applicable requirements of § 129.129.
- (3) Demonstrate that the VOC emissions are reduced as specified in \S 129.129(k).
- (d) Exemptions. Subsection (c) does not apply to the owner or operator of a centrifugal compressor that meets the following:
 - (1) Is located at a well site.

- (2) Is located at an adjacent well site and services more than one well site.
- (e) Recordkeeping and reporting requirements. The owner or operator of a reciprocating compressor or centrifugal compressor subject to this section shall do the following, as applicable:
- (1) For a reciprocating compressor, maintain the records under § 129.130(e) (relating to recordkeeping and reporting) and submit the reports under § 129.130(k)(3)(iv).
- (2) For a centrifugal compressor, maintain the records under § 129.130(f) and submit the reports under § 129.130(k)(3)(v).

§ 129.127. Fugitive emissions components.

- (a) Applicability. This section applies to the owner or operator of a fugitive emissions component subject to § 129.121(a)(5) (relating to general provisions and applicability), located at one or more of the following:
 - (1) An unconventional well site.
 - (2) A natural gas gathering and boosting station.
 - (3) A natural gas processing plant.
- (b) Average production calculation procedure for a well site. Beginning on or before January 9, 2023:
- (1) The owner or operator of a well site subject to subsection (a)(1) shall calculate the average production in barrels of oil equivalent per day of the well site using the previous 12 calendar months of operation as reported to the Department and thereafter as specified in subsection (c)(4) for the previous calendar year. The owner or operator shall do the following:
- (i) For each well at the well site with production reported to the Department:
- (A) Record the barrels of oil produced for each active well.
- (B) Convert the natural gas production for each active well to equivalent barrels of oil by dividing the standard cubic feet of natural gas produced by 6,000 standard cubic feet per barrel of oil equivalent.
- (C) Convert the condensate production for each active well to equivalent barrels of oil by multiplying the barrels of condensate by 0.9 barrels of oil equivalent per barrel of condensate.
- (ii) Calculate the total production for each active well, in barrels of oil equivalent, by adding the results of subparagraph (i)(A)—(C) for each active well.
- (iii) Sum the results of subparagraph (ii) for all active wells at the well site and divide by 365 or 366 days for the previous 12 calendar months or the previous calendar year, as applicable.
- (2) If the owner or operator does not know the production of an individual well at the well site, the owner or operator shall comply with subsection (c)(2).
 - (c) Requirements for an unconventional well site.
- (1) For a well site consisting of only oil wells, the owner or operator shall:
- (i) Determine the GOR of the oil well site using generally accepted methods.
- (ii) If the GOR of the oil well site is less than 300 standard cubic feet of gas per barrel of oil produced, maintain the records under § 129.130(g)(1) (relating to recordkeeping and reporting).

- (iii) If the GOR of the oil well site is equal to or greater than 300 standard cubic feet of gas per barrel of oil produced, meet the requirements of paragraph (2) or paragraph (3) based on the results of subsection (b)(1).
- (2) For a well site producing, on average, equal to or greater than 15 barrels of oil equivalent per day, with at least one well producing, on average, equal to or greater than 15 barrels of oil equivalent per day, the owner or operator shall:
- (i) Conduct an initial AVO inspection on or before February 8, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days.
- (ii) Conduct an initial LDAR inspection program on or before February 8, 2023, with quarterly inspections thereafter separated by at least 60 calendar days but not more than 120 calendar days using one or more of the following:
- (A) OGI equipment.
- (B) A gas leak detector that meets the requirements of EPA Method 21.
- (C) Another leak detection method approved by the Department.
- (3) For a well site producing, on average, equal to or greater than 15 barrels of oil equivalent per day, and at least one well producing, on average, equal to or greater than 5 barrels of oil equivalent per day but less than 15 barrels of oil equivalent per day, the owner or operator shall:
- (i) Conduct an initial AVO inspection on or before February 8, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days.
- (ii) Conduct an initial LDAR inspection program on or before May 9, 2023, with annual inspections thereafter separated by at least 335 calendar days but not more than 395 calendar days using one or more of the following:
- (A) OGI equipment.
- (B) A gas leak detector that meets the requirements of EPA Method 21.
- (C) Another leak detection method approved by the Department.
- (4) The owner or operator of a producing well site shall calculate the average production of the well site under subsection (b) for the previous calendar year not later than February 15 and may adjust the frequency of the required LDAR inspection as follows:
- If two consecutive calculations show reduced production, the owner or operator may adopt the requirements applicable to the reduced production level.
- (ii) If a calculation shows higher production, the owner or operator shall adopt the requirements applicable to the higher production level immediately.
- (5) The owner or operator of a well site subject to paragraph (3) may submit to the appropriate Department Regional Office a request, in writing, for an exemption from the requirements of paragraph (3)(ii).
- (i) The written request must include the following:
- (A) Name and location of the well site.

- (B) A demonstration that the requirements of paragraph (3)(ii) are not technically or economically feasible for the well site.
- (C) Sufficient methods for demonstrating compliance with all applicable standards or regulations promulgated under the Clean Air Act or the Act.
- (D) Sufficient methods for demonstrating compliance with this section, §§ 129.121—129.126 and 129.128— 129.130.
- (ii) The Department will review the complete written request submitted in accordance with subparagraph (i) and approve or deny the request in writing.
- (iii) The Department will submit each exemption determination approved under subparagraph (ii) to the Administrator of the EPA for approval as a revision to the SIP. The owner or operator shall bear the costs of public hearings and notifications, including newspaper notices, required for the SIP submittal.
- (iv) The owner or operator of the well site identified in subparagraph (i)(A) shall remain subject to the requirements of paragraphs (1), (3)(i) and (4).
- (d) Requirements for a shut-in unconventional well site. The owner or operator of an unconventional well site that is temporarily shut-in is not required to perform an LDAR inspection of the well site until one of the following occurs, whichever is first:
- Sixty days after the unconventional well site is put into production.
- (2) The date of the next required LDAR inspection after the unconventional well site is put into production.
- (e) Requirements for a natural gas gathering and boosting station or a natural gas processing plant. The owner or operator of a natural gas gathering and boosting station or a natural gas processing plant shall conduct the following:
- (1) An initial AVO inspection on or before February 8, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days.
- (2) An initial LDAR inspection program on or before February 8, 2023, with quarterly inspections thereafter separated by at least 60 calendar days but not more than 120 calendar days using one or more of the following:
- (i) OGI equipment.
- (ii) A gas leak detector that meets the requirements of EPA Method 21.
- (iii) Another leak detection method approved by the Department.
- (f) Requirements for extension of the LDAR inspection interval. The owner or operator of an affected facility may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the appropriate Department Regional Office.
- (g) Fugitive emissions monitoring plan. The owner or operator shall develop, in writing, an emissions monitoring plan that covers the collection of fugitive emissions components at the subject facility within each companydefined area. The written plan must include the following elements:
- The technique used for determining fugitive emissions.

- (2) A list of fugitive emissions detection equipment, including the manufacturer and model number, that may be used at the facility.
- (3) A list of personnel that may conduct the monitoring surveys at the facility, including their training and experience
- (4) The procedure and timeframe for identifying and fixing a fugitive emissions component from which fugitive emissions are detected, including for a component that is unsafe-to-repair.
- (5) The procedure and timeframe for verifying fugitive emissions component repairs.
- (6) The procedure and schedule for verifying the fugitive emissions detection equipment is operating properly.
- (i) For OGI equipment, the verification must be completed as specified in subsection (h).
- (ii) For gas leak detection equipment using EPA Method 21, the verification must be completed as specified in subsection (i).
- (iii) For a Department-approved method, a copy of the request for approval that shows the method's equivalence to subsection (h) or subsection (i).
 - (7) A sitemap.
- (8) If using OGI, a defined observation path that meets the following:
- (i) Ensures that all fugitive emissions components are within sight of the path.
- (ii) Accounts for interferences
- (9) If using EPA Method 21, a list of the fugitive emissions components to be monitored and an identification method to locate them in the field.
- (10) A written plan for each fugitive emissions component designated as difficult-to-monitor or unsafe-tomonitor which includes the following:
- A method to identify a difficult-to-monitor or unsafeto-monitor component in the field.
- (ii) The reason each component was identified as difficult-to-monitor or unsafe-to-monitor.
- (iii) The monitoring schedule for each component identified as difficult-to-monitor or unsafe-to-monitor. The monitoring schedule for difficult-to-monitor components must include at least one survey per year no more than 13 months apart.
- (h) Verification procedures for OGI equipment. An owner or operator that identifies OGI equipment in the fugitive emissions monitoring plan in subsection (g)(6)(i) shall complete the verification by doing the following:
- Demonstrating that the OGI equipment is capable of imaging a gas:
- (i) In the spectral range for the compound of highest concentration in the potential fugitive emissions.
- (ii) That is half methane, half propane at a concentration of 10,000 ppm at a flow rate of less than or equal to 60 grams per hour (2.115 ounces per hour) from a 1/4-inch diameter orifice.
- (2) Performing a verification check each day prior to use.
- (3) Determining the equipment operator's maximum viewing distance from the fugitive emissions component and how the equipment operator will ensure that this distance is maintained.

- (4) Determining the maximum wind speed during which monitoring can be performed and how the equipment operator will ensure monitoring occurs only at wind speeds below this threshold.
- (5) Conducting the survey by using the following procedures:
- Ensuring an adequate thermal background is present to view potential fugitive emissions.
- (ii) Dealing with adverse monitoring conditions, such as wind.
- (iii) Dealing with interferences, such as steam.
- (6) Following the manufacturer's recommended calibration and maintenance procedures.
- (i) Verification procedures for gas leak detection equipment using EPA Method 21. An owner or operator that identifies gas leak detection equipment using EPA Method 21 in the fugitive emissions monitoring plan in subsection (g)(6)(ii) shall complete the verification by doing the following:
- (1) Verifying that the gas leak detection equipment meets:
- (i) The requirements of Section 6.0 of EPA Method 21 with a fugitive emissions definition of 500 ppm or greater calibrated as methane using an FID-based instrument.
- (ii) A site-specific fugitive emission definition that would be equivalent to subparagraph (i) for other equipment approved for use in EPA Method 21 by the Department.
- (2) Using the average composition of the fluid, not the individual organic compounds in the stream, when performing the instrument response factor of Section 8.1.1 of EPA Method 21.
- (3) Calculating the average stream response factor on an inert-free basis for process streams that contain nitrogen, air or other inert gases that are not organic hazardous air pollutants or VOCs.
- (4) Calibrating the gas leak detection instrument in accordance with Section 10.1 of EPA Method 21 on each day of its use using zero air, defined as a calibration gas with less than 10 ppm by volume of hydrocarbon in air, and a mixture of methane in air at a concentration less than 10,000 ppm by volume as the calibration gases.
- (5) Conducting the surveys which, at a minimum, must comply with the relevant sections of EPA Method 21, including Section 8.3.1.
- (j) Fugitive emissions detection devices. Fugitive emissions detection devices must be operated and maintained in accordance with manufacturer-recommended procedures and as required by the test method or a Department-approved method.
- (k) Background adjustment. For LDAR inspections using a gas leak detector in accordance with EPA Method 21, the owner or operator may choose to adjust the gas leak detection instrument readings to account for the background organic concentration level as determined by the procedures of Section 8.3.2 of EPA Method 21.
- Repair and resurvey provisions. The owner or operator shall repair a leak detected from a fugitive emissions component as follows:
- (1) A first attempt at repair must be made within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:

- (i) The purchase of a part is required. The repair must be completed no later than 10 calendar days after the receipt of the purchased part.
- (ii) The repair is technically infeasible because of one of the following reasons:
 - (A) It requires vent blowdown.
- (B) It requires facility shutdown.
- (C) It requires a well shut-in.
- (D) It is unsafe to repair during operation of the unit.
- (iii) A repair that is technically infeasible under subparagraph (ii) must be completed at the earliest of the following:
 - (A) After a planned vent blowdown.
 - (B) The next facility shutdown.
 - (C) Within 2 years.
- (2) The owner or operator shall resurvey the fugitive emissions component no later than 30 calendar days after the leak is repaired.
- (3) For a repair that cannot be made during the monitoring survey when the leak is initially found, the owner or operator shall do one of the following:
- (i) Take a digital photograph of the fugitive emissions component which includes:
 - (A) The date the photo was taken.
- (B) Clear identification of the component by location, such as by latitude and longitude or other descriptive landmarks visible in the picture.
- (ii) Tag the component for identification purposes.
- (4) A gas leak is considered repaired if:
- (i) There is no visible leak image when using OGI equipment calibrated according to subsection (h).
- (ii) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the fugitive emissions component for a gas leak detector calibrated according to subsection (i).
- (iii) There are no detectable emissions consistent with Section 8.3.2 of EPA Method 21.
- (iv) There is no bubbling at the leak interface using the soap solution bubble test specified in Section 8.3.3 of EPA Method 21.
- (m) Recordkeeping and reporting requirements. The owner or operator of a fugitive emissions component subject to this section shall maintain the records under § 129.130(g) and submit the reports under § 129.130(k)(3)(vi).

§ 129.128. Covers and closed vent systems.

- (a) Requirements for a cover on a storage vessel, reciprocating compressor or centrifugal compressor. The owner or operator shall perform the following for a cover of a source subject to § 129.123(b)(1)(i) or § 129.126(b)(2) or (c)(2) (relating to storage vessels; and compressors), as applicable:
- (1) Ensure that the cover and all openings on the cover form a continuous impermeable barrier over each subject source as follows:
- The entire surface area of the liquid in the storage vessel.

- (ii) The entire surface area of the liquid in the wet seal fluid degassing system of a centrifugal compressor.
- (iii) The rod packing emissions collection system of a reciprocating compressor.
- (2) Ensure that each cover opening is covered by a gasketed lid or cap that is secured in a closed, sealed position except when it is necessary to use an opening for one or more of the following:
- (i) To inspect, maintain, repair or replace equipment.
- (ii) To route a liquid, gas, vapor or fume from the source to a control device or a process that meets the applicable requirements of § 129.129 (relating to control devices) through a closed vent system designed and operated in accordance with subsection (b).
- (iii) To inspect or sample the material in a storage vessel.
- (iv) To add material to or remove material from a storage vessel, including openings necessary to equalize or balance the internal pressure of the storage vessel following changes in the level of the material in the storage vessel.
- (3) Ensure that each storage vessel thief hatch is equipped, maintained and operated with the following:
- (i) A mechanism to ensure that the lid remains properly seated and sealed under normal operating conditions, including when working, standing or breathing, or when flash emissions may be generated.
- (ii) A gasket made of a suitable material based on the composition of the fluid in the storage vessel and weather conditions.
- (4) Conduct an initial AVO inspection on or before February 8, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days for defects that could result in air emissions. Defects include the following:
 - (i) A visible crack, hole or gap in the cover.
- (ii) A visible crack, hole or gap between the cover and the separator wall.
- (iii) A broken, cracked or otherwise damaged seal or gasket on a closure device.
- (iv) A broken or missing hatch, access cover, cap or other closure device.
- (5) Inspect only those portions of the cover that extend to or above the surface and the connections on those portions of the cover, including fill ports, access hatches and gauge wells that can be opened to the atmosphere for a storage vessel that is partially buried or entirely underground.
- (6) Repair a detected leak or defect as specified in § 129.127(l) (relating to fugitive emissions components).
- (7) Maintain the records under § 129.130(h) (relating to recordkeeping and reporting) and submit the report under § 129.130(k)(3)(vii).
- (b) Requirements for a closed vent system. The owner or operator shall perform the following for each closed vent system installed on a source subject to § 129.123(b)(1)(ii), § 129.125(b)(1)(i) or (c)(1)(ii) (relating to natural gasdriven diaphragm pumps) or § 129.126(b)(2) or (c)(2):
- (1) Design the closed vent system to route the liquid, gas, vapor or fume emitted from the source to a control device or process that meets the applicable requirements in § 129.129.

- (2) Operate the closed vent system with no detectable emissions as determined by the following:
- (i) Conduct an initial AVO inspection on or before February 8, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days for defects that could result in air emissions. Defects include the following:
- (A) A visible crack, hole or gap in piping.
- (B) A loose connection.
- (C) A liquid leak.
- (D) A broken or missing cap or other closure device.
- (ii) Conducting a no detectable emissions inspection as specified in subsection (d) during the facility's scheduled LDAR inspection in accordance with § 129.127(c)(2)(ii), (c)(3)(ii) or (e)(2).
- (3) Repair a detected leak or defect as specified in § 129.127(1).
- (4) Except as specified in subparagraph (iii), if the closed vent system contains one or more bypass devices that could be used to divert the liquid, gas, vapor or fume from routing to the control device or to the process under paragraph (1), perform one or more of the following:
- (i) Install, calibrate, operate and maintain a flow indicator at the inlet to the bypass device so when the bypass device is open it does one of the following:
 - (A) Sounds an alarm.
- (B) Initiates a notification by means of a remote alarm to the nearest field office.
- (ii) Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using the following procedure:
- (A) Installing either of the following:
- (I) A car-seal.
- (II) A lock-and-key configuration.
- (B) Visually inspecting the mechanism in clause (A) to verify that the valve is maintained in the non-diverting position on or before February 8, 2023, with monthly inspections separated by at least 15 calendar days but not more than 45 calendar days.
- (C) Maintaining the records under § 129.130(i)(4).
- (iii) Subparagraphs (i) and (ii) do not apply to a low leg drain, high point bleed, analyzer vent, open-ended valve or line, or safety device.
- (5) Conduct an assessment that meets the requirements of subsection (c).
- (6) Maintain the records under § 129.130(i) and submit the reports under § 129.130(k)(3)(viii).
- (c) Requirements for closed vent system design and capacity assessment. An owner or operator that installs a closed vent system under subsection (b) shall perform a design and capacity assessment which must include the following:
- Be prepared under the supervision of an in-house engineer or qualified professional engineer.
- (2) Verify the following:
- (i) That the closed vent system is of sufficient design and capacity to ensure that the emissions from the emission source are routed to the control device or process.

- (ii) That the control device or process is of sufficient design and capacity to accommodate the emissions from the emission source.
- (3) Be certified, signed and dated by the engineer supervising the assessment, including the statement: "I certify that the closed vent design and capacity assessment was prepared under my supervision. I further certify that the assessment was conducted and this report was prepared under the requirements of 25 Pa. Code § 129.128(c). Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information."
- (d) No detectable emissions procedures. The owner or operator shall conduct the no detectable emissions inspection required under subsection (b)(2)(ii) by performing one of the following:
 - (1) Use OGI equipment that meets § 129.127(h).
- (2) Use a gas leak detection instrument that meets § 129.127(i). The owner or operator may adjust the gas leak detection instrument readings as specified in § 129.127(k).
- (3) Use another leak detection method approved by the Department.
- (4) Determine if a potential leak interface operates with no detectable emissions, if the gas leak detection instrument reading is not a leak as defined in § 129.122(a) (relating to definitions, acronyms and EPA methods)

§ 129.129. Control devices.

- (a) Applicability. This section applies to the owner or operator of each control device that receives a liquid, gas, vapor or fume from a source subject to § 129.123(b)(1)(iii), § 129.125(b)(1)(ii) or (c)(1), or § 129.126(b)(2) or (c)(2) (relating to storage vessels; natural gas-driven diaphragm pumps; and compressors).
- (1) The owner or operator shall perform the following:
- (i) Operate each control device whenever a liquid, gas, vapor or fume is routed to the control device.
- (ii) Maintain the records under § 129.130(j) (relating to recordkeeping and reporting) and submit the reports under § 129.130(k)(3)(ix).
- (2) The owner or operator may route the liquid, gas, vapor or fume from more than one source subject to § 129.123(b)(1)(iii), § 129.125(b)(1)(ii) or (c)(1), or § 129.126(b)(2) or (c)(2) to a control device installed and operated under this section.
- (b) General requirements for a control device. The owner or operator of a control device subject to this section shall install and operate one or more control devices listed in subsections (c)—(i). The owner or operator shall meet the following requirements, as applicable:
- (1) Operate the control device following the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing VOC emissions.
- (2) Ensure that the control device is maintained in a leak-free condition by conducting a physical integrity check according to the manufacturer's instructions, with monthly inspections separated by at least 15 calendar days but not more than 45 calendar days.

- (3) Maintain a pilot flame while operating the control device and monitor the pilot flame by installing a heat sensing CPMS as specified under subsection (m)(3). If the heat sensing CPMS indicates the absence of the pilot flame or if the control device is smoking or shows other signs of improper equipment operation, ensure the control device is returned to proper operation by performing the following procedures:
- Checking the air vent for obstruction and clearing an observed obstruction.
 - (ii) Checking for liquid reaching the combustor.
- (4) Operate the control device with no visible emissions, except for periods not to exceed a total of 1 minute during a 15-minute period as determined by conducting a visible emissions test according to Section 11 of EPA Method 22.
- Each monthly visible emissions test shall be separated by at least 15 calendar days but not more than 45 calendar days.
- (ii) The observation period for the test in subparagraph(i) shall be 15 minutes.
- (5) Repair the control device if it fails the visible emissions test of paragraph (4) as specified in subparagraph (i) or subparagraph (ii) and return the control device to compliant operation.
 - (i) The manufacturer's repair instructions, if available,
- (ii) The best combustion engineering practice applicable to the control device if the manufacturer's repair instructions are not available.
- (6) Ensure the control device passes the EPA Method 22 visual emissions test described in paragraph (4) following return to operation from a maintenance or repair activity.
- (7) Record the inspection, repair and maintenance activities for the control device in a maintenance and repair log.
- (c) Compliance requirements for a manufacturer-tested combustion device. The owner or operator of a control device subject to this section that installs a control device tested under 40 CFR 60.5413a(d) (relating to what are the performance testing procedures for control devices used to demonstrate compliance at my centrifugal compressor and storage vessel affected facilities?) shall meet subsection (b)(1)—(7) and the following:
- (1) Maintain the inlet gas flow rate at less than or equal to the maximum flow rate specified by the manufacturer. This is confirmed by one of the following:
- (i) Installing, operating and maintaining a flow CPMS that meets subsection (m)(1) and (2)(i) to measure gas flow rate at the inlet to the control device.
- (ii) Conducting a periodic performance test under subsection (k) instead of installing a flow CPMS to demonstrate that the mass content of VOC in the gases vented to the device is reduced by 95.0% by weight or greater.
- (2) Submit an electronic copy of the performance test results to the EPA as required by 40 CFR 60.5413a(d) in accordance with 40 CFR 60.5413a(e)(6).
- (d) Compliance requirements for an enclosed combustion device. The owner or operator of a control device subject to this section that installs an enclosed combustion device, such as a thermal vapor incinerator, catalytic vapor incinerator, boiler or process heater, shall meet subsection (b)(1)—(7) and the following:

- (1) Ensure the enclosed combustion control device is designed and operated to meet one of the following performance requirements:
- (i) To reduce the mass content of VOC in the gases vented to the device by 95.0% by weight or greater, as determined under subsection (k).
- (ii) To reduce the concentration of TOC in the exhaust gases at the outlet to the device to a level less than or equal to 275 ppmvd as propane corrected to 3% oxygen as determined under subsection (l).
- (iii) To operate at a minimum temperature of 760 "Celsius (1,400 "Fahrenheit), if it is demonstrated during the performance test conducted under subsection (k) that combustion zone temperature is an indicator of destruction efficiency.
- (iv) To introduce the vent stream into the flame zone of the boiler or process heater if a boiler or process heater is used as the control device.
- (2) Install, calibrate, operate and maintain a CPMS according to the manufacturer's specifications and subsection (m) to measure the values of the operating parameters appropriate to the control device as follows:
- (i) For a thermal vapor incinerator that demonstrates under subsection (m)(6)(i) that combustion zone temperature is an accurate indicator of performance, a temperature CPMS that meets subsection (m)(1) and (4) with the temperature sensor installed at a location representative of the combustion zone temperature.
- (ii) For a catalytic vapor incinerator, a temperature CPMS capable of monitoring temperature at two locations and that meets subsection (m)(1) and (4) with one temperature sensor installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor installed in the vent stream at the nearest feasible point to the catalyst bed outlet.
- (iii) For a boiler or process heater that demonstrates under subsection (m)6%(i) that combustion zone temperature is an accurate indicator of performance, a temperature CPMS that meets subsection (m)(1) and (4) with the temperature sensor installed at a location representative of the combustion zone temperature. The monitoring requirements do not apply if the boiler or process heater meets either of the following:
- (A) Has a design heat input capacity of 44 megawatts (150 MMBtu per hour) or greater.
- (B) Introduces the vent stream with the primary fuel or uses the vent stream as the primary fuel.
- (iv) For a control device complying with paragraph (1)(ii), an organic concentration CPMS that meets subsection (m)(1) and (5) that measures the concentration level of organic compounds in the exhaust vent stream from the control device.
- (3) Operate the control device in compliance with the operating parameter value established under subsection (m)(6).
- (4) Calculate the daily average of the monitored operating parameter for each operating day, using the valid data recorded by the monitoring system under subsection (m)(7).
- (5) Ensure that the daily average of the monitoring parameter value calculated under paragraph (4) complies with the parameter value established under paragraph (3) as specified in subsection (m)(9).

- (6) Operate the CPMS installed under paragraph (2) whenever the source is operating, except during the times specified in subsection (m)(8)(iii).
- (e) Compliance requirements for a flare. The owner or operator of a control device subject to this section that installs a flare designed and operated in accordance with 40 CFR 60.18(b) (relating to general control device and work practice requirements) shall meet subsection (b)(3)—(7).
- (f) Compliance requirements for a carbon adsorption system. The owner or operator of a control device subject to this section that installs a carbon adsorption system shall meet subsection (b)(1) and (2) and the following:
- (1) Design and operate the carbon adsorption system to reduce the mass content of VOC in the gases vented to the device as demonstrated by one of the following:
- (i) Determining the VOC emission reduction is 95.0% by weight or greater as specified in subsection (k).
- (ii) Reducing the concentration of TOC in the exhaust gases at the outlet to the device to a level less than or equal to 275 ppmvd as propane corrected to 3% oxygen as determined under subsection (I).
- (iii) Conducting a design analysis in accordance with subsection (g)(6) or subsection (h)(2) as applicable.
- (2) Include a carbon replacement schedule in the design of the carbon adsorption system.
- (3) Replace the carbon in the control device with fresh carbon on a regular schedule that is no longer than the carbon service life established according to the design analysis in subsection (g)(6) or subsection (h)(2) or according to the replacement schedule in paragraph (2).
- (4) Manage the spent carbon removed from the carbon adsorption system in paragraph (3) by one of the following:
- (i) Regenerating or reactivating the spent carbon in one of the following:
- (A) A thermal treatment unit for which the owner or operator has been issued a permit under 40 CFR Part 270 (relating to EPA administered permit programs: the hazardous waste permit program) that implements the requirements of 40 CFR Part 264, Subpart X (relating to miscellaneous units).
- (B) A unit equipped with operating organic air emission controls in accordance with an emissions standard for VOC under a subpart in 40 CFR Part 60 (relating to standards of performance for new stationary sources) or 40 CFR Part 63 (relating to National emission standards for hazardous air pollutants for source categories).
 - (ii) Burning the spent carbon in one of the following:
- (A) A hazardous waste incinerator, boiler or industrial furnace for which the owner or operator complies with the requirements of 40 CFR Part 63, Subpart EEE (relating to National emission standards for hazardous air pollutants from hazardous waste combustors) and has submitted a Notification of Compliance under 40 CFR 63.1207(j) (relating to what are the performance testing requirements?).
- (B) An industrial furnace for which the owner or operator has been issued a permit under 40 CFR Part 270 that implements the requirements of 40 CFR Part 266, Subpart H (relating to hazardous waste burned in boilers and industrial furnaces).

- (C) An industrial furnace designed and operated in accordance with the interim status requirements of 40 CFR Part 266, Subpart H.
- (g) Additional compliance requirements for a regenerative carbon adsorption system. The owner or operator of a control device subject to this section that installs a regenerative carbon adsorption system shall meet subsection (f) and the following:
- (1) Install, calibrate, operate and maintain a CPMS according to the manufacturer's specifications and the applicable requirements of subsection (m) to measure the values of the operating parameters appropriate to the control device as follows:
- (i) For a source complying with subsection (f)(1)(i), a flow CPMS system that meets the requirements of subsection (m)(1) and (2)(ii) to measure and record the average total regeneration steam mass flow or volumetric flow during each carbon bed regeneration cycle. The owner or operator shall inspect the following:
- (A) The mechanical connections for leakage with monthly inspections separated by at least 15 calendar days but not more than 45 calendar days.
- (B) The components of the flow CPMS for physical and operational integrity if the flow CPMS is not equipped with a redundant flow sensor with quarterly inspections separated by at least 60 calendar days but not more than 120 calendar days.
- (C) The electrical connections of the flow CPMS for oxidation and galvanic corrosion if the flow CPMS is not equipped with a redundant flow sensor with quarterly inspections separated by at least 60 calendar days but not more than 120 calendar days.
- (ii) For a source complying with subsection (f)(1)(i), a temperature CPMS that meets the requirements of subsection (m)(1) and (4) to measure and record the average carbon bed temperature for the duration of the carbon bed steaming cycle and measure the actual carbon bed temperature after regeneration and within 15 minutes of completing the cooling cycle.
- (iii) For a source complying with subsection (f)(1)(ii), an organic concentration CPMS that meets subsection (m)(1) and (5) that measures the concentration level of organic compounds in the exhaust vent stream from the control desires.
- (2) Operate the control device in compliance with the operating parameter value established under subsection (m)(6).
- (3) Calculate the daily average of the applicable monitored operating parameter for each operating day, using the valid data recorded by the CPMS as specified in subsection (m)(7).
- (4) Ensure that the daily average of the monitoring parameter value calculated under paragraph (3) complies with the parameter value established under paragraph (2) as specified in subsection (m/9).
- (5) Operate the CPMS installed in paragraph (1) whenever the source is operating, except during the times specified in subsection (m)(8)(iii).
- (6) Ensure that the design analysis to meet subsection (f)(1)(iii) and (2) for the regenerable carbon adsorption system meets the following:
- (i) Includes an analysis of the vent stream, including the following information:
- (A) Composition.

- (B) Constituent concentrations.
- (C) Flowrate.
- (D) Relative humidity.
- (E) Temperature.
- (ii) Establishes the following parameters for the regenerable carbon adsorption system:
- (A) Design exhaust vent stream organic compound concentration level.
 - (B) Adsorption cycle time.
 - (C) Number and capacity of carbon beds.
- (D) Type and working capacity of activated carbon used for the carbon beds.
- (E) Design total regeneration stream flow over the period of each complete carbon bed regeneration cycle.
 - (F) Design carbon bed temperature after regeneration.
 - (G) Design carbon bed regeneration time.
 - (H) Design service life of the carbon.
- (h) Additional compliance requirements for a nonregenerative carbon adsorption system. The owner or operator of a control device subject to this section that installs a non-regenerative carbon adsorption system shall meet subsection (f) and the following:
- (1) Monitor the design carbon replacement interval established in subsection (f)(2) or paragraph (2). The design carbon replacement interval must be based on the total carbon working capacity of the control device and the source operating schedule.
- (2) Ensure that the design analysis to meet subsection (f)(1)(iii) and (2) for a non-regenerable carbon adsorption system, such as a carbon canister, meets the following:
- (i) Includes an analysis of the vent stream including the following information:
- (A) Composition.
- (B) Constituent concentrations.
- (C) Flowrate.
- (D) Relative humidity.
- (E) Temperature.
- (ii) Establishes the following parameters for the nonregenerable carbon adsorption system:
- (A) Design exhaust vent stream organic compound concentration level.
- (B) Capacity of the carbon bed.
- (C) Type and working capacity of activated carbon used for the carbon bed.
- (D) Design carbon replacement interval based on the total carbon working capacity of the control device and the source operating schedule.
- (iii) Incorporates dual carbon canisters in case of emission breakthrough occurring in one canister.
- (i) Compliance requirements for a condenser or nondestructive control device. The owner or operator of a control device subject to this section that installs a condenser or other non-destructive control device shall meet subsection (b)(1) and (2) and the following:
- (1) Design and operate the condenser or other nondestructive control device to reduce the mass content of VOC in the gases vented to the device as demonstrated by one of the following:

- (i) Determining the VOC emissions reduction is 95.0% by weight or greater under subsection (k).
- (ii) Reducing the concentration of TOC in the exhaust gases at the outlet to the device to a level less than or equal to 275 ppmvd as propane corrected to 3% oxygen as determined under subsection (I).
- (iii) Conducting a design analysis in accordance with paragraph (7).
- (2) Prepare a site-specific monitoring plan that addresses the following CPMS design, data collection, and quality assurance and quality control elements:
- (i) The performance criteria and design specifications for the CPMS equipment, including the following:
- (A) The location of the sampling interface that allows the CPMS to provide representative measurements. For a temperature CPMS that meets the requirements of subsection (m)(1) and (4) the sensor must be installed in the exhaust vent stream as detailed in the procedures of the site-specific monitoring plan.
- (B) Equipment performance checks, system accuracy audits or other audit procedures.
- (I) Performance evaluations of each CPMS shall be conducted in accordance with the site-specific monitoring plan.
- (II) CPMS performance checks, system accuracy audits or other audit procedures specified in the site-specific monitoring plan shall be conducted at least once every 12 months.
- (ii) Ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(b) (relating to monitoring requirements).
- (iii) Ongoing reporting and recordkeeping procedures in accordance with 40 CFR 60.7(c), (d) and (f) (relating to notification and record keeping).
- (3) Install, calibrate, operate and maintain a CPMS according to the site-specific monitoring plan described in paragraph (2) and the applicable requirements of subsection (m) to measure the values of the operating parameters appropriate to the control device as follows:
- (i) For a source complying with paragraph (1)(i), a temperature CPMS that meets subsection (m)(1) and (4) to measure and record the average condenser outlet temperature.
- (ii) For a source complying with paragraph (1)(ii), an organic concentration CPMS that meets subsection (m)(1) and (5) that measures the concentration level of organic compounds in the exhaust vent stream from the control desires.
- (4) Operate the control device in compliance with the operating parameter value established under subsection (m)(6)
- (5) Calculate the daily average of the applicable monitored operating parameter for each operating day, using the valid data recorded by the CPMS as follows:
- (i) For a source complying with paragraph (1)(i), use the calculated daily average condenser outlet temperature as specified in subsection (m)(7) and the condenser performance curve established under subsection (m)(6)(iii) to determine the condenser efficiency for the current operating day. Calculate the 365-day rolling average TOC emission reduction, as appropriate, from the condenser efficiencies as follows:

- (A) If there is less than 120 days of data for determining average TOC emission reduction, calculate the average TOC emission reduction for the first 120 days of operation. Compliance is demonstrated with paragraph (1)(i) if the 120-day average TOC emission reduction is equal to or greater than 95.0% by weight.
- (B) After 120 days and no more than 364 days of operation, calculate the average TOC emission reduction as the TOC emission reduction averaged over the number of days of operation for which there is data. Compliance is demonstrated with paragraph (1)(i) if the average TOC emission reduction is equal to or greater than 95.0% by weight.
- (C) If there is data for 365 days or more of operation, compliance is demonstrated with the TOC emission reduction if the rolling 365-day average TOC emission reduction calculated in subparagraph (i) is equal to or greater than 95.0% by weight.
- (ii) For a source complying with paragraph (1)(ii), calculate the daily average concentration for each operating day, using the data recorded by the CPMS as specified in subsection (m)(7). Compliance is demonstrated with paragraph (1)(ii) if the daily average concentration is less than the operating parameter under paragraph (4) as specified in subsection (m)(9).
- (6) Operate the CPMS installed in accordance with paragraph (3) whenever the source is operating, except during the times specified in subsection (m)(8)(iii).
- (7) Ensure that the design analysis to meet paragraph (1)(iii) for a condenser or other non-destructive control device meets the following:
- (i) Includes an analysis of the vent stream including the following information:
- (A) Composition.
- (B) Constituent concentrations.
- (C) Flowrate.
- (D) Relative humidity.
- (E) Temperature.
- (ii) Establishes the following parameters for the condenser or other non-destructive control device:
- (A) Design outlet organic compound concentration
- (B) Design average temperature of the condenser exhaust vent stream.
- (C) Design average temperatures of the coolant fluid at the condenser inlet and outlet.
- (j) General performance test requirements. The owner or operator shall meet the following performance test requirements:
- (1) The owner or operator shall do the following, as applicable:
- Except as specified in subparagraph (iii), conduct an initial performance test within 180 days after installation of a control device.
- (ii) Except as specified in subparagraph (iii), conduct a performance test of an existing control device on or before August 7, 2023, unless the owner or operator of the control device is complying with an established performance test interval, in which case the current schedule should be maintained.

- (iii) The performance test in subparagraph (i) or subparagraph (ii) is not required if the owner or operator meets one or more of the following:
- (A) Installs a manufacturer-tested combustion device that meets the requirements of subsection (c).
- (B) Installs a flare that meets the requirements of subsection (e).
- (C) Installs a boiler or process heater with a design heat input capacity of 44 megawatts (150 MMBtu per hour) or greater.
- (D) Installs a boiler or process heater which introduces the vent stream with the primary fuel or uses the vent stream as the primary fuel.
- (E) Installs a boiler or process heater which burns hazardous waste that meets one or more of the following:
- (I) For which an operating permit was issued under 40 CFR Part 270 (relating to EPA administered permit programs: the hazardous waste permit program) and complies with the requirements of 40 CFR Part 266, Subpart H.
- (II) For which compliance with the interim status requirements of 40 CFR Part 266, Subpart H has been certified.
- (III) Which complies with 40 CFR Part 63, Subpart EEE and for which a Notification of Compliance under 40 CFR 63.1207(j) was submitted to the Department.
- (IV) Which complies with 40 CFR Part 63, Subpart EEE and for which a Notification of Compliance under 40 CFR 63.1207(j) will be submitted to the Department within 90 days of the completion of the initial performance test report unless a written request for an extension is submitted to the Department.
- (F) Installs a hazardous waste incinerator which meets the requirements of 40 CFR Part 63, Subpart EEE and for which the Notification of Compliance under 40 CFR 63 1207(i):
- (I) Was submitted to the Department.
- (II) Will be submitted to the Department within 90 days of the completion of the initial performance test report unless a written request for an extension is submitted to the Department.
- (G) Requests the performance test be waived under 40 CFR 60.8(b) (relating to performance tests).
- (2) Conduct a periodic performance test no more than 60 months after the most recent performance test unless the owner or operator:
- Monitors the inlet gas flow for a manufacturertested combustion device under subsection (c)(1)(i).
- (ii) Installs a control device exempt from testing requirements under paragraph (1)(iii)(A)—(G).
- (iii) Establishes a correlation between firebox or combustion chamber temperature and the VOC performance level for an enclosed combustion device under subsection (d)(2)(iii)
- (3) Conduct a performance test when establishing a new operating limit.
- (k) Performance test method for demonstrating compliance with a control device weight-percent VOC emission reduction requirement. Demonstrate compliance with the control device weight-percent VOC emission reduction requirements of subsections (c)(1)(ii), (d)(1)(i), (f)(1)(i) and (i)(1)(i) by meeting subsection (j) and the following:

- Conducting a minimum of three test runs of at least 1-hour duration.
- (2) Using EPA Method 1 or EPA Method 1A, as appropriate, to select the sampling sites which must be located at the inlet of the first control device and at the outlet of the final control device. References to particulate mentioned in EPA Method 1 or EPA Method 1A do not apply to this paragraph.
- (3) Using EPA Method 2, EPA Method 2A, EPA Method 2C or EPA Method 2D, as appropriate, to determine the gas volumetric flowrate.
- (4) Using EPA Method 25A to determine compliance with the control device percent VOC emission reduction performance requirement using the following procedure:
- Convert the EPA Method 25A results to a dry basis, using EPA Method 4.
- (ii) Compute the mass rate of TOC using the following equations:

$$E_i = K_2C_iM_pQ_i$$

$$E_o = K_2C_oM_pQ_o$$

Where:

- E_i = Mass rate of TOC at the inlet of the control device on a dry basis, in kilograms per hour (pounds per hour).
- E_o = Mass rate of TOC at the outlet of the control device on a dry basis, in kilograms per hour (pounds per hour).
- $K_2 = {
 m Constant}, \ 2.494 \times 10^{-6} \ ({
 m ppm}) \ ({
 m mole~per~standard}$ cubic meter) (kilogram per gram) (minute per hour) where standard temperature (mole per standard cubic meter) is 20 "Celsius.

Or

- $K_{\rm p}$ = Constant, 1.554 × 10⁻⁷ (ppm) (lb-mole per standard cubic feet) (minute per hour), where standard temperature (lb-mole per standard cubic feet) is 68 "Fahrenheit.
- C_i = Concentration of TOC, as propane, of the gas stream as measured by EPA Method 25A at the inlet of the control device, ppmvd.
- C_o = Concentration of TOC, as propane, of the gas stream as measured by EPA Method 25A at the outlet of the control device, ppmvd.
- M_p = Molecular weight of propane, 44.1 gram per mole (pounds per lb-mole).
- Q_i = Flowrate of gas stream at the inlet of the control device in dry standard cubic meter per minute (dry standard cubic feet per minute).
- $Q_{\rm o}$ = Flowrate of gas stream at the outlet of the control device in dry standard cubic meter per minute (dry standard cubic feet per minute).
- (iii) Calculate the percent reduction in TOC as follows:

$$R_{cd} = \frac{E_i - E_o}{E_i} * 100\%$$

Where:

 R_{cd} = Control efficiency of control device, percent.

E_i = Mass rate of TOC at the inlet to the control device as calculated in subparagraph (ii), kilograms per hour (pounds per hour).

- E_{ρ} = Mass rate of TOC at the outlet of the control device as calculated in subparagraph (ii), kilograms per hour (pounds per hour).
- (iv) If the vent stream entering a boiler or process heater with a performance testing requirement is introduced with the combustion air or as a secondary fuel, the owner or operator shall:
- (A) Calculate E_i in subparagraph (ii) by using the TOC concentration in all combusted vent streams, primary fuels and secondary fuels as C_i .
- (B) Calculate E_o in subparagraph (ii) by using the TOC concentration exiting the device as C_o .
- (C) Determine the weight-percent reduction of TOC across the device in accordance with subparagraph (iii).
- (5) The weight-percent reduction of TOC across the control device represents the VOC weight-percent reduction for demonstration of compliance with subsections (c)(1)(ii), (d)(1)(i), (f)(1)(i) and (i)(1)(i).
- Performance test method for demonstrating compliance with an outlet concentration requirement. Demonstrate compliance with the TOC concentration requirement of subsections (d)(1)(ii), (f)(1)(ii) and (i)(1)(ii) by meeting subsection (j) and the following:
- Conducting a minimum of three test runs of at least 1-hour duration.
- (2) Using EPA Method 1 or EPA Method 1A, as appropriate, to select the sampling sites which must be located at the outlet of the control device. References to particulate mentioned in EPA Method 1 or EPA Method 1A do not apply to this paragraph.
- (3) Using EPA Method 2, EPA Method 2A, EPA Method 2C, or EPA Method 2D, as appropriate, to determine the gas volumetric flowrate.
- (4) Using EPA Method 25A to determine compliance with the TOC concentration requirement using the following procedures:
- (i) Measure the TOC concentration, as propane.
- (ii) For a control device subject to subsection (f) or subsection (i), the results of EPA Method 25A in subparagraph (i) may be adjusted by subtracting the concentration of methane and ethane measured using EPA Method 18 taking either:
 - (A) An integrated sample.
- (B) A minimum of four grab samples per hour using the following procedures:
- (I) Taking the samples at approximately equal intervals in time, such as 15-minute intervals during the run.
- (II) Taking the samples during the same time as the EPA Method 25A sample.
- (III) Determining the average methane and ethane concentration per run.
- (iii) The TOC concentration must be adjusted to a dry basis, using EPA Method 4.
- (iv) The TOC concentration must be corrected to 3% oxygen as follows:
- (A) The oxygen concentration must be determined using the emission rate correction factor for excess air, integrated sampling and analysis procedures from one of the following methods:
 - (I) EPA Method 3A.
 - (II) EPA Method 3B.

- (III) ASTM D6522-00.
- (IV) ANSI/ASME PTC 19.10-1981, Part 10.
- (B) The samples for clause (A) must be taken during the same time that the samples are taken for determining the TOC concentration.
- (C) The TOC concentration for percent oxygen must be corrected as follows:

$$C_c = C_m \left(\frac{17.9}{20.9 - \% O_{2m}} \right)$$

Where:

 C_c = TOC concentration, as propane, corrected to 3% oxygen, ppmvd.

 C_m = TOC concentration, as propane, ppmvd.

 $\%O_{2m}$ = Concentration of oxygen, percent by volume as measured, dry.

- (m) Continuous parameter monitoring system requirements. The owner or operator of a source subject to § 129.121(a) (relating to general provisions and applicability) and controlled by a device listed in subsections (c)—(i) that is required to install a CPMS shall:
- (1) Ensure the CPMS measures the applicable parameter at least once every hour and continuously records either:
 - The measured operating parameter value.
- (ii) The block average operating parameter value for each 1-hour period calculated using the following proce-
- (A) The block average from all measured data values during each period.
- (B) If values are measured more frequently than once per minute, a single value for each minute may be used instead of all measured values.
- (2) Ensure the flow CPMS has either:
- (i) An accuracy of ±2% or better at the maximum expected flow rate.
- (ii) A measurement sensitivity of 5% of the flow rate or 10 standard cubic feet per minute, whichever is greater.
- (3) Ensure the heat-sensing CPMS indicates the presence of the pilot flame while emissions are routed to the control device. Heat-sensing CPMS are exempt from the calibration, quality assurance and quality control requirements in this section.
- (4) Ensure the temperature CPMS has a minimum accuracy of ±1% of the temperature being monitored in "Celsius (±1.8% in "Fahrenheit) or ±2.5 "Celsius (±4.5 "Fahrenheit), whichever value is greater.
- (5) Ensure the organic concentration CPMS meets the requirements of Performance Specification 8 or 9 of 40 CFR Part 60, Appendix B (relating to performance specifications).
- (6) Establish the operating parameter value to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirement as follows:
- (i) For a parameter value established while conducting a performance test under subsection (k) or subsection (l):

- (A) Base each minimum operating parameter value on the value established while conducting the performance test and supplemented, as necessary, by the design analysis of subsection (g)(6), subsection (h)(2) or subsection (i)(7), the manufacturer's recommendations, or both.
- (B) Base each maximum operating parameter value on the value established while conducting the performance test and supplemented, as necessary, by the design analysis of subsection (g)(6), subsection (h)(2) or subsection (i)(7), the manufacturer's recommendations, or both.
- (ii) Except as specified in clause (C), for a parameter value established using a design analysis in subsection (g)(6), subsection (h)(2) or subsection (i)(7):
- (A) Base each minimum operating parameter value on the value established in the design analysis and supplemented, as necessary, by the manufacturer's recommendations.
- (B) Base each maximum operating parameter value on the value established in the design analysis and supplemented, as necessary, by the manufacturer's recommendations.
- (C) If the owner or operator and the Department do not agree on a demonstration of control device performance using a design analysis as specified in clause (A) or (B), then the owner or operator shall perform a performance test under subsection (k) or subsection (l) to resolve the disagreement. The Department may choose to have an authorized representative observe the performance test.
- (iii) For a condenser, establish a condenser performance curve showing the relationship between condenser outlet temperature and condenser control efficiency that demonstrates the condenser complies with the applicable performance requirements in subsection (i)(1) as follows:
- (A) Based on the value measured while conducting a performance test under subsection (k) or subsection (l) and supplemented, as necessary, by a condenser design analysis performed under subsection (i)(7), the manufacturer's recommendations, or both.
- (B) Based on the value from a condenser design analysis performed under subsection (i)(7) supplemented, as necessary, by the manufacturer's recommendations.
- (7) Except for the CPMS in paragraphs (2) and (3), calculate the daily average for each monitored parameter for each operating day using the data recorded by the CPMS. Valid data points must be available for 75% of the operating hours in an operating day to compute the daily average where the operating day is:
- A 24-hour period if the control device operation is continuous.
- (ii) The total number of hours of control device operation per 24-hour period.
- (8) Except as specified in subparagraph (iii), do both of the following:
- Ensure the data recorded by the CPMS is used to assess the operation of the control device and associated control system.
- (ii) Report the failure to collect the required data in paragraph (1) as a deviation of the monitoring requirements.
- (iii) The requirements of subparagraphs (i) and (ii) do not apply during:
- (A) A monitoring system malfunction.

- (B) A repair associated with a monitoring system malfunction.
- (C) A required monitoring system quality assurance or quality control activity.
- (9) Determine compliance with the established parameter value by comparing the calculated daily average to the established operating parameter value as follows:
- (i) For a minimum operating parameter established in paragraph $(6|\hat{n})(A)$ or paragraph $(6|\hat{n})(A)$, the control device is in compliance if the calculated value is equal to or greater than the established value.
- (ii) For a maximum operating parameter established in paragraph (6)(i)(B) or paragraph (6)(ii)(B), the control device is in compliance if the calculated value is less than or equal to the established value.

§ 129.130. Recordkeeping and reporting.

- (a) Recordkeeping. The owner or operator of a source subject to §§ 129.121—129.129 shall maintain the applicable records onsite or at the nearest local field office for 5 years. The records shall be made available to the Department upon request.
- (b) Storage vessels. The records for each storage vessel must include the following, as applicable:
- (1) The identification and location of each storage vessel subject to § 129.123 (relating to storage vessels). The location of the storage vessel shall be in latitude and longitude coordinates in decimal degrees to an accuracy and precision of 5 decimals of a degree using the North American Datum of 1983.
- (2) Each deviation when the storage vessel was not operated in compliance with the requirements specified in § 129.123.
- (3) The identity of each storage vessel removed from service under § 129.123(e) and the date on which it was removed from service.
- (4) The identity of each storage vessel returned to service under § 129.123(f) and the date on which it was returned to service.
- (5) The identity of each storage vessel and the VOC potential to emit calculation under § 129.123(a)(2).
- (6) The identity of each storage vessel and the actual VOC emission calculation under § 129.123(c)(2)(i) including the following information:
- (i) The date of each monthly calculation performed under § 129.123(c)(2)(i).
- (ii) The calculation determining the actual VOC emissions each month.
- (iii) The calculation demonstrating that the actual VOC emissions are less than 2.7 TPY determined as a 12month rolling sum.
- (7) The records documenting the time the skid-mounted or mobile storage vessel under § 129.123(d)(1) is located on site. If a skid-mounted or mobile storage vessel is removed from a site and either returned or replaced within 30 calendar days to serve the same or similar function, count the entire period since the original storage vessel was removed towards the number of consecutive days.
- (8) The identity of each storage vessel required to reduce VOC emissions under § 129.123(b)(1) and the demonstration under § 129.123(b)(1)(iv).

- (c) Natural gas-driven continuous bleed pneumatic controllers. The records for each natural gas-driven continuous bleed pneumatic controller must include the following, as applicable:
- (1) The required compliance date, identification, location and manufacturer specifications for each natural gas-driven continuous bleed pneumatic controller subject to § 129.124(c) (relating to natural gas-driven continuous bleed pneumatic controllers).
- (2) Each deviation when the natural gas-driven continuous bleed pneumatic controller was not operated in compliance with the requirements specified in 8 129 124(c).
- (3) If the natural gas-driven continuous bleed pneumatic controller is located at a natural gas processing plant, the documentation that the natural gas bleed rate is zero.
- (4) For a natural gas-driven continuous bleed pneumatic controller under § 129.124(b), the determination based on a functional requirement for why a natural gas bleed rate greater than the applicable standard is required. A functional requirement includes one or more of the following:
- (i) Response time.
- (ii) Safety.
- (iii) Positive actuation.
- (d) Natural gas-driven diaphragm pumps. The records for each natural gas-driven diaphragm pump must include the following, as applicable:
- (1) The required compliance date, location and manufacturer specifications for each natural gas-driven diaphragm pump subject to § 129.125 (relating to natural gas-driven diaphragm pumps).
- (2) Each deviation when the natural gas-driven diaphragm pump was not operated in compliance with the requirements specified in § 129.125.
- (3) For a natural gas-driven diaphragm pump under § 129.125(d), the records of the days of operation each calendar year. Any period of operation during a calendar day counts toward the 90-calendar-day threshold.
- (4) For a natural gas-driven diaphragm pump under § 129.125(c)(1), maintain the following records:
- (i) The records under subsection (j) for the control device type.
 - (ii) One of the following:
- (A) The results of a performance test under § 129.129(k) or (l) (relating to control devices).
- (B) A design evaluation indicating the percentage of VOC emissions reduction the control device is designed to achieve.
- (C) The manufacturer's specifications indicating the percentage of VOC emissions reduction the control device is designed to achieve.
- (5) For a well site with no available control device or process under § 129.125(c)(2), maintain a copy of the certification submitted under subsection (k)(3)(iii)(B)(II).
- (6) The engineering assessment substantiating a claim under § 129.125(c)(3), including the certification under § 129.125(c)(3)(ii)(C).
- (7) For a natural gas-driven diaphragm pump required to reduce VOC emissions under § 129.125(b)(1), the demonstration under § 129.125(b)(1)(iii).

- (e) Reciprocating compressors. The records for each reciprocating compressor must include the following, as applicable:
- (1) For a reciprocating compressor under § 129,126(b)(1)(i) (relating to compressors), the following records:
- (i) The cumulative number of hours of operation.
- (ii) The date and time of each rod packing replacement.
- (2) For a reciprocating compressor under $\S 129.126(b)(1)(ii)$, the following records:
- The number of months since the previous replacement of the rod packing.
 - (ii) The date of each rod packing replacement.
- (3) For a reciprocating compressor under § 129.126(b)(2), the following records:
- (i) A statement that emissions from the rod packing are being routed to a control device or a process through a closed vent system under negative pressure.
- (ii) The date of installation of a rod packing emissions collection system and closed vent system as specified in § 129.126(b)(2).
- (4) Each deviation when the reciprocating compressor was not operated in compliance with § 129.126(b).
- (f) Centrifugal compressors. The records for each centrifugal compressor must include the following, as applicable:
- An identification of each existing centrifugal compressor using a wet seal system subject to § 129.126(c).
- (2) Each deviation when the centrifugal compressor was not operated in compliance with § 129.126(c).
- (3) For a centrifugal compressor required to reduce VOC emissions under § 129.126(c)(1), the demonstration under § 129.126(c)(3).
- (g) Fugitive emissions components. The records for each fugitive emissions component must include the following, as applicable:
- (1) For an oil well site subject to § 129.127(c)(1)(ii) (relating to fugitive emissions components):
- The location of each well and its United States Well ID Number.
- (ii) The analysis documenting a GOR of less than 300 standard cubic feet of gas per barrel of oil produced, conducted using generally accepted methods. The analysis must be signed by and include a certification by the responsible official stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and
- (2) For each well site, the average production calculations required under § 129.127(b)(1) and § 129.127(c)(4).
- (3) For a well site subject to § 129.127(c)(2) or (c)(3), a natural gas gathering and boosting station or a natural gas processing plant:
- (i) The fugitive emissions monitoring plan under § 129.127(g).
- (ii) The records of each monitoring survey conducted under § 129.127(c)(2)(ii), (c)(3)(ii) or (e)(2). The monitoring survey must include the following information:
- (A) The facility name and location.
- (B) The date, start time and end time of the survey.

- (C) The name of the equipment operator performing the survey.
- (D) The monitoring instrument used.
- (E) The ambient temperature, sky conditions and maximum wind speed at the time of the survey.
- (F) Each deviation from the monitoring plan or a statement that there were none.
- (G) Documentation of each fugitive emission including:
- (I) The identification of each component from which fugitive emissions were detected.
- (II) The instrument reading of each fugitive emissions component that meets the definition of a leak under § 129.122(a) (relating to definitions, acronyms and EPA methods).
- (III) The repair methods applied in each attempt to repair the component.
- (IV) The tagging or digital photographing of each component not repaired during the monitoring survey in which the fugitive emissions were discovered.
- (V) The reason a component was placed on delay of repair.
- (VI) The date of successful repair of the component.
- (VII) If repair of the component was not completed during the monitoring survey in which the fugitive emissions were discovered, the information on the instrumentation or the method used to resurvey the component after repair.
- (h) Covers. The records for each cover include the results of each cover inspection under § 129.128(a) (relating to covers and closed vent systems).
- (i) Closed vent systems. The records for each closed vent system must include the following, as applicable:
- The results of each closed vent system inspection under § 129.128(b)(2).
- (2) For the no detectable emissions inspections of § 129.128(d), a record of the monitoring survey as specified under subsection (g)(3)(ii).
- (3) The engineering assessment under § 129.128(c), including the certification under § 129.128(c)(3).
- (4) If the closed vent system includes a bypass device subject to § 129.128(b)(4), a record of:
- (i) Each time the alarm is activated.
- (ii) Each time the key is checked out, as applicable.
- (iii) Each inspection required under § 129.128(b)(4)(ii)(B).
- (j) Control devices. The records for each control device must include the following, as applicable:
- Make, model and serial number of the purchased device.
- (2) Date of purchase.
- (3) Copy of purchase order.
- (4) Location of the control device in latitude and longitude coordinates in decimal degrees to an accuracy and precision of 5 decimals of a degree using the North American Datum of 1983.
- (5) For the general requirements under § 129.129(b):

- (i) The manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing emissions under § 129.129(b)(1).
- (ii) The results of each monthly physical integrity check performed under § 129.129(b)(2).
- (iii) The CPMS data which indicates the presence of a pilot flame during the device's operation under § 129.129(b)(3).
- (iv) The results of the visible emissions test under § 129.129(b)(4) using Figure 22-1 in EPA Method 22 or a form which includes the following:
- (A) The name of the company that owns or operates the control device.
 - (B) The location of the control device.
- (C) The name and affiliation of the person performing the observation.
- (D) The sky conditions at the time of observation.
- (E) Type of control device.
- (F) The clock start time.
- (G) The observation period duration, in minutes and seconds.
- (H) The accumulated emission time, in minutes and seconds.
- (I) The clock end time.
- (v) The results of the visible emissions test required in § 129.129(b)(6) under subparagraph (iv) following a return to operation from a maintenance or repair activity performed under § 129.129(b)(5).
- (vi) The maintenance and repair log under § 129.129(b)(7).
- (6) For a manufacturer-tested combustion control device under § 129.129(c), maintain the following records:
 - (i) The records specified in paragraph (5)(i)-(vi).
 - (ii) The manufacturer's specified inlet gas flow rate.
 - (iii) The CPMS results under § 129.129(c)(1)(i).
- (iv) The results of each performance test conducted under § 129.129(c)(1)(ii) as performed under § 129.129(k).
- (7) For an enclosed combustion device in § 129.129(d):
- (i) The records specified in paragraph (5)(i)-(vi).
- (ii) The results of each performance test conducted under § 129.129(d)(1)(i) as performed under § 129.129(k).
- (iii) The results of each performance test conducted under § 129.129(d)(1)(ii) as performed under § 129.129(l).
- (iv) The data and calculations for the CPMS installed, operated or maintained under § 129.129(d)(2).
- (8) For a flare in § 129.129(e), the records specified in paragraph (5)(iii)—(vi).
- (9) For a regenerative carbon adsorption device in § 129.129(g):
- (i) The records specified in paragraph (5)(i) and (ii).
- (ii) The results of the performance test conducted under § 129.129(f)(1)(i) as performed under § 129.129(k).
- (iii) The results of the performance test conducted under § 129.129(f)(1)(ii) as performed under § 129.129(1).

- (iv) The control device design analysis, if one is performed under § 129.129(g)(6).
- (v) The data and calculations for a CPMS installed, operated or maintained under § 129.129(g)(1)—(5).
- (vi) The schedule for carbon replacement, as determined by § 129.129(f)(2) or the design analysis requirements of § 129.129(g)(6) and records of each carbon replacement under § 129.129(f)(3) and (4).
- (10) For a non-regenerative carbon adsorption device in § 129.129(h):
- (i) The records specified in paragraph (5)(i) and (ii).
- (ii) The results of the performance test conducted under § 129.129(f)(1)(i) as performed under § 129.129(k).
- (iii) The results of the performance test conducted under § 129.129(f)(1)(ii) as performed under § 129.129(l).
- (iv) The control device design analysis, if one is performed under § 129.129(h)(2).
- (v) The schedule for carbon replacement, as determined by § 129.129(f)(2) or the design analysis requirements of § 129.129(h)(2) and records of each carbon replacement under § 129.129(f)(3) and (4).
- (11) For a condenser or other non-destructive control device in § 129.129(i):
- (i) The records specified in paragraph (5)(i) and (ii).
- (ii) The results of the performance test conducted under § 129.129(i)(1)(i) as performed under § 129.129(k).
- (iii) The results of the performance test conducted under § 129.129(i)(1)(ii) as performed under § 129.129(l).
- (iv) The control device design analysis, if one is performed under § 129.129(i)(7).
- (v) The site-specific monitoring plan under § 129.129(i)(2).
- (vi) The data and calculations for a CPMS installed, operated or maintained under § 129.129(i)(3)—(5).
- (k) Reporting. The owner or operator of a source subject to § 129.121(a) (relating to general provisions and applicability) shall do the following:
- (1) Submit an initial annual report to the Air Program Manager of the appropriate Department Regional Office by December 10, 2023, and annually thereafter on or before June 1.
- (i) The responsible official must sign, date and certify compliance and include the certification in the initial report and each subsequent annual report.
- (ii) The due date of the initial report may be extended with the written approval of the Air Program Manager of the appropriate Department Regional Office.
- (2) Submit the reports under paragraph (3) in a manner prescribed by the Department.
- (3) Submit the information specified in subparagraphs (i)—(ix) for each report as applicable:
- (i) Storage vessels. The report for each storage vessel must include the information specified in subsection (b)(1)—(4) for the reporting period, as applicable.
- (ii) Natural gas-driven continuous bleed pneumatic controllers. The initial report for each natural gas-driven continuous bleed pneumatic controller must include the information specified in subsection (c), as applicable. Subsequent reports must include the following:

- (A) The information specified in subsection (c)(1) and (2) for each natural gas-driven continuous bleed pneumatic controller.
- (B) The information specified in subsection (c)(3) and (4) for each natural gas-driven continuous bleed pneumatic controller installed during the reporting period.
- (iii) Natural gas-driven diaphragm pumps. The report for each natural gas-driven diaphragm pump must include the following:
- (A) The information specified in subsection (d)(1) and (2) for the reporting period, as applicable.
- (B) A certification of the compliance status of each natural gas-driven diaphragm pump during the reporting period using one of the following:
- (I) A certification that the emissions from the natural gas-driven diaphragm pump are routed to a control device or process under § 129.125(b)(1)(ii) or (c)(1). If the control device is installed during the reporting period under § 129.125(c)(2)(iii), include the information specified in subsection (d)(4).
- (II) A certification under § 129.125(c)(2) that there is no control device or process available at the facility during the reporting period. This includes if a control device or process is removed from the facility during the reporting period.
- (III) A certification according to § 129.125(c)(3)(ii)(C) that it is technically infeasible to capture and route emissions from:
- (-a-) A natural gas-driven diaphragm pump installed during the reporting period to an existing control device or process.
- (-b-) An existing natural gas-driven diaphragm pump to a control device or process installed during the reporting period.
- (-c-) An existing natural gas-driven diaphragm pump to another control device or process located at the facility due to the removal of the original control device or process during the reporting period.
- (iv) Reciprocating compressors. The report for each reciprocating compressor must include the information specified in subsection (e) for the reporting period, as applicable.
- (v) Centrifugal compressors. The report for each centrifugal compressor must include the information specified in subsection (f) for the reporting period, as applicable.
- (vi) Fugitive emissions components. The report for each fugitive emissions component must include the records of each monitoring survey conducted during the reporting period as specified in subsection (g)(3)(ii).
- (vii) Covers. The report for each cover must include the information specified in subsection (h) for the reporting period, as applicable.
- (viii) Closed vent systems. The report for each closed vent system must include the information specified in subsection (i)(1) and (2) for the reporting period, as applicable. The information specified in subsection (i)(3) is only required for the initial report or if the closed vent system was installed during the reporting period.

(ix) Control devices. The report for each control device must include the information specified in subsection (j), as applicable.

(Pa. R. Day, No. 32 1034, Filed for public importains December 9, 2023, 0.05 a.m.

Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD [25 PA. CODE CH. 129]

Control of VOC Emissions from Conventional Oil and Natural Gas Sources

The Environmental Quality Board (Board) amends Chapter 129 (relating to standards for sources) to read as set forth in Annex A. This final omitted rulemaking adds §§ 129.131 129.140 (relating to control of VOC emissions from conventional oil and natural gas source adopt reasonably available control technology (RACT) requirements and RACT emission limitations for conven-tional oil and natural gas sources of volatile organic compound (VOC) emissions. These sources include natural gas driven continuous bleed pneumatic controllers, natural gas driven diaphragm pumps, reciprocating coms, centrifugal compressors, fugitive emissio ponents and storage vessels installed at conventional well sites, gathering and boosting stations and natural gas processing plants, as well as storage vessels in the natural gas transmission and storage segment. The Board adds definitions, acronyms and United States Environmental Protection Agency (EPA) methods to § 129.132 (relating to definitions, acronyms and EPA methods) to support the implementation of the control measures. e of proposed rulemaking is omitted under section 204(3) of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. § 1204(3)), referred to as the Commonwealth Documents Law (CDL). This final-omitted rulemaking is also being submitted as an emergency certified regulation under section 6(d) of the Regulatory Review Act (RRA) (71 P.S. § 745.6(d)).

Rulemaking Background and History

On December 17, 2019, the Board adopted the Control of VOC Emissions from Oil and Natural Gas Sources proposed rulemaking (referred to as the combined rulemaking). On May 23, 2929, the combined rulemaking included VOC RACT requirements for five categories of oil and natural gas sources of VOC emissions in this Commonwealth, including sources used by the unconventional and conventional industries. The combined rulemaking was published for a 66-day comment period at 50 Pa.B. 2633 (May 23, 2020). Three public hearings were held virtually on June 23, 24 and 25, 2020. Over 100 individuals provided verbal testimony. The comment period closed on July 27, 2020. The Board received over 4,500 comments, including comments from the House and Senate Environmental Resources and Energy Committees (ERE Committees), members of the General Assembly and the Independent Regulatory Review Commission (IRRC). The majority of the commentators expressed their support-for the VOC RACT requirements in the combined rulemaking, noting the need to address air emissions from the oil and gas sector. On March 15, 2022, the Board adopted the combined rulemaking as a final form rulemaking.

Also, on March 15, 2022, the Board submitted the final form combined rulemaking to IRRC for its consideration. On April 26, 2022, the House ERE Committee sent a letter to IRRC indicating their disapproval of the combined rulemaking due to their interpretation of language in the Pennsylvania Grade Crude Development Act, the act of June 23, 2016 (P.L. 375, No. 52) (58 P.S. §§ 1201–1208), known as Act 52 of 2016. The letter stated the House ERE Committee's position that Act 52 of 2016 requires the Board to submit two rulemaking packages one that applies to unconventional oil and natural gas sources and one that applies to conventional oil and natural gas sources. The House ERE Committee's letter to IRRC initiated the concurrent resolution process under section 7(d) of the RRA (71 P.S. § 745.7(d)) which allows the General Assembly to adopt a resolution that disapproves and permanently bars a final regulation from taking effect.

While the Board disagrees with the House ERE Committee's interpretation of Act 52 of 2016, to address their concerns and avoid further delay, on May 4, 2022, the Board withdrew the combined rulemaking from IRRC's consideration. The Board then revised the combined rulemaking to apply only to unconventional oil and natural gas sources. On June 14, 2022, the Board adopted the revised Control of VOC Emissions from Unconventional Oil and Natural Gas Sources final form rulemaking (referred to as the unconventional rulemaking). On July 21, 2022, IRRC unanimously approved the unconventional rulemaking.

Given the concerns expressed by the House ERE Committee and other commentators during the regulatory process for the combined rulemaking, the Department developed a separate rulemaking to control VOC emissions from conventional oil and natural gas sources. At the October 12, 2022, meeting, the Board adopted the "Control of VOC Emissions from Conventional Oil and Natural Gas Sources" final-omitted rulemaking, regulation # 7-579. On November 14, 2022, the House ERE Committee disapproved the previously adopted final-omitted regulation triggering the 14 calendar day legislative-review period under section 5.1(j.2) of the RRA (71 P.S. § 745-5a(j.2)). During that 14 day period, the regulation may not be published in the Pennsylvania Bulletin. The 14 day period began after IRRC issued its approval order of regulation # 7-579 on November 17, 2022, and the 2022 legislative session ended on November 30, 2022. Under section 5.1(j.3) of the RRA (71 P.S. § 745-5a(j.3)), the legislative review period will therefore run into the 2023 legislative session ensuring that regulation # 7-579 could not be published by the December 16, 2022, sanction deadline.

This final-omitted rulemaking, regulation # 7.580, is identical to the previous final-omitted rulemaking (regulation # 7.579) except it has received an emergency certification of need from Governor Tom Wolf:

Final-Omitted Rulemaking and Emergency Certification of Need

Under section 201 of the CDL (45 P.S. § 1201), an agency is required to provide public notice of its intention to promulgate, amend or repeal administrative regulations. Section 202 of the CDL (45 P.S. § 1202) also requires agencies to review and consider any written comments—submitted—under—section—201—and—authorizes agencies to hold public hearings as appropriate. However, under section 204 of the CDL, an agency may omit or modify the procedures specified in sections 201 and 202 of the CDL, if:

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RULES AND REGULATIONS

Whereas, the Environmental Quality Board created a separate rulemaking (Regulation #7-579) to address conventional sources, which it adopted on October 12, 2022;

Whereas, on November 14, 2022, the Pennsylvania House Environmental Resources & Energy Committee notified IRRC of the Committee's disapproval of Regula tion #7-579 triggering the 14-calendar day legislative review period under section 7(d) of the Regulatory Review Act, (71 P.S. § 745.7(d)); and

Whereas, due to the Pennsylvania House Environmental Resources & Energy Committee's disapproval, the rulemaking process for the conventional rulemaking (Regulation #7-579) cannot be completed by December 16 2022, in time to prevent an emergency which would ereate conditions causing the need for supplemental or deficiency appropriations of at least \$1,000,000; and

Whereas, Section 6(d) of the Regulatory Review Act, (71 P.S. § 745.6(d)), prohibits IRRC from issuing an order barring an agency from promulgating a final-form or final-omitted-regulation if the Governor-certifies that the final-form or final-omitted regulation is required to meet an emergency which includes conditions which may threaten the public health, safety or welfare; cause a budget deficit; or create the need for supplemental or deficiency appropriations of greater than \$1,000,000; and

Whereas, if the Governor so certifies, the final-form or final-omitted regulation may take effect prior to review by the commission and committees under Section 6(d) of the Regulatory Review Act (71 P.S. § 745.6(d)); and

Whereas, an immediate amendment to the regulations is necessary to prevent an emergency because the absence of a completed regulation and corresponding, complete SIP is a condition that will risk sanctions that will affect approximately \$800 million in Federal highway funds and nts and will create the need for supplemental or deficiency appropriations greater than \$1,000,000 to direct-state-funding-to-previously-Federalized-projects-so-as to carry out planned projects that have been selected to meet the needs of the motoring public; and

Whereas, the Environmental Quality Board adopted a separate rulemaking on November 30, 2022, identical to Regulation #7-579 (Regulation #7-580) that the Governor may certify under 71 P.S. § 745.6(d) to ensure completion of the regulation by December 16, 2022.

Now Therefore, I do hereby certify that the regulatory amendment (Regulation #7-580) to add conventional sources to the Department's regulations in Title 25 (25 Pa. Code §§ 129.131—129.140) to adopt RACT requirements and RACT emission limitations for oil and natural gas sources of VOC emissions as required under the CAA, following this certification as Annex A, is required to meet the emergency conditions enumerated in the recitals above and to avoid an emergency as described therein.

Further, I hereby authorize the Chairperson of the Environmental Quality Board to publish this amendment in the Pennsylvania Bulletin—as an Emergency Certified Final Omitted Rulemaking consistent with the provisions of Section 6(d) of the Regulatory Review Act, as amended, 71 P.S. § 745.6(d).

Further, this Emergency Certified Final-Omitted Rulemaking shall take effect immediately upon notice or publication in the Pennsylvania Bulletin

Given under my hand and the Seal of the Governor, at the City of Harrisburg, on this 30th day of November in the year of our Lord two thousand and twenty two, and of the Commonwealth the two hundred and forty seventh.

Tan Wolf



TITLE 25. ENVIRONMENTAL PROTECTION PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES

CHAPTER 129. STANDARDS FOR SOURCES CONTROL OF VOC EMISSIONS FROM CONVENTIONAL OIL AND NATURAL GAS SOURCES

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§ 129.131. General provisions and applicability.

(a) Applicability. Beginning December 2, 2022, this section and §§ 129.132—129.140 (relating to control of VOC emissions from conventional oil and natural gas sources) apply to an owner or operator of one or more of the following conventional oil and natural gas sources of VOC emissions installed at a conventional well site, a gathering and boosting station or a natural gas processing plant in this Commonwealth which were constructed on or before December 2, 2022:

- (1) Storage vessels at:
- (i) A conventional well site.
- (ii) A gathering and boosting station.
- (iii) A natural gas processing plant.
- (iv) The natural gas transmission and storage segment.
- (2) Natural gas-driven continuous bleed pneumatic con-
- (3) Natural gas-driven diaphragm pumps.
- (4) Reciprocating compressors and centrifugal compres-
- (5) Fugitive emissions components.
- (b) Existing RACT permit. Compliance with the requirements of this section and §§ 129.132-129.140 assures compliance with the requirements of a permit issued under §§ 129.91-129.95 (relating to stationary sources of NO_x and VOCs) or §§ 129.96-129.100 (relating to stationary sources of NO_x) or §§ NO_x 0 or §§ NO_x 1 or §§ NO_x 1 or §§ NO_x 1 or §§ NO_x 2 or §§ NO_x 3 or §§ NO_x 4 or NO_x 5 or §§ NO_x 5 or NO_x 5 or ing to additional RACT requirements for major sources of NO_x and VOCs) to the owner or operator of a source subject to subsection (a) prior to December 2, 2022, to control, reduce or minimize VOC emissions from oil and

natural gas sources listed in subsection (a), except to the extent the operating permit contains more stringent requirements.

§ 129.132. Definitions, acronyms and EPA methods.

(a) Definitions and acronyms. The following words and terms, when used in this section, §§ 129.131 (relating to general provisions and applicability) and 129.133— 129.140, have the following meanings, unless the context clearly indicates otherwise:

AVO-Audible, visual and olfactory

Bleed rate—The rate in standard cubic feet per hour at which natural gas is continuously vented from a natural gas-driven continuous bleed pneumatic controller.

Centrifugal compressor—

- (i) A machine for raising the pressure of natural gas by drawing in low-pressure natural gas and discharging significantly higher-pressure natural gas by means of mechanical rotating vanes or impellers.
- (ii) The term does not include a screw compressor, sliding vane compressor or liquid ring compressor.

Closed vent system—A system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Condensate—Hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

Connector-

- (i) A flanged fitting, screwed fitting or other joined fitting used to connect two pipes or a pipe and a piece of process equipment or that closes an opening in a pipe that could be connected to another pipe.
- (ii) The term does not include a joined fitting welded completely around the circumference of the interface.

Control device—An enclosed combustion device, vapor recovery system or flare.

Conventional well-

- (i) A bore hole drilled or being drilled for the purpose of or to be used for construction of a well regulated under 58 Pa.C.S. §§ 3201—3274 (relating to development) that is not an unconventional well, irrespective of technology or
- (ii) The term includes, but is not limited to:
- (A) Wells drilled to produce oil.
- (B) Wells drilled to produce natural gas from formations other than shale formations.
- (C) Wells drilled to produce natural gas from shale formations located above the base of the Elk Group or its stratigraphic equivalent.
- (D) Wells drilled to produce natural gas from shale formations located below the base of the Elk Group where natural gas can be produced at economic flow rates or in economic volumes without the use of vertical or nonvertical well bores stimulated by hydraulic fracture treatments or multilateral well bores or other techniques to expose more of the formation to the well bore.
- (E) Irrespective of formation, wells drilled for collateral purposes, such as monitoring, geologic logging, secondary and tertiary recovery or disposal injection.

Conventional well site—A location with exclusively one or more conventional wells. A location with both unconventional and conventional wells is considered to be an unconventional well site.

Custody transfer—The transfer of natural gas after processing or treatment, or both, in the producing operation or from a storage vessel or an automatic transfer facility or other equipment, including a product loading rack, to a pipeline or another form of transportation.

Deviation—An instance in which the owner or operator of a source subject to this section, §§ 129.131 and 129.133—129.140 fails to meet one or more of the following.

- (i) A requirement or an obligation established in this section, § 129.131 or §§ 129.133—129.140, including an emission limit, operating limit or work practice standard.
- (ii) A term or condition that is adopted to implement an applicable requirement in this section, § 129.131 or §§ 129.133—129.140 and which is included in the operating permit for the affected source.
- (iii) An emission limit, operating limit or work practice standard in this section, § 129.131 or §§ 129.133— 129.140 during startup, shutdown or malfunction, regardless of whether a failure is permitted by this section, § 129.131 or §§ 129.133—129.140.

FID-Flame ionization detector.

First attempt at repair—For purposes of § 129.137 (relating to fugitive emissions components):

- An action using best practices taken to stop or reduce fugitive emissions to the atmosphere.
- (ii) The term includes:
- (A) Tightening bonnet bolts.
- (B) Replacing bonnet bolts.
- (C) Tightening packing gland nuts.
- (D) Injecting lubricant into lubricated packing.

Flare-

- A thermal oxidation system using an open flame without an enclosure.
- (ii) The term does not include a horizontally or vertically installed ignition device or pit flare used to combust otherwise vented emissions from completions.

Flow line—A pipeline used to transport oil or gas, or both, to processing equipment, compression equipment, storage vessel or other collection system for further handling or to a mainline pipeline.

Fugitive emissions component-

- (i) A piece of equipment that has the potential to emit fugitive emissions of VOC at a well site, including the following:
- (A) A valve.
- (B) A connector.
- (C) A pressure relief device.
- (D) An open-ended line.
- (E) A flange.
- (F) A compressor.
- (G) An instrument.
- (H) A meter.

- (I) A cover or closed vent system not subject to § 129.138 (relating to covers and closed vent systems).
- (J) A thief hatch or other opening on a controlled storage vessel not subject to § 129.133 (relating to storage vessels).
- (ii) The term does not include a device, such as a natural gas-driven continuous bleed pneumatic controller or a natural gas-driven diaphragm pump, that vents as part of normal operations if the gas is discharged from the device's vent.

GOR—gas-to-oil ratio—The ratio of the volume of gas at standard temperature and pressure that is produced from a volume of oil when depressurized to standard temperature and pressure.

Gathering and boosting station-

- (i) A permanent combination of one or more compressors that collects natural gas from one or more well sites and moves the natural gas at increased pressure into a gathering pipeline to the natural gas processing plant or into the pipeline.
- (ii) The term does not include the combination of one or more compressors located at a well site or located at an onshore natural gas processing plant.

Hard-piping—Pipe or tubing that is manufactured and properly installed using good engineering judgment and standards.

Hydraulic fracturing—The process of directing pressurized fluids containing a combination of water, proppant and added chemicals to penetrate tight formations, such as shale or coal formations, that subsequently require high rate, extended flowback to expel fracture fluids and solids during a completion.

Hydraulic refracturing—Conducting a subsequent hydraulic fracturing operation at a well that has previously undergone a hydraulic fracturing operation.

In-house engineer-An individual who is both of the

- (i) Employed by the same owner or operator as the responsible official that signs the certification required under § 129.140(k) (relating to recordkeeping and reporting)
- (ii) Qualified by education, technical knowledge and expertise in the design and operation of a natural gasdriven diaphragm pump or closed vent system to make the technical certification required under § 129.135(c)(3)(ii) (relating to natural gas driven diaphragm pumps) or § 129.138(c)(3), or both, as applicable.

Intermediate hydrocarbon liquid—A naturally occurring, unrefined petroleum liquid.

LDAR-Leak detection and repair

Leak—An emission detected using one or more of the following methods:

- Through audible, visual or odorous evidence during an AVO inspection.
- (ii) By OGI equipment calibrated according to $\S 129.137(h)$.
- (iii) With a concentration of 500 ppm or greater as methane or equivalent by a gas leak detector calibrated according to § 129.137(i).
- (iv) Using an alternative leak detection method approved by the Department in § 129.137(c)(2)(ii)(C), (c)(3)(ii)(C) or (e)(2)(iii).

Maximum average daily throughput—The single highest daily average throughput during the 30-day potential to emit evaluation period employing generally accepted methods.

Monitoring system malfunction—

- (i) A sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data.
- (ii) The term does not include a system failure caused by poor maintenance or careless operation.

Natural gas distribution segment—The delivery of natural gas to the end user by a distribution company after the distribution company receives the natural gas from the natural gas transmission and storage segment.

Natural gas-driven continuous bleed pneumatic controller—An automated instrument used for maintaining a process condition such as liquid level, pressure, deltapressure or temperature powered by a continuous flow of pressurized natural gas.

Natural gas-driven diaphragm pump-

- (i) A positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid.
- (ii) The term does not include either of the following:
- (A) A pump in which a fluid is displaced by a piston driven by a diaphragm.
- (B) A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor.

Natural gas liquids—The hydrocarbons, such as ethane, propane, butane and pentane, that are extracted from field gas.

Natural gas processing plant-

- (i) A processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.
- (ii) The term does not include a Joule-Thompson valve, a dew point depression valve or an isolated or standalone Joule-Thompson skid.

Natural gas transmission and storage segment—The term includes the following:

- The pipelines used for the long-distance transport of natural gas, excluding processing.
- (ii) The natural gas transmission stations which include the following:
- (A) The land, mains, valves, meters, boosters, regulators, storage vessels, dehydrators and compressors.
- (B) The driving units and appurtenances associated with the items listed in clause (A).
- (C) The equipment used for transporting gas from a production plant, delivery point of purchased gas, gathering system, storage area or other wholesale source of gas to one or more distribution areas.
- (iii) The aboveground storage facilities and underground storage facilities that transport and store natural gas between the natural gas processing plant and natural gas distribution segment.

OGI-Optical gas imaging.

Open-ended valve or line—A valve, except a safety relief valve, having one side of the valve seat in contact with

process fluid and one side open to the atmosphere, either directly or through open piping.

Produced water—Water that is extracted from the earth from an oil or natural gas production well or that is separated from crude oil, condensate or natural gas after extraction.

Qualified professional engineer-

- (i) An individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the required specific technical certification.
- (ii) The individual making this certification must be currently licensed in this Commonwealth or another state in which the responsible official, as defined in § 121.1 (relating to definitions), is located and with which the Commonwealth offers reciprocity.

Quality assurance or quality control activity—An activity such as a system accuracy audit and a zero and span adjustment that ensures the proper calibration and operation of monitoring equipment.

Reciprocating compressor—A piece of equipment that employs linear movement of a driveshaft to increase the pressure of a process gas by positive displacement.

Reciprocating compressor rod packing—

- (i) A series of flexible rings in machined metal cups that fit around the reciprocating compressor piston rod to create a seal limiting the amount of compressed natural gas that escapes to the atmosphere.
- (ii) Another mechanism that provides the same func-

Removed from service—A storage vessel that has been physically isolated and disconnected from the process for a purpose other than maintenance.

Repaired—A piece of equipment that is adjusted or otherwise altered to eliminate a leak and is remonitored to verify that emissions from the equipment are at or below the applicable leak limitation.

Returned to service—A storage vessel that was removed from service which has been:

- Reconnected to the original source of liquids or has been used to replace another storage vessel.
- (ii) Installed in another location and introduced with crude oil, condensate, intermediate hydrocarbon liquids or produced water.

Routed to a process or route to a process—The emissions are conveyed by means of a closed vent system to an enclosed portion of a process that is operational where the emissions are controlled in one or more of the following

- (i) Predominantly recycled or consumed, or both, in the same manner as a material that fulfills the same function in the process.
- (ii) Transformed by chemical reaction into materials that are not regulated.
 - (iii) Incorporated into a product.
 - (iv) Recovered for beneficial use.

Sensor—A device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH or liquid level. Storage vessel—

- (i) A container used to collect crude oil, condensate, intermediate hydrocarbon liquids or produced water that is constructed primarily of non-earthen materials which provide structural support.
- (ii) The term includes a container described in subparagraph (i) that is skid-mounted or permanently attached to something that is mobile which has been located at a site for 180 or more consecutive days.
 - (iii) The term does not include the following:
- (A) A process vessel such as a surge control vessel, bottoms receiver or knockout vessel.
- (B) A pressure vessel used to store a liquid or a gas and is designed to operate in excess of 204.9 kilopascals (29.7 pounds per square inch, absolute) and to not vent to the atmosphere as a result of compression of the vapor headspace during filling of the vessel.
- (C) A container described in subparagraph (i) with a capacity greater than 100,000 gallons used to recycle water that has been passed through two-stage separation.

Surface site—A combination of one or more graded pad sites, gravel pad sites, foundations, platforms or the immediate physical location upon which equipment is physically affixed.

TOC—total organic compounds—The results of EPA Method 25A

UIC-Underground injection control.

UIC Class I oilfield disposal well—A well with a UIC Class I permit that meets the definition in 40 CFR 144.6(a)(2) (relating to classification of wells) and receives eligible fluids from oil and natural gas exploration and production operations.

UIC Class II oilfield disposal well—A well with a UIC Class II permit where wastewater resulting from oil and natural gas production operations is injected into underground porous rock formations not productive of oil or gas and sealed above and below by unbroken, impermeable strata.

Unconventional formation—A geological shale formation existing below the base of the Elk Sandstone or its geologic equivalent stratigraphic interval where natural gas generally cannot be produced at economic flow rates or in economic volumes except by vertical or horizontal well bores stimulated by hydraulic fracture treatments or by using multilateral well bores or other techniques to expose more of the formation to the well bore.

Unconventional well—A bore hole drilled or being drilled for the purpose of or to be used for the production of natural gas from an unconventional formation.

Unconventional well site—A location with one or more unconventional wells.

VRU—vapor recovery unit—A device used to recover vapor and route it to a process, flow line or other equipment.

Well—A hole drilled for producing oil or natural gas or into which a fluid is injected.

Wellhead-

- (i) The piping, casing, tubing and connected valves protruding above the earth's surface for an oil or natural gas well.
- (ii) The wellhead ends where the flow line connects to a wellhead valve.

(iii) The term does not include other equipment at the well site except for a conveyance through which gas is vented to the atmosphere.

Well site-

- (i) One or more surface sites that are constructed for the drilling and subsequent operation of a conventional well or injection well.
- (ii) For purposes of the fugitive emissions standards in § 129.137, the term also means a separate tank battery surface site collecting crude oil, condensate, intermediate hydrocarbon liquids or produced water from a well not located at the well site, for example, a centralized tank battery.
- (iii) For purposes of the fugitive emissions standards in § 129.137, the term does not include:
 - (A) A UIC Class I oilfield disposal well.
- (B) A UIC Class II oilfield disposal well and disposal facility.
- (C) The flange immediately upstream of the custody meter assembly.
- (D) Equipment, including fugitive emissions components, located downstream of the flange in clause (C).
- (b) EPA methods. The EPA methods referenced in this section and §§ 129.133—129.140 are those listed as follows, unless the context clearly indicates otherwise:
- EPA Method 1—EPA Method 1, 40 CFR Part 60, Appendix A-1 (relating to test methods 1 through 2F), regarding sample and velocity traverses for stationary sources.
- EPA Method 1A—EPA Method 1A, 40 CFR Part 60, Appendix A-1, regarding sample and velocity traverses for stationary sources with small stacks or ducts.
- EPA Method 2—EPA Method 2, 40 CFR Part 60, Appendix A-1, regarding determination of stack gas velocity and volumetric flow rate (Type S pitot tube).
- EPA Method 2A—EPA Method 2A, 40 CFR Part 60, Appendix A-1, regarding direct measurement of gas volume through pipes and small ducts.
- EPA Method 2C—EPA Method 2C, 40 CFR Part 60, Appendix A-1, regarding determination of gas velocity and volumetric flow rate in small stacks or ducts (standard pitot tube).
- EPA Method 2D—EPA Method 2D, 40 CFR Part 60, Appendix A-1, regarding measurement of gas volume flow rates in small pipes and ducts.
- EPA Method 3A—EPA Method 3A, 40 CFR Part 60, Appendix A-2 (relating to test methods 2G through 3C), regarding determination of oxygen and carbon dioxide concentrations in emissions from stationary sources (instrumental analyzer procedure).
- EPA Method 3B—EPA Method 3B, 40 CFR Part 60, Appendix A-2, regarding gas analysis for the determination of emission rate correction factor or excess air.
- EPA Method 4—EPA Method 4, 40 CFR Part 60, Appendix A-3 (relating to test methods 4 through 51), regarding determination of moisture content in stack gases.
- EPA Method 18—EPA Method 18, 40 CFR Part 60, Appendix A-6 (relating to test methods 16 through 18), regarding measurement of gaseous organic compound emissions by gas chromatography.

- EPA Method 21—EPA Method 21, 40 CFR Part 60, Appendix A-7 (relating to test methods 19 through 25E), regarding determination of volatile organic compound leaks
- EPA Method 22—EPA Method 22, 40 CFR Part 60, Appendix A-7, regarding visual determination of fugitive emissions from material sources and smoke emissions from flares.
- EPA Method 25A—EPA Method 25A, 40 CFR Part 60, Appendix A-7, regarding determination of total gaseous organic concentration using a flame ionization analyzer.

§ 129.133. Storage vessels.

- (a) Applicability
- (1) Potential VOC emissions. Except as specified in subsections (c) and (d), this section applies to the owner or operator of a storage vessel subject to § 129.131(a)(1) (relating to general provisions and applicability) that has the potential to emit 2.7 TPY or greater VOC emissions.
- (2) Calculation of potential VOC emissions.
- (i) The potential VOC emissions in paragraph (1) must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput as defined in § 129.132 (relating to definitions, acronyms and EPA methods) prior to January 31, 2023, for an existing storage vessel.
- (ii) The determination of potential VOC emissions may consider requirements under a legally and practically enforceable limit established in an operating permit or plan approval approved by the Department.
- (iii) Vapor from the storage vessel that is recovered and routed to a process through a VRU is not required to be included in the determination of potential VOC emissions for purposes of determining applicability, if the owner or operator meets the following:
- (A) The cover requirements in § 129.138(a) (relating to covers and closed vent systems).
- (B) The closed vent system requirements in § 129.138(b).
- (iv) If the apparatus that recovers and routes vapor to a process is removed from operation or is operated inconsistently with § 129.138, the owner or operator shall determine the storage vessel's potential VOC emissions under this paragraph within 30 calendar days of the date of apparatus removal or inconsistent operation.
- (b) VOC emissions limitations and control requirements. Except as specified in subsections (c) and (d), beginning December 2, 2023, the owner or operator of a storage vessel subject to this section shall reduce VOC emissions by 95.0% by weight or greater. The owner or operator shall comply with paragraph (1) or paragraph (2) as applicable.
- Route the VOC emissions to a control device. The owner or operator shall do the following:
- (i) Equip the storage vessel with a cover that meets the requirements of § 129.138(a).
- (ii) Connect the storage vessel to a control device or process through a closed vent system that meets the requirements of § 129.138(b).
- (iii) Route the emissions from the storage vessel to a control device or a process that meets the applicable requirements of § 129.139 (relating to control devices).

- (iv) Demonstrate that the VOC emissions are reduced as specified in § 129.139(k).
- (2) Equip the storage vessel with a floating roof. The owner or operator shall install a floating roof that meets the requirements of 40 CFR 60.112b(a)(1) or (2) (relating to standard for volatile organic compounds (VOC)) and the relevant monitoring, inspection, recordkeeping and reporting requirements in 40 CFR Part 60, Subpart Kb (relating to standards of performance for volatile organic liquid storage vessels) (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984).
 - (c) Exceptions.
- (1) The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a storage vessel that maintains actual VOC emissions less than 2.7 TPY determined as a 12-month rolling sum. An owner or operator claiming this exception shall perform the compliance demonstration requirements under paragraph (2) and maintain the records under subsection (g), as applicable.
- (2) The owner or operator of a storage vessel claiming exception under this subsection shall perform the following:
- (i) Beginning on or before January 1, 2023, calculate the actual VOC emissions once per calendar month using a generally accepted model or calculation methodology. The monthly calculations must meet the following:
- (A) Be separated by at least 15 calendar days but not more than 45 calendar days.
- (B) Be based on the monthly average throughput for the previous 30 calendar days.
- (ii) Comply with subsection (b) within 1 year of the date of the monthly calculation showing that actual VOC emissions from the storage vessel have increased to 2.7 TPY VOC or greater.
- (d) Exemptions. The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a storage vessel that meets one or more of the following:
- (1) Is skid-mounted or permanently attached to something that is mobile for which records are available to document that it has been located at a site for less than 180 consecutive days. An owner or operator claiming this exemption shall maintain the records under subsection (g), as applicable.
- (2) Is used in the natural gas distribution segment.
- (3) Is controlled under 40 CFR Part 60, Subpart Kb or 40 CFR Part 63, Subpart G, Subpart CC, Subpart HH or Subpart WW.
- (e) Requirements for a storage vessel removed from service. A storage vessel subject to this section that is removed from service is not an affected source for the period that it is removed from service if the owner or operator performs the following:
- (1) Completely empties and degasses the storage vessel so that the storage vessel no longer contains crude oil, condensate, produced water or intermediate hydrocarbon liquids. A storage vessel where liquid is left on walls, as bottom clingage or in pools due to floor irregularity is considered to be completely empty.
- (2) Submits a notification in the next annual report required under § 129.140(k)(1) (relating to recordkeeping

- and reporting) identifying each storage vessel removed from service during the reporting period and the date of its removal from service.
- (f) Requirements for a storage vessel returned to service. The owner or operator of a storage vessel identified in subsection (e) that is returned to service shall submit a notification in the next annual report required under § 129.140(k)(1) identifying each storage vessel that has been returned to service during the reporting period and the date of its return to service.
- (g) Recordkeeping and reporting requirements. The owner or operator of a storage vessel subject to this section shall maintain the records under § 129.140(b) and submit the reports under § 129.140(k)(3)(i).

§ 129.134. Natural gas-driven continuous bleed pneumatic controllers.

- (a) Applicability. This section applies to the owner or operator of a natural gas-driven continuous bleed pneumatic controller subject to § 129.131(a)(2) (relating to general provisions and applicability) located prior to the point of custody transfer of oil to an oil pipeline or of natural gas to the natural gas transmission and storage segment.
- (b) Exception. An owner or operator may use a natural gas-driven continuous bleed pneumatic controller subject to this section with a bleed rate greater than the applicable requirements in subsection (c) based on functional requirements. An owner or operator claiming this exception shall perform the compliance demonstration requirements under subsection (d) and maintain the records under subsection (e), as applicable.
- (c) VOC emissions limitation requirements. Except as specified in subsection (b), beginning December 2, 2023, the owner or operator of a natural gas-driven continuous bleed pneumatic controller subject to this section shall do the following:
- (1) Ensure each natural gas-driven continuous bleed pneumatic controller with a natural gas bleed rate greater than 6.0 standard cubic feet per hour, at a location other than a natural gas processing plant, maintains a natural gas bleed rate of less than or equal to 6.0 standard cubic feet per hour.
- (2) Ensure each natural gas-driven continuous bleed pneumatic controller maintains a natural gas bleed rate of zero standard cubic feet per hour, if located at a natural gas processing plant.
- (3) Perform the compliance demonstration requirements under subsection (d).
- (d) Compliance demonstration requirements. The owner or operator shall tag each natural gas-driven continuous bleed pneumatic controller affected under subsection (c) with the following:
- The date the natural gas-driven continuous bleed pneumatic controller is required to comply with this section.
- (2) An identification number that ensures traceability to the records for that natural gas-driven continuous bleed pneumatic controller.
- (e) Recordkeeping and reporting requirements. The owner or operator of a natural gas-driven continuous bleed pneumatic controller affected under subsection (c) shall maintain the records under § 129.140(c) (relating to recordkeeping and reporting) and submit the reports under § 129.140(k)(3)(ii).

§ 129.135. Natural gas-driven diaphragm pumps.

- (a) Applicability. This section applies to the owner or operator of a natural gas-driven diaphragm pump subject to § 129.131(a)(3) (relating to general provisions and applicability) located at a well site or natural gas processing plant.
- (b) VOC emissions limitation and control requirements. Except as specified in subsections (c) and (d), beginning December 2, 2023, the owner or operator of a natural gas-driven diaphragm pump subject to this section shall comply with the following:
- (1) Conventional well site. The owner or operator of a natural gas-driven diaphragm pump located at a conventional well site shall reduce the VOC emissions by 95.0% by weight or greater. The owner or operator shall do the following:
- (i) Connect the natural gas-driven diaphragm pump to a control device or process through a closed vent system that meets the applicable requirements of § 129.138(b) (relating to covers and closed vent systems).
- (ii) Route the emissions from the natural gas-driven diaphragm pump to a control device or a process that meets the applicable requirements of § 129.139 (relating to control devices).
- (iii) Demonstrate that the VOC emissions are reduced as specified in § 129.139(k).
- (2) Natural gas processing plant. The owner or operator of a natural gas-driven diaphragm pump located at a natural gas processing plant shall maintain an emission rate of zero standard cubic feet per hour.
- (c) Exceptions. The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a natural gas-driven diaphragm pump located at a well site which meets one or more of the following:
- (1) Routes emissions to a control device which is unable to reduce VOC emissions by 95.0% by weight or greater and there is no ability to route VOC emissions to a process. An owner or operator that claims this exception shall do the following:
- (i) Maintain the records under § 129.140(d)(4) (relating to recordkeeping and reporting).
- (ii) Connect the natural gas-driven diaphragm pump to the control device through a closed vent system that meets the requirements of § 129.138(b).
- (iii) Demonstrate the percentage by which the VOC emissions are reduced as specified in § 129.139(k).
- (2) Has no available control device or process. An owner or operator that claims this exception shall do the following:
 - (i) Maintain the records under § 129.140(d)(5).
- (ii) Certify that there is no available control device or process in the next annual report required by § 129.140(k)(1).
- (iii) Route emissions from the natural gas-driven diaphragm pump within 30 days of the installation of a control device or process. Once the emissions are routed to a control device or process, the certification of subparagraph (ii) is no longer required and the applicable requirements of this section shall be met.
- (3) Is technically infeasible of connecting to a control device or process. An owner or operator that claims this exception shall do the following:

- Maintain the records under § 129.140(d)(6).
- (ii) Perform an assessment of technical infeasibility which must meet the following:
- (A) Be prepared under the supervision of an in-house engineer or qualified professional engineer.
- (B) Include a technical analysis of safety considerations, the distance from an existing control device, the pressure losses and differentials in the closed vent system and the ability of the control device to handle the increase in emissions routed to them.
- (C) Be certified, signed and dated by the engineer supervising the assessment, including the statement: "I certify that the assessment of technical infeasibility was prepared under my supervision. I further certify that the assessment was conducted and this report was prepared under the requirements of 25 Pa. Code § 129.135(c)(3). Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information."
- (d) Exemptions. The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a natural gas-driven diaphragm pump located at a well site which operates less than 90 days per calendar year. An owner or operator claiming this exemption shall maintain the records under § 129.140(d)(3).
- (e) Removal of control device or process. The owner or operator of a natural gas-driven diaphragm pump located at a well site that routes emissions to a control device or process which is removed or is no longer available shall comply with one of the exceptions in subsection (c), as applicable.
- (f) Recordkeeping and reporting requirements. The owner or operator of a natural gas-driven diaphragm pump subject to this section shall maintain the records under § 129.140(k)(3)(iii).

§ 129.136. Compressors.

- (a) Applicability. This section applies to the owner or operator of a reciprocating compressor or centrifugal compressor subject to § 129.131(a)(4) (relating to general provisions and applicability) that meets the following:
- Reciprocating compressor. Each reciprocating compressor located between the wellhead and point of custody transfer to the natural gas transmission and storage segment.
- (2) Centrifugal compressor. Each centrifugal compressor using wet seals that is located between the wellhead and point of custody transfer to the natural gas transmission and storage segment.
- (b) VOC emissions control requirements for a reciprocating compressor. Beginning December 2, 2023, the owner or operator of a reciprocating compressor subject to this section shall meet one of the following:
- (1) Replace the reciprocating compressor rod packing on or before one of the following:
- (i) The reciprocating compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning on the later of:
- (A) The date of the most recent reciprocating compressor rod packing replacement.

- (B) December 2, 2022, for a reciprocating compressor rod packing that has not yet been replaced.
- (ii) The reciprocating compressor has operated for 36 months. The number of months of operation must be continuously monitored beginning on the later of:
- (A) The date of the most recent reciprocating compressor rod packing replacement.
- (B) December 2, 2025, for a reciprocating compressor rod packing that has not yet been replaced.
- (2) Route the VOC emissions to a control device or a process that meets § 129.139 (relating to control devices) by using a reciprocating compressor rod packing emissions collection system that operates under negative pressure and meets the cover requirements of § 129.138(a) (relating to covers and closed vent systems) and the closed vent system requirements of § 129.138(b).
- (c) VOC emissions limitation and control requirements for a centrifugal compressor. Except as specified in subsection (d), the owner or operator of a centrifugal compressor subject to this section shall perform the following:
- Reduce the VOC emissions from each centrifugal compressor wet seal fluid degassing system by 95.0% by weight or greater.
- (2) Equip the wet seal fluid degassing system with a cover that meets the requirements of § 129.138(a) through a closed vent system that meets the requirements of § 129.138(b) to a control device or a process that meets the applicable requirements of § 129.139.
- (3) Demonstrate that the VOC emissions are reduced as specified in § 129.139(k).
- (d) Exemptions. Subsection (c) does not apply to the owner or operator of a centrifugal compressor that meets the following:
- (1) Is located at a well site.
- (2) Is located at an adjacent well site and services more than one well site.
- (e) Recordkeeping and reporting requirements. The owner or operator of a reciprocating compressor or centrifugal compressor subject to this section shall do the following, as applicable:
- (1) For a reciprocating compressor, maintain the records under § 129.140(e) (relating to recordkeeping and reporting) and submit the reports under § 129.140(k)(3)(iv).
- (2) For a centrifugal compressor, maintain the records under § 129.140(f) and submit the reports under § 129.140(k)(3)(v).

§ 129.137. Fugitive emissions components.

- (a) Applicability. This section applies to the owner or operator of a fugitive emissions component subject to § 129.131(a)(5) (relating to general provisions and applicability), located at one or more of the following:
 - (1) A conventional well site.
 - (2) A natural gas gathering and boosting station.
- (3) A natural gas processing plant.
- (b) Average production calculation procedure for a well site. Beginning on or before January 1, 2023:
- (1) The owner or operator of a well site subject to subsection (a)(1) shall calculate the average production in barrels of oil equivalent per day of the well site using the previous 12 calendar months of operation as reported to the Department and thereafter as specified in subsection

- (c)(4) for the previous calendar year. The owner or operator shall do the following:
- (i) For each well at the well site with production reported to the Department:
- (A) Record the barrels of oil produced for each active well.
- (B) Convert the natural gas production for each active well to equivalent barrels of oil by dividing the standard cubic feet of natural gas produced by 6,000 standard cubic feet per barrel of oil equivalent.
- (C) Convert the condensate production for each active well to equivalent barrels of oil by multiplying the barrels of condensate by 0.9 barrels of oil equivalent per barrel of condensate.
- (ii) Calculate the total production for each active well, in barrels of oil equivalent, by adding the results of subparagraph (i)(A)—(C) for each active well.
- (iii) Sum the results of subparagraph (ii) for all active wells at the well site and divide by 365 or 366 days for the previous 12 calendar months or the previous calendar year, as applicable.
- (2) If the owner or operator does not know the production of an individual well at the well site, the owner or operator shall comply with subsection (c)(2).
 - (c) Requirements for a conventional well site.
- (1) For a well site consisting of only oil wells, the owner or operator shall:
- (i) Determine the GOR of the oil well site using generally accepted methods.
- (ii) If the GOR of the oil well site is less than 300 standard cubic feet of gas per barrel of oil produced, maintain the records under § 129.140(g)(1) (relating to recordkeeping and reporting).
- (iii) If the GOR of the oil well site is equal to or greater than 300 standard cubic feet of gas per barrel of oil produced, meet the requirements of paragraph (2) or paragraph (3) based on the results of subsection (b)(1).
- (2) For a well site producing, on average, equal to or greater than 15 barrels of oil equivalent per day, with at least one well producing, on average, equal to or greater than 15 barrels of oil equivalent per day, the owner or operator shall:
- (i) Conduct an initial AVO inspection on or before January 31, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days.
- (ii) Conduct an initial LDAR inspection program on or before January 31, 2023, with quarterly inspections thereafter separated by at least 60 calendar days but not more than 120 calendar days using one or more of the following:
 - (A) OGI equipment.
- (B) A gas leak detector that meets the requirements of EPA Method 21.
- (C) Another leak detection method approved by the Department.
- (3) For a well site producing, on average, equal to or greater than 15 barrels of oil equivalent per day, and at least one well producing, on average, equal to or greater than 5 barrels of oil equivalent per day but less than 15 barrels of oil equivalent per day, the owner or operator shall.

- (i) Conduct an initial AVO inspection on or before January 31, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days.
- (ii) Conduct an initial LDAR inspection program on or before May 1, 2023, with annual inspections thereafter separated by at least 335 calendar days but not more than 395 calendar days using one or more of the following.
 - (A) OGI equipment.
- (B) A gas leak detector that meets the requirements of EPA Method 21.
- (C) Another leak detection method approved by the Department.
- (4) The owner or operator of a producing well site shall calculate the average production of the well site under subsection (b) for the previous calendar year not later than February 15 and may adjust the frequency of the required LDAR inspection as follows:
- If two consecutive calculations show reduced production, the owner or operator may adopt the requirements applicable to the reduced production level.
- (ii) If a calculation shows higher production, the owner or operator shall adopt the requirements applicable to the higher production level immediately.
- (5) The owner or operator of a well site subject to paragraph (3) may submit to the appropriate Department Regional Office a request, in writing, for an exemption from the requirements of paragraph (3)(ii).
- (i) The written request must include the following:
- (A) Name and location of the well site.
- (B) A demonstration that the requirements of paragraph (3)(ii) are not technically or economically feasible for the well site.
- (C) Sufficient methods for demonstrating compliance with all applicable standards or regulations promulgated under the Clean Air Act or the Act.
- (D) Sufficient methods for demonstrating compliance with this section, §§ 129.131—129.136 and 129.138— 129.140.
- (ii) The Department will review the complete written request submitted in accordance with subparagraph (i) and approve or deny the request in writing.
- (iii) The Department will submit each exemption determination approved under subparagraph (ii) to the Administrator of the EPA for approval as a revision to the SIP. The owner or operator shall bear the costs of public hearings and notifications, including newspaper notices, required for the SIP submittal.
- (iv) The owner or operator of the well site identified in subparagraph (i)(A) shall remain subject to the requirements of paragraphs (1), (3)(i) and (4).
- (d) Requirements for a shut-in conventional well site. The owner or operator of a conventional well site that is temporarily shut-in is not required to perform an LDAR inspection of the well site until one of the following occurs, whichever is first:
- (1) Sixty days after the conventional well site is put into production.
- (2) The date of the next required LDAR inspection after the conventional well site is put into production.

- (e) Requirements for a natural gas gathering and boosting station or a natural gas processing plant. The owner or operator of a natural gas gathering and boosting station or a natural gas processing plant shall conduct the following:
- (1) An initial AVO inspection on or before January 31, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days
- (2) An initial LDAR inspection program on or before January 31, 2023, with quarterly inspections thereafter separated by at least 60 calendar days but not more than 120 calendar days using one or more of the following:
 - (i) OGI equipment.
- (ii) A gas leak detector that meets the requirements of EPA Method 21.
- (iii) Another leak detection method approved by the Department.
- (f) Requirements for extension of the LDAR inspection interval. The owner or operator of an affected facility may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the appropriate Department Regional Office.
- (g) Fugitive emissions monitoring plan. The owner or operator shall develop, in writing, an emissions monitoring plan that covers the collection of fugitive emissions components at the subject facility within each companydefined area. The written plan must include the following
- The technique used for determining fugitive emissions.
- (2) A list of fugitive emissions detection equipment, including the manufacturer and model number, that may be used at the facility.
- (3) A list of personnel that may conduct the monitoring surveys at the facility, including their training and experience.
- (4) The procedure and timeframe for identifying and fixing a fugitive emissions component from which fugitive emissions are detected, including for a component that is unsafe-to-repair.
- (5) The procedure and timeframe for verifying fugitive emissions component repairs.
- (6) The procedure and schedule for verifying the fugitive emissions detection equipment is operating properly.
- (i) For OGI equipment, the verification must be completed as specified in subsection (h).
- (ii) For gas leak detection equipment using EPA Method 21, the verification must be completed as specified in subsection (i).
- (iii) For a Department-approved method, a copy of the request for approval that shows the method's equivalence to subsection (h) or subsection (i).
- (7) A sitemap.
- (8) If using OGI, a defined observation path that meets the following:
- (i) Ensures that all fugitive emissions components are within sight of the path.
- (ii) Accounts for interferences

- (9) If using EPA Method 21, a list of the fugitive emissions components to be monitored and an identification method to locate them in the field.
- (10) A written plan for each fugitive emissions component designated as difficult-to-monitor or unsafe-tomonitor which includes the following:
- A method to identify a difficult-to-monitor or unsafeto-monitor component in the field.
- (ii) The reason each component was identified as difficult-to-monitor or unsafe-to-monitor.
- (iii) The monitoring schedule for each component identified as difficult-to-monitor or unsafe-to-monitor. The monitoring schedule for difficult-to-monitor components must include at least one survey per year no more than 13 months apart.
- (h) Verification procedures for OGI equipment. An owner or operator that identifies OGI equipment in the fugitive emissions monitoring plan in subsection (g)(6)(i) shall complete the verification by doing the following:
- Demonstrating that the OGI equipment is capable of imaging a gas:
- (i) In the spectral range for the compound of highest concentration in the potential fugitive emissions.
- (ii) That is half methane, half propane at a concentration of 10,000 ppm at a flow rate of less than or equal to 60 grams per hour (2.115 ounces per hour) from a 1/4-inch diameter orifice.
- (2) Performing a verification check each day prior to use.
- (3) Determining the equipment operator's maximum viewing distance from the fugitive emissions component and how the equipment operator will ensure that this distance is maintained.
- (4) Determining the maximum wind speed during which monitoring can be performed and how the equipment operator will ensure monitoring occurs only at wind speeds below this threshold.
- (5) Conducting the survey by using the following proce-
- Ensuring an adequate thermal background is present to view potential fugitive emissions.
- (ii) Dealing with adverse monitoring conditions, such as wind.
- (iii) Dealing with interferences, such as steam.
- (6) Following the manufacturer's recommended calibration and maintenance procedures.
- (i) Verification procedures for gas leak detection equipment using EPA Method 21. An owner or operator that identifies gas leak detection equipment using EPA Method 21 in the fugitive emissions monitoring plan in subsection (g)(6)(ii) shall complete the verification by doing the following:
- (1) Verifying that the gas leak detection equipment meets:
- (i) The requirements of Section 6.0 of EPA Method 21 with a fugitive emissions definition of 500 ppm or greater calibrated as methane using an FID-based instrument.
- (ii) A site-specific fugitive emission definition that would be equivalent to subparagraph (i) for other equipment approved for use in EPA Method 21 by the Department.

(2) Using the average composition of the fluid, not the individual organic compounds in the stream, when performing the instrument response factor of Section 8.1.1 of EPA Method 21.

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- (3) Calculating the average stream response factor on an inert-free basis for process streams that contain nitrogen, air or other inert gases that are not organic hazardous air pollutants or VOCs.
- (4) Calibrating the gas leak detection instrument in accordance with Section 10.1 of EPA Method 21 on each day of its use using zero air, defined as a calibration gas with less than 10 ppm by volume of hydrocarbon in air, and a mixture of methane in air at a concentration less than 10,000 ppm by volume as the calibration gases.
- (5) Conducting the surveys which, at a minimum, must comply with the relevant sections of EPA Method 21, including Section 8.3.1.
- (j) Fugitive emissions detection devices. Fugitive emissions detection devices must be operated and maintained in accordance with manufacturer-recommended procedures and as required by the test method or a Department-approved method.
- (k) Background adjustment. For LDAR inspections using a gas leak detector in accordance with EPA Method 21, the owner or operator may choose to adjust the gas leak detection instrument readings to account for the background organic concentration level as determined by the procedures of Section 8.3.2 of EPA Method 21.
- Repair and resurvey provisions. The owner or operator shall repair a leak detected from a fugitive emissions component as follows:
- (1) A first attempt at repair must be made within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:
- (i) The purchase of a part is required. The repair must be completed no later than 10 calendar days after the receipt of the purchased part.
- (ii) The repair is technically infeasible because of one of the following reasons:
- (A) It requires vent blowdown.
- (B) It requires facility shutdown.
- (C) It requires a well shut-in.
- (D) It is unsafe to repair during operation of the unit.
- (iii) A repair that is technically infeasible under subparagraph (ii) must be completed at the earliest of the following:
- (A) After a planned vent blowdown.
- (B) The next facility shutdown.
- (C) Within 2 years.
- (2) The owner or operator shall resurvey the fugitive emissions component no later than 30 calendar days after the leak is repaired.
- (3) For a repair that cannot be made during the monitoring survey when the leak is initially found, the owner or operator shall do one of the following:
- (i) Take a digital photograph of the fugitive emissions component which includes:
 - (A) The date the photo was taken.

- (B) Clear identification of the component by location, such as by latitude and longitude or other descriptive landmarks visible in the picture.
- (ii) Tag the component for identification purposes.
- (4) A gas leak is considered repaired if:
- (i) There is no visible leak image when using OGI equipment calibrated according to subsection (h).
- (ii) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the fugitive emissions component for a gas leak detector calibrated according to subsection (i).
- (iii) There are no detectable emissions consistent with Section 8.3.2 of EPA Method 21.
- (iv) There is no bubbling at the leak interface using the soap solution bubble test specified in Section 8.3.3 of EPA Method 21.
- (m) Recordkeeping and reporting requirements. The owner or operator of a fugitive emissions component subject to this section shall maintain the records under \$ 129.140(g) and submit the reports under \$ 129.140(k/3)(vi).

§ 129.138. Covers and closed vent systems.

- (a) Requirements for a cover on a storage vessel, reciprocating compressor or centrifugal compressor. The owner or operator shall perform the following for a cover of a source subject to § 129.133(b)(1)(i) or § 129.136(b)(2) or (c)(2) (relating to storage vessels; and compressors), as applicable:
- (1) Ensure that the cover and all openings on the cover form a continuous impermeable barrier over each subject source as follows:
- The entire surface area of the liquid in the storage vessel.
- (ii) The entire surface area of the liquid in the wet seal fluid degassing system of a centrifugal compressor.
- (iii) The rod packing emissions collection system of a reciprocating compressor.
- (2) Ensure that each cover opening is covered by a gasketed lid or cap that is secured in a closed, sealed position except when it is necessary to use an opening for one or more of the following:
 - (i) To inspect, maintain, repair or replace equipment.
- (ii) To route a liquid, gas, vapor or fume from the source to a control device or a process that meets the applicable requirements of § 129.139 (relating to control devices) through a closed vent system designed and operated in accordance with subsection (b).
- (iii) To inspect or sample the material in a storage vessel.
- (iv) To add material to or remove material from a storage vessel, including openings necessary to equalize or balance the internal pressure of the storage vessel following changes in the level of the material in the storage vessel.
- (3) Ensure that each storage vessel thief hatch is equipped, maintained and operated with the following:
- (i) A mechanism to ensure that the lid remains properly seated and sealed under normal operating conditions, including when working, standing or breathing, or when flash emissions may be generated.

- (ii) A gasket made of a suitable material based on the composition of the fluid in the storage vessel and weather conditions.
- (4) Conduct an initial AVO inspection on or before January 31, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days for defects that could result in air emissions. Defects include the following:
- (i) A visible crack, hole or gap in the cover.
- (ii) A visible crack, hole or gap between the cover and the separator wall.
- (iii) A broken, cracked or otherwise damaged seal or gasket on a closure device.
- (iv) A broken or missing hatch, access cover, cap or other closure device.
- (5) Inspect only those portions of the cover that extend to or above the surface and the connections on those portions of the cover, including fill ports, access hatches and gauge wells that can be opened to the atmosphere for a storage vessel that is partially buried or entirely underground.
- (6) Repair a detected leak or defect as specified in § 129.137(1) (relating to fugitive emissions components).
- (7) Maintain the records under § 129.140(h) (relating to recordkeeping and reporting) and submit the report under § 129.140(k)(3)(vii).
- (b) Requirements for a closed vent system. The owner or operator shall perform the following for each closed vent system installed on a source subject to § 129.133(b)(1)(ii), § 129.135(b)(1)(i) or (c)(1)(ii) (relating to natural gasdriven diaphragm pumps) or § 129.136(b)(2) or (c)(2):
- (1) Design the closed vent system to route the liquid, gas, vapor or fume emitted from the source to a control device or process that meets the applicable requirements in § 129.139.
- (2) Operate the closed vent system with no detectable emissions as determined by the following:
- (i) Conduct an initial AVO inspection on or before January 31, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days for defects that could result in air emissions. Defects include the following:
- (A) A visible crack, hole or gap in piping.
- (B) A loose connection.
- (C) A liquid leak.
- (D) A broken or missing cap or other closure device.
- (ii) Conducting a no detectable emissions inspection as specified in subsection (d) during the facility's scheduled LDAR inspection in accordance with § 129.137(c)(2)(ii) and (c)(3)(ii) or (e)(2).
- (3) Repair a detected leak or defect as specified in § 129.137(1).
- (4) Except as specified in subparagraph (iii), if the closed vent system contains one or more bypass devices that could be used to divert the liquid, gas, vapor or fume from routing to the control device or to the process under paragraph (1), perform one or more of the following:
- (i) Install, calibrate, operate and maintain a flow indicator at the inlet to the bypass device so when the bypass device is open it does one of the following:
 - (A) Sounds an alarm.

- (B) Initiates a notification by means of a remote alarm to the nearest field office.
- (ii) Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using the following procedure:
 - (A) Installing either of the following:
 - (I) A car-seal.
 - (II) A lock-and-key configuration.
- (B) Visually inspecting the mechanism in clause (A) to verify that the valve is maintained in the non-diverting position on or before January 31, 2023, with monthly inspections separated by at least 15 calendar days but not more than 45 calendar days.
 - (C) Maintaining the records under § 129.140(i)(4).
- (iii) Subparagraphs (i) and (ii) do not apply to a low leg drain, high point bleed, analyzer vent, open-ended valve or line or safety device.
- (5) Conduct an assessment that meets the requirements of subsection (c).
- (6) Maintain the records under § 129.140(i) and submit the reports under § 129.140(k)(3)(viii).
- (c) Requirements for closed vent system design and capacity assessment. An owner or operator that installs a closed vent system under subsection (b) shall perform a design and capacity assessment which must include the following:
- Be prepared under the supervision of an in-house engineer or qualified professional engineer.
- (2) Verify the following:
- (i) That the closed vent system is of sufficient design and capacity to ensure that the emissions from the emission source are routed to the control device or process.
- (ii) That the control device or process is of sufficient design and capacity to accommodate the emissions from the emission source.
- (3) Be certified, signed and dated by the engineer supervising the assessment, including the statement: "I certify that the closed vent design and capacity assessment was prepared under my supervision. I further certify that the assessment was conducted and this report was prepared under the requirements of 25 Pa. Code § 129.138(c). Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information."
- (d) No detectable emissions procedures. The owner or operator shall conduct the no detectable emissions inspection required under subsection (b)(2)(ii) by performing one of the following:
 - (1) Use OGI equipment that meets § 129.137(h).
- (2) Use a gas leak detection instrument that meets § 129.137(i). The owner or operator may adjust the gas leak detection instrument readings as specified in § 129.137(k).
- (3) Use another leak detection method approved by the Department.
- (4) Determine if a potential leak interface operates with no detectable emissions, if the gas leak detection

instrument reading is not a leak as defined in § 129.132(a) (relating to definitions, acronyms and EPA methods).

§ 129.139, Control devices.

- (a) Applicability. This section applies to the owner or operator of each control device that receives a liquid, gas, vapor or fume from a source subject to § 129.133(b)(1)(iii), § 129.135(b)(1)(iii) or (c)(1), or § 129.136(b)(2) or (c)(2) (relating to storage vessels; natural gas-driven diaphragm pumps; and compressors).
 - (1) The owner or operator shall perform the following:
- Operate each control device whenever a liquid, gas, vapor or fume is routed to the control device.
- (ii) Maintain the records under § 129.140(j) (relating to recordkeeping and reporting) and submit the reports under § 129.140(k)(3)(ix).
- (2) The owner or operator may route the liquid, gas, vapor or fume from more than one source subject to § 129.133(b)(1)(iii), § 129.135(b)(1)(ii) or (c)(1), or § 129.136(b)(2) or (c)(2) to a control device installed and operated under this section.
- (b) General requirements for a control device. The owner or operator of a control device subject to this section shall install and operate one or more control devices listed in subsections (c)—(i). The owner or operator shall meet the following requirements, as applicable:
- (1) Operate the control device following the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing VOC emissions.
- (2) Ensure that the control device is maintained in a leak-free condition by conducting a physical integrity check according to the manufacturer's instructions, with monthly inspections separated by at least 15 calendar days but not more than 45 calendar days.
- (3) Maintain a pilot flame while operating the control device and monitor the pilot flame by installing a heat sensing CPMS as specified under subsection (m)(3). If the heat sensing CPMS indicates the absence of the pilot flame or if the control device is smoking or shows other signs of improper equipment operation, ensure the control device is returned to proper operation by performing the following procedures:
- (i) Checking the air vent for obstruction and clearing an observed obstruction.
 - (ii) Checking for liquid reaching the combustor.
- (4) Operate the control device with no visible emissions, except for periods not to exceed a total of 1 minute during a 15-minute period as determined by conducting a visible emissions test according to Section 11 of EPA Method 22.
- Each monthly visible emissions test shall be separated by at least 15 calendar days but not more than 45 calendar days.
- (ii) The observation period for the test in subparagraph(i) shall be 15 minutes.
- (5) Repair the control device if it fails the visible emissions test of paragraph (4) as specified in subparagraph (i) or subparagraph (ii) and return the control device to compliant operation.
 - (i) The manufacturer's repair instructions, if available.

- (ii) The best combustion engineering practice applicable to the control device if the manufacturer's repair instructions are not available.
- (6) Ensure the control device passes the EPA Method 22 visual emissions test described in paragraph (4) following return to operation from a maintenance or repair activity.
- (7) Record the inspection, repair and maintenance activities for the control device in a maintenance and repair log.
- (c) Compliance requirements for a manufacturer-tested combustion device. The owner or operator of a control device subject to this section that installs a control device tested under 40 CFR 60.5413a(d) (relating to what are the performance testing procedures for control devices used to demonstrate compliance at my centrifugal compressor and storage vessel affected facilities?) shall meet subsection (b)(1)—(7) and the following:
- (1) Maintain the inlet gas flow rate at less than or equal to the maximum flow rate specified by the manufacturer. This is confirmed by one of the following:
- (i) Installing, operating and maintaining a flow CPMS that meets subsection (m)(1) and (2)(i) to measure gas flow rate at the inlet to the control device.
- (ii) Conducting a periodic performance test under subsection (k) instead of installing a flow CPMS to demonstrate that the mass content of VOC in the gases vented to the device is reduced by 95.0% by weight or greater.
- (2) Submit an electronic copy of the performance test results to the EPA as required by 40 CFR 60.5413a(d) in accordance with 40 CFR 60.5413a(e)(6).
- (d) Compliance requirements for an enclosed combustion device. The owner or operator of a control device subject to this section that installs an enclosed combustion device, such as a thermal vapor incinerator, catalytic vapor incinerator, boiler or process heater, shall meet subsection (b)(1)—(7) and the following:
- (1) Ensure the enclosed combustion control device is designed and operated to meet one of the following performance requirements:
- (i) To reduce the mass content of VOC in the gases vented to the device by 95.0% by weight or greater, as determined under subsection (k).
- (ii) To reduce the concentration of TOC in the exhaust gases at the outlet to the device to a level less than or equal to 275 ppmvd as propane corrected to 3% oxygen as determined under subsection (I).
- (iii) To operate at a minimum temperature of 760 "Celsius (1,400 "Fahrenheit), if it is demonstrated during the performance test conducted under subsection (k) that combustion zone temperature is an indicator of destruction efficiency.
- (iv) To introduce the vent stream into the flame zone of the boiler or process heater if a boiler or process heater is used as the control device.
- (2) Install, calibrate, operate and maintain a CPMS according to the manufacturer's specifications and subsection (m) to measure the values of the operating parameters appropriate to the control device as follows:
- (i) For a thermal vapor incinerator that demonstrates under subsection (m)6%(i) that combustion zone temperature is an accurate indicator of performance, a temperature CPMS that meets subsection (m)(1) and (4) with the

- temperature sensor installed at a location representative of the combustion zone temperature.
- (ii) For a catalytic vapor incinerator, a temperature CPMS capable of monitoring temperature at two locations and that meets subsection (m)(1) and (4) with one temperature sensor installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor installed in the vent stream at the nearest feasible point to the catalyst bed outlet.
- (iii) For a boiler or process heater that demonstrates under subsection (m)(6)(i) that combustion zone temperature is an accurate indicator of performance, a temperature CPMS that meets subsection (m)(1) and (4) with the temperature sensor installed at a location representative of the combustion zone temperature. The monitoring requirements do not apply if the boiler or process heater meets either of the following:
- (A) Has a design heat input capacity of 44 megawatts (150 MMBtu per hour) or greater.
- (B) Introduces the vent stream with the primary fuel or uses the vent stream as the primary fuel.
- (iv) For a control device complying with paragraph (1)(ii), an organic concentration CPMS that meets subsection (m)(1) and (5) that measures the concentration level of organic compounds in the exhaust vent stream from the control device.
- (3) Operate the control device in compliance with the operating parameter value established under subsection (m)(6)
- (4) Calculate the daily average of the monitored operating parameter for each operating day, using the valid data recorded by the monitoring system under subsection (m)(7).
- (5) Ensure that the daily average of the monitoring parameter value calculated under paragraph (4) complies with the parameter value established under paragraph (3) as specified in subsection (m)(9).
- (6) Operate the CPMS installed under paragraph (2) whenever the source is operating, except during the times specified in subsection (m)(8)(iii).
- (e) Compliance requirements for a flare. The owner or operator of a control device subject to this section that installs a flare designed and operated in accordance with 40 CFR 60.18(b) (relating to general control device and work practice requirements) shall meet subsection (b)(3)—(7).
- (f) Compliance requirements for a carbon adsorption system. The owner or operator of a control device subject to this section that installs a carbon adsorption system shall meet subsection (b)(1) and (2) and the following:
- (1) Design and operate the carbon adsorption system to reduce the mass content of VOC in the gases vented to the device as demonstrated by one of the following:
- (i) Determining the VOC emission reduction is 95.0% by weight or greater as specified in subsection (k).
- (ii) Reducing the concentration of TOC in the exhaust gases at the outlet to the device to a level less than or equal to 275 ppmvd as propane corrected to 3% oxygen as determined under subsection (I).
- (iii) Conducting a design analysis in accordance with subsection (g)(6) or subsection (h)(2) as applicable.
- (2) Include a carbon replacement schedule in the design of the carbon adsorption system.

- (3) Replace the carbon in the control device with fresh carbon on a regular schedule that is no longer than the carbon service life established according to the design analysis in subsection (g)(6) or subsection (h)(2) or according to the replacement schedule in paragraph (2).
- (4) Manage the spent carbon removed from the carbon adsorption system in paragraph (3) by one of the following:
- Regenerating or reactivating the spent carbon in one of the following:
- (A) A thermal treatment unit for which the owner or operator has been issued a permit under 40 CFR Part 270 (relating to EPA administered permit programs: the hazardous waste permit program) that implements the requirements of 40 CFR Part 264, Subpart X (relating to miscellaneous units).
- (B) A unit equipped with operating organic air emission controls in accordance with an emissions standard for VOC under a subpart in 40 CFR Part 60 (relating to standards of performance for new stationary sources) or 40 CFR Part 63 (relating to National emission standards for hazardous air pollutants for source categories).
 - (ii) Burning the spent carbon in one of the following:
- (A) A hazardous waste incinerator, boiler or industrial furnace for which the owner or operator complies with the requirements of 40 CFR Part 63, Subpart EEE (relating to National emission standards for hazardous air pollutants from hazardous waste combustors) and has submitted a Notification of Compliance under 40 CFR 63.1207(j) (relating to what are the performance testing requirements?).
- (B) An industrial furnace for which the owner or operator has been issued a permit under 40 CFR Part 270 that implements the requirements of 40 CFR Part 266, Subpart H (relating to hazardous waste burned in boilers and industrial furnaces).
- (C) An industrial furnace designed and operated in accordance with the interim status requirements of 40 CFR Part 266, Subpart H.
- (g) Additional compliance requirements for a regenerative carbon adsorption system. The owner or operator of a control device subject to this section that installs a regenerative carbon adsorption system shall meet subsection (f) and the following:
- (1) Install, calibrate, operate and maintain a CPMS according to the manufacturer's specifications and the applicable requirements of subsection (m) to measure the values of the operating parameters appropriate to the control device as follows:
- (i) For a source complying with subsection (f)(1)(i), a flow CPMS system that meets the requirements of subsection (m)(1) and (2)(ii) to measure and record the average total regeneration steam mass flow or volumetric flow during each carbon bed regeneration cycle. The owner or operator shall inspect the following:
- (A) The mechanical connections for leakage with monthly inspections separated by at least 15 calendar days but not more than 45 calendar days.
- (B) The components of the flow CPMS for physical and operational integrity if the flow CPMS is not equipped with a redundant flow sensor with quarterly inspections separated by at least 60 calendar days but not more than 120 calendar days.

- (C) The electrical connections of the flow CPMS for oxidation and galvanic corrosion if the flow CPMS is not equipped with a redundant flow sensor with quarterly inspections separated by at least 60 calendar days but not more than 120 calendar days.
- (ii) For a source complying with subsection (f)(1)(i), a temperature CPMS that meets the requirements of subsection (m)(1) and (4) to measure and record the average carbon bed temperature for the duration of the carbon bed steaming cycle and measure the actual carbon bed temperature after regeneration and within 15 minutes of completing the cooling cycle.
- (iii) For a source complying with subsection (f)(1)(ii), an organic concentration CPMS that meets subsection (m)(1) and (5) that measures the concentration level of organic compounds in the exhaust vent stream from the control device.
- (2) Operate the control device in compliance with the operating parameter value established under subsection (m)(6)
- (3) Calculate the daily average of the applicable monitored operating parameter for each operating day, using the valid data recorded by the CPMS as specified in subsection (m)(7).
- (4) Ensure that the daily average of the monitoring parameter value calculated under paragraph (3) complies with the parameter value established under paragraph (2) as specified in subsection (m)(9).
- (5) Operate the CPMS installed in paragraph (1) whenever the source is operating, except during the times specified in subsection (m)(8)(iii).
- (6) Ensure that the design analysis to meet subsection (f)(1)(iii) and (2) for the regenerable carbon adsorption system meets the following:
- (i) Includes an analysis of the vent stream, including the following information:
 - (A) Composition.
 - (B) Constituent concentrations.
 - (C) Flowrate.
 - (D) Relative humidity.
 - (E) Temperature.
- (ii) Establishes the following parameters for the regenerable carbon adsorption system:
- (A) Design exhaust vent stream organic compound concentration level.
- (B) Adsorption cycle time.
- (C) Number and capacity of carbon beds.
- (D) Type and working capacity of activated carbon used for the carbon beds.
- (E) Design total regeneration stream flow over the period of each complete carbon bed regeneration cycle.
 - (F) Design carbon bed temperature after regeneration.
- (G) Design carbon bed regeneration time.
- (H) Design service life of the carbon.
- (h) Additional compliance requirements for a nonregenerative carbon adsorption system. The owner or operator of a control device subject to this section that installs a non-regenerative carbon adsorption system shall meet subsection (f) and the following:

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- (1) Monitor the design carbon replacement interval established in subsection (f)(2) or paragraph (2). The design carbon replacement interval must be based on the total carbon working capacity of the control device and the source operating schedule.
- (2) Ensure that the design analysis to meet subsection (f)(1)(iii) and (2) for a non-regenerable carbon adsorption system, such as a carbon canister, meets the following:
- (i) Includes an analysis of the vent stream including the following information:
- (A) Composition.
- (B) Constituent concentrations
- (C) Flowrate.
- (D) Relative humidity.
- (E) Temperature.
- (ii) Establishes the following parameters for the nonregenerable carbon adsorption system:
- (A) Design exhaust vent stream organic compound concentration level.
 - (B) Capacity of the carbon bed.
- (C) Type and working capacity of activated carbon used for the carbon bed.
- (D) Design carbon replacement interval based on the total carbon working capacity of the control device and the source operating schedule.
- (iii) Incorporates dual carbon canisters in case of emission breakthrough occurring in one canister.
- (i) Compliance requirements for a condenser or nondestructive control device. The owner or operator of a control device subject to this section that installs a condenser or other non-destructive control device shall meet subsection (b)(1) and (2) and the following:
- (1) Design and operate the condenser or other nondestructive control device to reduce the mass content of VOC in the gases vented to the device as demonstrated by one of the following:
- (i) Determining the VOC emissions reduction is 95.0% by weight or greater under subsection (k).
- (ii) Reducing the concentration of TOC in the exhaust gases at the outlet to the device to a level less than or equal to 275 ppmvd as propane corrected to 3% oxygen as determined under subsection (I).
- (iii) Conducting a design analysis in accordance with paragraph (7).
- (2) Prepare a site-specific monitoring plan that addresses the following CPMS design, data collection, and quality assurance and quality control elements:
- (i) The performance criteria and design specifications for the CPMS equipment, including the following:
- (A) The location of the sampling interface that allows the CPMS to provide representative measurements. For a temperature CPMS that meets the requirements of subsection (m)(1) and (4) the sensor must be installed in the exhaust vent stream as detailed in the procedures of the site-specific monitoring plan.
- (B) Equipment performance checks, system accuracy audits or other audit procedures.
- (I) Performance evaluations of each CPMS shall be conducted in accordance with the site-specific monitoring plan.

- (II) CPMS performance checks, system accuracy audits or other audit procedures specified in the site-specific monitoring plan shall be conducted at least once every 12 months.
- (ii) Ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(b) (relating to monitoring requirements).
- (iii) Ongoing reporting and recordkeeping procedures in accordance with 40 CFR 60.7(c), (d) and (f) (relating to notification and record keeping).
- (3) Install, calibrate, operate and maintain a CPMS according to the site-specific monitoring plan described in paragraph (2) and the applicable requirements of subsection (m) to measure the values of the operating parameters appropriate to the control device as follows:
- (i) For a source complying with paragraph (1)(i), a temperature CPMS that meets subsection (m)(1) and (4) to measure and record the average condenser outlet temperature.
- (ii) For a source complying with paragraph (1)(ii), an organic concentration CPMS that meets subsection (m)(1) and (5) that measures the concentration level of organic compounds in the exhaust vent stream from the control device.
- (4) Operate the control device in compliance with the operating parameter value established under subsection (m)(6).
- (5) Calculate the daily average of the applicable monitored operating parameter for each operating day, using the valid data recorded by the CPMS as follows:
- (i) For a source complying with paragraph (1)(i), use the calculated daily average condenser outlet temperature as specified in subsection (m)(7) and the condenser performance curve established under subsection (m)(6)(iii) to determine the condenser efficiency for the current operating day. Calculate the 365-day rolling average TOC emission reduction, as appropriate, from the condenser efficiencies as follows:
- (A) If there is less than 120 days of data for determining average TOC emission reduction, calculate the average TOC emission reduction for the first 120 days of operation. Compliance is demonstrated with paragraph (1)(i) if the 120-day average TOC emission reduction is equal to or greater than 95.0% by weight.
- (B) After 120 days and no more than 364 days of operation, calculate the average TOC emission reduction as the TOC emission reduction averaged over the number of days of operation for which there is data. Compliance is demonstrated with paragraph (1)(i) if the average TOC emission reduction is equal to or greater than 95.0% by weight.
- (C) If there is data for 365 days or more of operation, compliance is demonstrated with the TOC emission reduction if the rolling 365-day average TOC emission reduction calculated in subparagraph (i) is equal to or greater than 95.0% by weight.
- (ii) For a source complying with paragraph (1)(ii), calculate the daily average concentration for each operating day, using the data recorded by the CPMS as specified in subsection (m)(7). Compliance is demonstrated with paragraph (1)(ii) if the daily average concentration is less than the operating parameter under paragraph (4) as specified in subsection (m)(9).

- (6) Operate the CPMS installed in accordance with paragraph (3) whenever the source is operating, except during the times specified in subsection (m)(8)(iii).
- (7) Ensure that the design analysis to meet paragraph (1)(iii) for a condenser or other non-destructive control device meets the following:
- (i) Includes an analysis of the vent stream including the following information:
 - (A) Composition.
 - (B) Constituent concentrations.
 - (C) Flowrate.
 - (D) Relative humidity.
 - (E) Temperature.
- (ii) Establishes the following parameters for the condenser or other non-destructive control device:
- (A) Design outlet organic compound concentration level.
- (B) Design average temperature of the condenser exhaust vent stream.
- (C) Design average temperatures of the coolant fluid at the condenser inlet and outlet.
- (j) General performance test requirements. The owner or operator shall meet the following performance test requirements:
- (1) The owner or operator shall do the following, as applicable:
- Except as specified in subparagraph (iii), conduct an initial performance test within 180 days after installation of a control device.
- (ii) Except as specified in subparagraph (iii), conduct a performance test of an existing control device on or before July 30, 2023, unless the owner or operator of the control device is complying with an established performance test interval, in which case the current schedule should be maintained.
- (iii) The performance test in subparagraph (i) or subparagraph (ii) is not required if the owner or operator meets one or more of the following:
- (A) Installs a manufacturer-tested combustion device that meets the requirements of subsection (c).
- (B) Installs a flare that meets the requirements of subsection (e).
- (C) Installs a boiler or process heater with a design heat input capacity of 44 megawatts (150 MMBtu per hour) or greater.
- (D) Installs a boiler or process heater which introduces the vent stream with the primary fuel or uses the vent stream as the primary fuel.
- (E) Installs a boiler or process heater which burns hazardous waste that meets one or more of the following:
- (I) For which an operating permit was issued under 40 CFR Part 270 (relating to EPA administered permit programs: the hazardous waste permit program) and complies with the requirements of 40 CFR Part 266, Subpart H.
- (II) For which compliance with the interim status requirements of 40 CFR Part 266, Subpart H has been certified.

- (III) Which complies with 40 CFR Part 63, Subpart EEE and for which a Notification of Compliance under 40 CFR 63.1207(j) was submitted to the Department.
- (IV) Which complies with 40 CFR Part 63, Subpart EEE and for which a Notification of Compliance under 40 CFR 63.1207(j) will be submitted to the Department within 90 days of the completion of the initial performance test report unless a written request for an extension is submitted to the Department.
- (F) Installs a hazardous waste incinerator which meets the requirements of 40 CFR Part 63, Subpart EEE and for which the Notification of Compliance under 40 CFR 63 1207(i):
 - (I) Was submitted to the Department.
- (II) Will be submitted to the Department within 90 days of the completion of the initial performance test report unless a written request for an extension is submitted to the Department.
- (G) Requests the performance test be waived under 40 CFR 60.8(b) (relating to performance tests).
- (2) Conduct a periodic performance test no more than 60 months after the most recent performance test unless the owner or operator:
- Monitors the inlet gas flow for a manufacturertested combustion device under subsection (c)(1)(i).
- (ii) Installs a control device exempt from testing requirements under paragraph (1)(iii)(A)—(G).
- (iii) Establishes a correlation between firebox or combustion chamber temperature and the VOC performance level for an enclosed combustion device under subsection (d)(2)(iii).
- (3) Conduct a performance test when establishing a new operating limit.
- (k) Performance test method for demonstrating compliance with a control device weight-percent VOC emission reduction requirement. Demonstrate compliance with the control device weight-percent VOC emission reduction requirements of subsections (c)(1)(ii), (d)(1)(i), (f)(1)(i) and (i)(1)(i) by meeting subsection (j) and the following:
- Conducting a minimum of three test runs of at least 1-hour duration.
- (2) Using EPA Method 1 or EPA Method 1A, as appropriate, to select the sampling sites which must be located at the inlet of the first control device and at the outlet of the final control device. References to particulate mentioned in EPA Method 1 or EPA Method 1A do not apply to this paragraph.
- (3) Using EPA Method 2, EPA Method 2A, EPA Method 2C or EPA Method 2D, as appropriate, to determine the gas volumetric flowrate.
- (4) Using EPA Method 25A to determine compliance with the control device percent VOC emission reduction performance requirement using the following procedure:
- Convert the EPA Method 25A results to a dry basis, using EPA Method 4.

(ii) Compute the mass rate of TOC using the following equations:

$$E_i = K_2C_iM_pQ_i$$

$$E_o = K_2C_oM_pQ_o$$

Where:

E_i = Mass rate of TOC at the inlet of the control device on a dry basis, in kilograms per hour (pounds per hour).

 E_o = Mass rate of TOC at the outlet of the control device on a dry basis, in kilograms per hour (pounds per hour)

 K_2 = Constant, 2.494 × 10⁻⁶ (ppm) (mole per standard cubic meter) (kilogram per gram) (minute per hour) where standard temperature (mole per standard cubic meter) is 20 "Celsius

Or

 K_2 = Constant, 1.554 × 10⁻⁷ (ppm) (lb-mole per standard cubic feet) (minute per hour), where standard temperature (lb-mole per standard cubic feet) is 68 °Fahrenheit.

 C_i = Concentration of TOC, as propane, of the gas stream as measured by EPA Method 25A at the inlet of the control device, ppmvd.

 $C_{\rm o}$ = Concentration of TOC, as propane, of the gas stream as measured by EPA Method 25A at the outlet of the control device, ppmvd.

 M_p = Molecular weight of propane, 44.1 gram per mole (pounds per lb-mole).

 Q_i = Flowrate of gas stream at the inlet of the control device in dry standard cubic meter per minute (dry standard cubic feet per minute).

 Q_o = Flowrate of gas stream at the outlet of the control device in dry standard cubic meter per minute (dry standard cubic feet per minute).

(iii) Calculate the percent reduction in TOC as follows:

$$R_{cd} = \frac{E_i - E_o}{E_i} * 100\%$$

Where:

 R_{cd} = Control efficiency of control device, percent.

 E_i = Mass rate of TOC at the inlet to the control device as calculated in subparagraph (ii), kilograms per hour (pounds per hour).

 E_{α} = Mass rate of TOC at the outlet of the control device as calculated in subparagraph (ii), kilograms per hour (pounds per hour).

(iv) If the vent stream entering a boiler or process heater with a performance testing requirement is introduced with the combustion air or as a secondary fuel, the owner or operator shall:

(A) Calculate E_i in subparagraph (ii) by using the TOC concentration in all combusted vent streams, primary fuels and secondary fuels as C_i .

(B) Calculate E_o in subparagraph (ii) by using the TOC concentration exiting the device as C_o .

(C) Determine the weight-percent reduction of TOC across the device in accordance with subparagraph (iii).

(5) The weight-percent reduction of TOC across the control device represents the VOC weight-percent reduction for demonstration of compliance with subsections (c)(1)(ii), (d)(1)(i), (f)(1)(i) and (i)(1)(i). (1) Performance test method for demonstrating compliance with an outlet concentration requirement. Demonstrate compliance with the TOC concentration requirement of subsections (d)(1)(ii), (f)(1)(ii) and (i)(1)(ii) by meeting subsection (j) and the following:

 Conducting a minimum of three test runs of at least 1-hour duration.

(2) Using EPA Method 1 or EPA Method 1A, as appropriate, to select the sampling sites which must be located at the outlet of the control device. References to particulate mentioned in EPA Method 1 or EPA Method 1A do not apply to this paragraph.

(3) Using EPA Method 2, EPA Method 2A, EPA Method 2C, or EPA Method 2D, as appropriate, to determine the gas volumetric flowrate.

(4) Using EPA Method 25A to determine compliance with the TOC concentration requirement using the following procedures:

(i) Measure the TOC concentration, as propane.

(ii) For a control device subject to subsection (f) or subsection (i), the results of EPA Method 25A in subparagraph (i) may be adjusted by subtracting the concentration of methane and ethane measured using EPA Method 18 taking either:

(A) An integrated sample.

(B) A minimum of four grab samples per hour using the following procedures:

(I) Taking the samples at approximately equal intervals in time, such as 15-minute intervals during the run.

(II) Taking the samples during the same time as the EPA Method 25A sample.

(III) Determining the average methane and ethane concentration per run.

(iii) The TOC concentration must be adjusted to a dry basis, using EPA Method 4.

(iv) The TOC concentration must be corrected to 3% oxygen as follows:

(A) The oxygen concentration must be determined using the emission rate correction factor for excess air, integrated sampling and analysis procedures from one of the following methods:

(I) EPA Method 3A.

(II) EPA Method 3B.

(III) ASTM D6522-00.

(IV) ANSI/ASME PTC 19.10-1981, Part 10.

(B) The samples for clause (A) must be taken during the same time that the samples are taken for determining the TOC concentration.

(C) The TOC concentration for percent oxygen must be corrected as follows:

$$C_c = C_m \left(\frac{17.9}{20.9 - \% O_{2m}} \right)$$

Where:

 $C_c = \mathrm{TOC}$ concentration, as propane, corrected to 3% oxygen, ppmvd.

 C_m = TOC concentration, as propane, ppmvd.

 $\%O_{2m}$ = Concentration of oxygen, percent by volume as measured, dry.

- (m) Continuous parameter monitoring system requirements. The owner or operator of a source subject to § 129.131(a) (relating to general provisions and applicability) and controlled by a device listed in subsections (c)—(i) that is required to install a CPMS shall:
- (1) Ensure the CPMS measures the applicable parameter at least once every hour and continuously records either:
 - The measured operating parameter value.
- (ii) The block average operating parameter value for each 1-hour period calculated using the following procedures:
- (A) The block average from all measured data values during each period.
- (B) If values are measured more frequently than once per minute, a single value for each minute may be used instead of all measured values.
 - (2) Ensure the flow CPMS has either:
- An accuracy of ±2% or better at the maximum expected flow rate.
- (ii) A measurement sensitivity of 5% of the flow rate or 10 standard cubic feet per minute, whichever is greater.
- (3) Ensure the heat-sensing CPMS indicates the presence of the pilot flame while emissions are routed to the control device. Heat-sensing CPMS are exempt from the calibration, quality assurance and quality control requirements in this section.
- (4) Ensure the temperature CPMS has a minimum accuracy of ±1% of the temperature being monitored in "Celsius (±1.8% in "Fahrenheit) or ±2.5 "Celsius (±4.5 "Fahrenheit), whichever value is greater.
- (5) Ensure the organic concentration CPMS meets the requirements of Performance Specification 8 or 9 of 40 CFR Part 60, Appendix B (relating to performance specifications).
- (6) Establish the operating parameter value to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirement as follows:
- (i) For a parameter value established while conducting a performance test under subsection (k) or subsection (l):
- (A) Base each minimum operating parameter value on the value established while conducting the performance test and supplemented, as necessary, by the design analysis of subsection (g)(6), subsection (h)(2) or subsection (i)(7), the manufacturer's recommendations, or both.
- (B) Base each maximum operating parameter value on the value established while conducting the performance test and supplemented, as necessary, by the design analysis of subsection (g)(6), subsection (h)(2) or subsection (i)(7), the manufacturer's recommendations, or both.
- (ii) Except as specified in clause (C), for a parameter value established using a design analysis in subsection (g)(6), subsection (h)(2) or subsection (i)(7):
- (A) Base each minimum operating parameter value on the value established in the design analysis and supplemented, as necessary, by the manufacturer's recommendations.
- (B) Base each maximum operating parameter value on the value established in the design analysis and supplemented, as necessary, by the manufacturer's recommendations.

- (C) If the owner or operator and the Department do not agree on a demonstration of control device performance using a design analysis as specified in clause (A) or (B), then the owner or operator shall perform a performance test under subsection (k) or subsection (l) to resolve the disagreement. The Department may choose to have an authorized representative observe the performance test.
- (iii) For a condenser, establish a condenser performance curve showing the relationship between condenser outlet temperature and condenser control efficiency that demonstrates the condenser complies with the applicable performance requirements in subsection (i)(1) as follows:
- (A) Based on the value measured while conducting a performance test under subsection (k) or subsection (l) and supplemented, as necessary, by a condenser design analysis performed under subsection (i)(7), the manufacturer's recommendations, or both.
- (B) Based on the value from a condenser design analysis performed under subsection (i)(7) supplemented, as necessary, by the manufacturer's recommendations.
- (7) Except for the CPMS in paragraphs (2) and (3), calculate the daily average for each monitored parameter for each operating day using the data recorded by the CPMS. Valid data points must be available for 75% of the operating hours in an operating day to compute the daily average where the operating day is:
- (i) A 24-hour period if the control device operation is continuous.
- (ii) The total number of hours of control device operation per 24-hour period.
- (8) Except as specified in subparagraph (iii), do both of the following:
- Ensure the data recorded by the CPMS is used to assess the operation of the control device and associated control system.
- (ii) Report the failure to collect the required data in paragraph (1) as a deviation of the monitoring require-
- (iii) The requirements of subparagraphs (i) and (ii) do not apply during:
 - (A) A monitoring system malfunction.
- (B) A repair associated with a monitoring system malfunction.
- (C) A required monitoring system quality assurance or quality control activity.
- (9) Determine compliance with the established parameter value by comparing the calculated daily average to the established operating parameter value as follows:
- (i) For a minimum operating parameter established in paragraph (6)(i)(A) or paragraph (6)(i)(A), the control device is in compliance if the calculated value is equal to or greater than the established value.
- (ii) For a maximum operating parameter established in paragraph (6)(i)(B) or paragraph (6)(ii)(B), the control device is in compliance if the calculated value is less than or equal to the established value.

§ 129.140. Recordkeeping and reporting.

(a) Recordkeeping. The owner or operator of a source subject to §§ 129.131—129.139 shall maintain the applicable records onsite or at the nearest local field office for 5 years. The records shall be made available to the Department upon request.

- (b) Storage vessels. The records for each storage vessel must include the following, as applicable:
- (1) The identification and location of each storage vessel subject to § 129.133 (relating to storage vessels). The location of the storage vessel shall be in latitude and longitude coordinates in decimal degrees to an accuracy and precision of 5 decimals of a degree using the North American Datum of 1983.
- (2) Each deviation when the storage vessel was not operated in compliance with the requirements specified in § 129.133.
- (3) The identity of each storage vessel removed from service under § 129.133(e) and the date on which it was removed from service.
- (4) The identity of each storage vessel returned to service under § 129.133(f) and the date on which it was returned to service.
- (5) The identity of each storage vessel and the VOC potential to emit calculation under § 129.133(a)(2).
- (6) The identity of each storage vessel and the actual VOC emission calculation under § 129.133(c)(2)(i) including the following information:
- (i) The date of each monthly calculation performed under § 129.133(c)(2)(i).
- (ii) The calculation determining the actual VOC emissions each month.
- (iii) The calculation demonstrating that the actual VOC emissions are less than 2.7 TPY determined as a 12month rolling sum.
- (7) The records documenting the time the skid-mounted or mobile storage vessel under § 129.133(d)(1) is located on site. If a skid-mounted or mobile storage vessel is removed from a site and either returned or replaced within 30 calendar days to serve the same or similar function, count the entire period since the original storage vessel was removed towards the number of consecutive days.
- (8) The identity of each storage vessel required to reduce VOC emissions under § 129.133(b)(1) and the demonstration under § 129.133(b)(1)(iv).
- (c) Natural gas-driven continuous bleed pneumatic controllers. The records for each natural gas-driven continuous bleed pneumatic controller must include the following, as applicable:
- (1) The required compliance date, identification, location and manufacturer specifications for each natural gas-driven continuous bleed pneumatic controller subject to § 129.134(c) (relating to natural gas-driven continuous bleed pneumatic controllers).
- (2) Each deviation when the natural gas-driven continuous bleed pneumatic controller was not operated in compliance with the requirements specified in § 129.134(c).
- (3) If the natural gas-driven continuous bleed pneumatic controller is located at a natural gas processing plant, the documentation that the natural gas bleed rate is zero.
- (4) For a natural gas-driven continuous bleed pneumatic controller under § 129.134(b), the determination based on a functional requirement for why a natural gas bleed rate greater than the applicable standard is required. A functional requirement includes one or more of the following:
 - (i) Response time.

- (ii) Safety.
- (iii) Positive actuation.
- (d) Natural gas-driven diaphragm pumps. The records for each natural gas-driven diaphragm pump must include the following, as applicable:
- (1) The required compliance date, location and manufacturer specifications for each natural gas-driven diaphragm pump subject to § 129.135 (relating to natural gas-driven diaphragm pumps).
- (2) Each deviation when the natural gas-driven diaphragm pump was not operated in compliance with the requirements specified in § 129.135.
- (3) For a natural gas-driven diaphragm pump under § 129.135(d), the records of the days of operation each calendar year. Any period of operation during a calendar day counts toward the 90-calendar-day threshold.
- (4) For a natural gas-driven diaphragm pump under § 129.135(c)(1), maintain the following records:
- (i) The records under subsection (j) for the control device type.
- (ii) One of the following:
- (A) The results of a performance test under § 129.139(k) or (l) (relating to control devices).
- (B) A design evaluation indicating the percentage of VOC emissions reduction the control device is designed to achieve
- (C) The manufacturer's specifications indicating the percentage of VOC emissions reduction the control device is designed to achieve.
- (5) For a well site with no available control device or process under § 129.135(c)(2), maintain a copy of the certification submitted under subsection (k)(3)(iii)(B)(II).
- (6) The engineering assessment substantiating a claim under § 129.135(c)(3), including the certification under § 129.135(c)(3)(ii)(C).
- (7) For a natural gas-driven diaphragm pump required to reduce VOC emissions under § 129.135(b)(1), the demonstration under § 129.135(b)(1)(iii).
- (e) Reciprocating compressors. The records for each reciprocating compressor must include the following, as applicable:
- (1) For a reciprocating compressor under § 129.136(b)(1)(i) (relating to compressors), the following records:
- (i) The cumulative number of hours of operation.
- (ii) The date and time of each rod packing replacement.
- (2) For a reciprocating compressor under § 129.136(b)(1)(ii), the following records:
- The number of months since the previous replacement of the rod packing.
 - (ii) The date of each rod packing replacement.
- (3) For a reciprocating compressor under § 129.136(b)(2), the following records:
- (i) A statement that emissions from the rod packing are being routed to a control device or a process through a closed vent system under negative pressure.
- (ii) The date of installation of a rod packing emissions collection system and closed vent system as specified in § 129.136(b)(2).

- (4) Each deviation when the reciprocating compressor was not operated in compliance with § 129.136(b).
- (f) Centrifugal compressors. The records for each centrifugal compressor must include the following, as applicable:
- An identification of each existing centrifugal compressor using a wet seal system subject to § 129.136(c).
- (2) Each deviation when the centrifugal compressor was not operated in compliance with § 129.136(c).
- (3) For a centrifugal compressor required to reduce VOC emissions under § 129.136(c)(1), the demonstration under § 129.136(c)(3).
- (g) Fugitive emissions components. The records for each fugitive emissions component must include the following, as applicable:
- For an oil well site subject to § 129.137(c)(1)(ii) (relating to fugitive emissions components):
- (i) The location of each well and its United States Well ID Number.
- (ii) The analysis documenting a GOR of less than 300 standard cubic feet of gas per barrel of oil produced, conducted using generally accepted methods. The analysis must be signed by and include a certification by the responsible official stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- (2) For each well site, the average production calculations required under § 129.137(b)(1) and § 129.137(c)(4).
- (3) For a well site subject to § 129.137(c)(2) or (c)(3), a natural gas gathering and boosting station or a natural gas processing plant:
- The fugitive emissions monitoring plan under § 129.137(g).
- (ii) The records of each monitoring survey conducted under § 129.137(c)(2)(ii), (c)(3)(ii) or (e)(2). The monitoring survey must include the following information:
 - (A) The facility name and location.
- (B) The date, start time and end time of the survey.
- (C) The name of the equipment operator performing the survey.
- (D) The monitoring instrument used.
- (E) The ambient temperature, sky conditions and maximum wind speed at the time of the survey.
- (F) Each deviation from the monitoring plan or a statement that there were none.
- (G) Documentation of each fugitive emission including:
- The identification of each component from which fugitive emissions were detected.
- (II) The instrument reading of each fugitive emissions component that meets the definition of a leak under \$ 129.132(a) (relating to definitions, acronyms and EPA methods).
- (III) The repair methods applied in each attempt to repair the component.
- (IV) The tagging or digital photographing of each component not repaired during the monitoring survey in which the fugitive emissions were discovered.
- (V) The reason a component was placed on delay of repair.

- (VI) The date of successful repair of the component.
- (VII) If repair of the component was not completed during the monitoring survey in which the fugitive emissions were discovered, the information on the instrumentation or the method used to resurvey the component after repair.
- (h) Covers. The records for each cover include the results of each cover inspection under § 129.138(a) (relating to covers and closed vent systems).
- (i) Closed vent systems. The records for each closed vent system must include the following, as applicable:
- The results of each closed vent system inspection under § 129.138(b)(2).
- (2) For the no detectable emissions inspections of § 129,138(d), a record of the monitoring survey as specified under subsection (g)(3)(ii).
- (3) The engineering assessment under § 129.138(c), including the certification under § 129.138(c)(3).
- (4) If the closed vent system includes a bypass device subject to § 129.138(b)(4), a record of:
 - (i) Each time the alarm is activated.
 - (ii) Each time the key is checked out, as applicable.
- (iii) Each inspection required under § 129.138(b)(4)(ii)(B).
- (j) Control devices. The records for each control device must include the following, as applicable:
- Make, model and serial number of the purchased device.
- (2) Date of purchase.
- (3) Copy of purchase order.
- (4) Location of the control device in latitude and longitude coordinates in decimal degrees to an accuracy and precision of 5 decimals of a degree using the North American Datum of 1983.
 - (5) For the general requirements under § 129.139(b):
- (i) The manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing emissions under § 129.139(b)(1).
- (ii) The results of each monthly physical integrity check performed under § 129.139(b)(2).
- (iii) The CPMS data which indicates the presence of a pilot flame during the device's operation under § 129.139(b)(3).
- (iv) The results of the visible emissions test under § 129.139(b)(4) using Figure 22-1 in EPA Method 22 or a form which includes the following:
- (A) The name of the company that owns or operates the control device.
 - (B) The location of the control device.
- (C) The name and affiliation of the person performing the observation.
 - (D) The sky conditions at the time of observation.
- (E) Type of control device.
- (F) The clock start time.
- (G) The observation period duration, in minutes and seconds.

- (H) The accumulated emission time, in minutes and seconds.
- (I) The clock end time.
- (v) The results of the visible emissions test required in § 129.139(b)(6) under subparagraph (iv) following a return to operation from a maintenance or repair activity performed under § 129.139(b)(5).
- (vi) The maintenance and repair log under § 129.139(b)(7).
- (6) For a manufacturer-tested combustion control device under § 129.139(c), maintain the following records:
- (i) The records specified in paragraph (5)(i)-(vi).
- (ii) The manufacturer's specified inlet gas flow rate.
- (iii) The CPMS results under § 129.139(c)(1)(i).
- (iv) The results of each performance test conducted under § 129.139(c)(1)(ii) as performed under § 129.139(k).
- (7) For an enclosed combustion device in § 129.139(d):
- (i) The records specified in paragraph (5)(i)-(vi).
- (ii) The results of each performance test conducted under § 129.139(d)(1)(i) as performed under § 129.139(k).
- (iii) The results of each performance test conducted under § 129.139(d)(1)(ii) as performed under § 129.139(l).
- (iv) The data and calculations for the CPMS installed, operated or maintained under § 129.139(d)(2).
- (8) For a flare in § 129.139(e), the records specified in paragraph (5)(iii)—(vi).
- (9) For a regenerative carbon adsorption device in § 129.139(g):
- (i) The records specified in paragraph (5)(i) and (ii).
- (ii) The results of the performance test conducted under § 129.139(f)(1)(i) as performed under § 129.139(k).
- (iii) The results of the performance test conducted under § 129.139(f)(1)(ii) as performed under § 129.139(l).
- (iv) The control device design analysis, if one is performed under § 129.139(g)(6).
- (v) The data and calculations for a CPMS installed, operated or maintained under § 129.139(g)(1)—(5).
- (vi) The schedule for carbon replacement, as determined by § 129.139(f)(2) or the design analysis requirements of § 129.139(g)(6) and records of each carbon replacement under § 129.139(f)(3) and (4).
- (10) For a nonregenerative carbon adsorption device in § 129.139(h):
- (i) The records specified in paragraph (5)(i) and (ii).
- (ii) The results of the performance test conducted under § 129.139(f)(1)(i) as performed under § 129.139(k).
- (iii) The results of the performance test conducted under § 129.139(f)(1)(ii) as performed under § 129.139(l).
- (iv) The control device design analysis, if one is performed under § 129.139(h)(2).
- (v) The schedule for carbon replacement, as determined by § 129.139(f)(2) or the design analysis requirements of § 129.139(h)(2) and records of each carbon replacement under § 129.139(f)(3) and (4).
- (11) For a condenser or other nondestructive control device in § 129.139(i):
- (i) The records specified in paragraph (5)(i) and (ii).

- (ii) The results of the performance test conducted under § 129.139(i)(1)(i) as performed under § 129.139(k).
- (iii) The results of the performance test conducted under § 129.139(i)(1)(ii) as performed under § 129.139(l).
- (iv) The control device design analysis, if one is performed under § 129.139(i)(7).
- (v) The site-specific monitoring plan under § 129.139(i)(2).
- (vi) The data and calculations for a CPMS installed, operated or maintained under § 129.139(i)(3)—(5).
- (k) Reporting. The owner or operator of a source subject to § 129.131(a) (relating to general provisions and applicability) shall do the following:
- (1) Submit an initial annual report to the Air Program Manager of the appropriate Department Regional Office by December 2, 2023, and annually thereafter on or before June 1
- (i) The responsible official must sign, date and certify compliance and include the certification in the initial report and each subsequent annual report.
- (ii) The due date of the initial report may be extended with the written approval of the Air Program Manager of the appropriate Department Regional Office.
- (2) Submit the reports under paragraph (3) in a manner prescribed by the Department.
- (3) Submit the information specified in subparagraphs (i)—(ix) for each report as applicable:
- (i) Storage vessels. The report for each storage vessel must include the information specified in subsection (b)(1)—(4) for the reporting period, as applicable.
- (ii) Natural gas-driven continuous bleed pneumatic controllers. The initial report for each natural gas-driven continuous bleed pneumatic controller must include the information specified in subsection (c), as applicable. Subsequent reports must include the following:
- (A) The information specified in subsection (c)(1) and (2) for each natural gas-driven continuous bleed pneumatic controller.
- (B) The information specified in subsection (c)(3) and (4) for each natural gas-driven continuous bleed pneumatic controller installed during the reporting period.
- (iii) Natural gas-driven diaphragm pumps. The report for each natural gas-driven diaphragm pump must include the following:
- (A) The information specified in subsection (d)(1) and (2) for the reporting period, as applicable.
- (B) A certification of the compliance status of each natural gas-driven diaphragm pump during the reporting period using one of the following:
- (I) A certification that the emissions from the natural gas-driven diaphragm pump are routed to a control device or process under § 129.135(b)(1)(ii) or (c)(1). If the control device is installed during the reporting period under § 129.135(c)(2)(iii), include the information specified in subsection (d)(4).
- (II) A certification under § 129.135(c)(2) that there is no control device or process available at the facility during the reporting period. This includes if a control device or process is removed from the facility during the reporting period.

- (III) A certification according to § 129.135(c)(3)(ii)(C) that it is technically infeasible to capture and route emissions from:
- (-a-) A natural gas-driven diaphragm pump installed during the reporting period to an existing control device or process
- (-b-) An existing natural gas-driven diaphragm pump to a control device or process installed during the reporting period.
- (-c-) An existing natural gas-driven diaphragm pump to another control device or process located at the facility due to the removal of the original control device or process during the reporting period.
- (iv) Reciprocating compressors. The report for each reciprocating compressor must include the information specified in subsection (e) for the reporting period, as applicable.
- (v) Centrifugal compressors. The report for each centrifugal compressor must include the information specified in subsection (f) for the reporting period, as applicable.
- (vi) Fugitive emissions components. The report for each fugitive emissions component must include the records of each monitoring survey conducted during the reporting period as specified in subsection (g)(3)(ii).
- (vii) Covers. The report for each cover must include the information specified in subsection (h) for the reporting period, as applicable.
- (viii) Closed vent systems. The report for each closed vent system must include the information specified in subsection (i)(1) and (2) for the reporting period, as applicable. The information specified in subsection (i)(3) is only required for the initial report or if the closed vent system was installed during the reporting period.
- (ix) Control devices. The report for each control device must include the information specified in subsection (j), as applicable.

[Pa.B. Dec. No. 22 1925. Filed for public inspection December 9, 2022, 9:00 a.m.]

Title 49—PROFESSIONAL AND VOCATIONAL STANDARDS

STATE BOARD OF AUCTIONEER EXAMINERS [49 PA. CODE CH. 1]

The State Board of Auctioneer Examiners (Board) and the Acting Commissioner of the Bureau of Professional and Occupational Affairs (Acting Commissioner) amends Chapter 1 (relating to State Board of Auctioneer Examiners) by amending § 1.41-(relating to schedule of fees) to read as set forth in Annex A.

This final-form-rulemaking increases application fees to reflect updated costs of processing applications and increases all the Board's biennial renewal fees to ensure its revenue meets or execeds the Board's current and projected expenses. This final-form-rulemaking increases the following application fees on a graduated basis: auctioneer, apprentice—auctioneer, auction—company, trading—as-

sistant, trading assistant company, special license and course of study. Approximately 141 applicants are impacted annually by the increased application fees:

The Board is also increasing the graduated biennial renewal fees for the following licenses and registrations: auctioneer, apprentice auctioneer, auction company, trading assistant and trading assistant company. There are approximately 2,487 individuals who possess current licenses and registrations issued by the Board who are required to pay more to renew their licenses or registrations:

Effective Date

This final form rulemaking is effective upon final form publication in the Pennsylvania Bulletin. The initial increase for application fees will be implemented immediately upon-publication. Thereafter, the subsequent graduated increases for application fees are implemented on a 2-fiscal-year-basis on July 1, 2025, and July 1, 2027.

The increased biennial renewal fees are implemented for the March 1, 2023 February 28, 2025, biennial renewal period. Thereafter, the subsequent graduated increases are implemented for the March 1, 2025 February 28, 2027, biennial renewal period and then again for the March 1, 2027 February 28, 2029, biennial renewal period, and thereafter.

Statutory Authority

Under section 6(a) and (b) of the Auctioneer Licer and Trading Assistant Registration Act (act) (63 P.S. § 734.6(a) and (b)), the license and examination fees and other fees imposed under the provisions of this shall be fixed by the Board by regulation and shall be subject to review in accordance with the Regulatory Review Act (71 P.S. §§ 745.1—745.14). If the revenues generated by fees, fines and civil penalties imposed in accordance with the provisions of this act are not sufficient to match expenditures over a 2-year period, the Board shall increase these fees by regulation, subject to review in accordance with the Regulatory Review Act, that the projected revenues will meet or exceed projected expenditures. If the Bureau of Professional and Occupational Affairs (Bureau) determines that the fees established by the Board are inadequate to meet the minimum enforcement efforts required, then the Bureau, after consultation with the Board, shall increase the fees by regulation, subject to review in accordance with the Regulatory Review Act, that adequate revenues are raised meet the required enforcement effort. In addition to the previous cited authority, other sections of the act support the Board's authority to amend its fees by

Section 32 of the act (63 P.S. § 734.32) provides that "ithle board may adopt rules and regulations necessary for the proper administration and enforcement of this net." Section 33(a) of the act (63 P.S. § 734.33(a)) provides that "fall! fees fixed pursuant to section 293 of the act of July 1, 1978 (P.L. 700, No. 124), known as the Bureau of Professional and Occupational Affairs Fee Act, shall continue in full force and effect until changed by the board." Regarding fees for trading assistant registration, the act of October 8, 2008 (P.L. 1080, No. 89) (Act 89 of 2008) established trading assistant registration by adding section 10.1. Section 10.1(c) specifically required that a registration fee of \$100 be included with each application for registration. When the act was amended by the act of July 20, 2016 (P.L. 789, No. 88) (Act 88 of 2016), it added section 5.1 requiring trading assistants and trading assistant companies to register with the Board and repealed

3. Documentation of Public Hearing and Certifications

Notice of Public Hearing
Transmittals of hearing notice to EPA & PA DEP
Proof of publication of notice of hearing
Certification of hearing
Summary of Comments and responses
Certification of approval and adoption

NOTICE OF PUBLIC HEARING AND PUBLIC COMMENT PERIOD

FOR PROPOSED AMENDMENTS TO

ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS ARTICLE XXI, AIR POLLUTION CONTROL

The Allegheny County Board of Health (ACHD) will hold a public hearing on **Wednesday**, **June 1, 2022**, at **10:00 AM**, in the First Floor Conference Room at Building #7 of the Clack Health Center, 301 39th Street, Pittsburgh, PA 15201 to take testimony on the proposed addition of Section 2105.87, "Control of VOC Emissions from Oil and Natural Gas Sources," to ACHD Article XXI, and corresponding County Ordinance 16782:

The addition of §2105.87 will be submitted as revisions to Allegheny County's portion of the Pennsylvania State Implementation Plan (SIP) for the ozone National Ambient Air Quality Standard (NAAQS).

The proposed regulation/SIP revision is available on the ACHD Air Quality web site at www.alleghenycounty.us/regs-sips. Written copies may be obtained by calling 412-578-8115.

- Persons wishing to present testimony at the hearing must register by using ACHD's <u>Public Hearing Participation Form</u>. Persons who do not have access to the internet may register by calling 412-578-8115.
- You must register to present testimony no less than 24 hours in advance of the virtual hearing.
- Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email to accomments@alleghenycounty.us.

The Board will also accept written comments, beginning on Friday, April 29, 2022, and concluding at 4:00 PM on Wednesday, June 1, 2022, by mail to ACHD Air Program, 301 39th Street, Bldg. 7, Pittsburgh, PA 15201-1811, or by email to aqcomments@alleghenycounty.us.

Please call 412-578-8115, if you have any questions or if you have any difficulty registering for the hearing.



April 26, 2022

Ms. Christina Fernandez, Director Air Protection Division Region III (3AP00) U.S. Environmental Protection Agency 1650 Arch Street Philadelphia, PA 19103-2029

Dear Ms. Fernandez:

Attached is a Notice of Public Hearing for a proposed revision to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding the addition of Section 2105.87, "Control of VOC Emissions from Oil and Natural Gas Sources."

The addition of Section 2105.87 to Article XXI will also be submitted as a change to Allegheny County's portion of the Pennsylvania State Implementation Plan under our Revision Tracking Number 94, as delineated in the Technical Support Document for that SIP.

Information regarding the proposed SIP change may also be found on the ACHD website at: Regulations and SIPs | Air Quality | Health Department | Allegheny County

The public comment period begins April 29, 2022 and concludes June 1, 2022 at 4:00 pm. The public hearing will be held June 1, 2022 at 10:00 AM. Your comments are welcome.

Sincerely,

Dean DeLuca; electronically signed

Dean DeLuca, Manager Air Quality Program

cc: Michael Gordon (U.S. EPA) Megan Goold (U.S. EPA) David Talley (U.S. EPA)

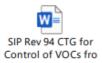
Page 1 of 2

Email Attachments

Public Hearing Notice



Proposed Article XXI/SIP Revision 94





April 26, 2022

Mr. Mark Hammond, Director Bureau of Air Quality Department of Environmental Protection Rachel Carson Building 400 Market Street P O Box 8468 Harrisburg, PA 17105-8468

Dear Mr. Hammond:

Attached is a Notice of Public Hearing for a proposed revision to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding the addition of Section 2105.87, "Control of VOC Emissions from Oil and Natural Gas Sources."

The addition of Section 2105.87 to Article XXI will also be submitted as a change to Allegheny County's portion of the Pennsylvania State Implementation Plan under our Revision Tracking Number 94, as delineated in the Technical Support Document for that SIP.

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Sincerely,

Dean DeLuca; electronically signed

Dean DeLuca, Manager Air Quality Program

cc: Kirit Dalal (PA DEP) Steve Hepler (PA DEP)

Page 1 of 2

Email Attachments

Public Hearing Notice



Proposed Article XXI/SIP Revision 94



		No		Term,
	of Publication of No oved May 16, 1929, PL 17			
Commonwealth of Pennsylvania, OPittsburgh Post-Gazette, a newspape established in 1993 by the merging Gazette and Sun-Telegraph was estimated in 17 been regularly issued in said Count printed and published in the newspaper of general circulation on 28 of April, 2022	r of general circulation publi of the Pittsburgh Post-Gazet tablished in 1960 and the P 86 and the Pittsburgh Post, e ty and that a copy of said p regular	shed in the City of Pittsb tte and Sun-Telegraph ar littsburgh Post-Gazette v stablished in 1842, since rinted notice or publical	urgh, County and ond The Pittsburgh I was established in which date the sation is attached he	Commonwealth aforesaid, was Press and the Pittsburgh Post- 1927 by the merging of the id Pittsburgh Post-Gazette has
Affiant further deposes that he/she is that, as such agent, affiant is duly au of the afore said notice or publicatio	thorized to verify the foregoi	ng statement under oath,	that affiant is not i	nterested in the subject matter
true.				COPY OF NOTICE OR PUBLICATION
Comm My cor Membe STATEM ALLEGH 542 4TH A PITTSBU	conwealth of Pennsylvania - Notary Karen Flaherty, Notary Public Allegheny County mission expires November 16, 2 commission number 1386 128 ir, Pennsylvania Association of Nota ENT OF ADVERTISING ENY CO HEALTH DEPTAVENUE RGH, PA 15219 To PG Publishing Compan	Seqi 2024 Pries G COSTS -LEGAL		NOTICE OF PUBLIC HEARING AND PUBLIC COMMENT PERIOD FOR PROPOSED AMENDMENTS OF ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS ARTICLE XXI, AIR POLLUTION CONTROL The Allegheny County Board of Health Century Board Clack Health Century Board Street, Pittsburgh, PA 15201 to take tostamony on the proposed addition of Section 2105.87, Control of VOC Emissions from Oi and Netural Gas Sources," to ACHD Article XXI, and corresponding County Ordinance 16/82: The addition of \$2105.87 will be submitted as revisions to Allegheny County's portion of the Pennsylvania State implementation Plan (SP) for the ozone National Ambient Air Quality Standard (NAAC)S. The proposed regalation/SIP revision is available on the ACHD Air Quality Web Site at www.alleghenycountyus/regs -site. Written coptes may be obtained. Persons withing to present testimony at the hearing must register by using ACHD's Public Hearing Participation Form. Persons who do not have access to the internet may register by calling
Total		\$77.70		412-578-8115. • You must register to present testimony no less than 24 hours in advance of the virtual
Publisher's Receipt for Advertising Costs PG PUBLISHING COMPANY, publisher of the Pittsburgh Post-Gazette, a newspaper of general circulation, hereby acknowledges receipt of the aforesaid advertising and publication costs and certifies that the same have been fully paid.			hearing. • Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email apcomments@alleghery.count y.us. The Board will also accept	
Office 2201 Sweeney Drive CLINTON, PA 15026 legaladvertising@post-gazette.com Phone 412-263-1440	PG Publishing Company, a Pittsburgh Post-Gazette, a N By	Corporation, Publisher of Newspaper of General Circ	culation	written comments, beginning on Friday, April 29, 2022, and concluding at 4:00 PM on Wochestoy, June 1, 2022, by mail to ACHO Ar Program, 301 39th Street, Bidg. 7, Pittsburgh, PA 15201-1811, or by cmail to accomments@alleghenycount.yus.
I hereby certify that the foregoing is the original Proof of Publication and receipt for the Advertising costs in t subject matter of said notice.		tising costs in the	Please call 412-578-8115, if you have any questions or if you have any difficulty registering for the hearing.	
Attorney For				

Revision 94

Article XXI Section 2105.87, "Control of VOC Emissions from Oil and Natural Gas Sources"

Certification of Hearing

Tom Lattner deposes and says that he is an Air Pollution Control Engineer in the Air Quality Program of the Allegheny County Health Department and hereby certifies that a Public Hearing was held on June 1, 2022 on the proposed revisions to Article XXI, "Rules and Regulations of the Allegheny County Health Department for Air Pollution Control," and County Ordinance No. 16782 adding §2105.87, "Control of VOC Emissions from Oil and Natural Gas Sources;"

that the addition is to be incorporated as a change to Allegheny County's Portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of National Ambient Air Quality Standards;

that the opportunity for written comments was given in accordance with the requirements of 40 CFR 51.102; that notice of such hearing was given by publication in a newspaper of general circulation on April 28, 2022; and to the best of his knowledge, belief and understanding, such proceedings were in full compliance with all applicable State and Federal laws, regulations, and other requirements.

Tom Lattner,

Air Pollution Control Engineer

Air Quality Program

Allegheny County Health Department

SUMMARY OF COMMENTS AND RESPONSES

for

Proposed SIP Revision 94 Article XXI, §2105.87, "Control of VOC Emissions from Oil and Natural Gas Sources."

Public Comment Period: April 29 to June 1, 2022 Public Hearing: June 1, 2022

No public comments were received. However, because the Pennsylvania Department of Environmental Protection (PA DEP) revised the final-form rulemaking that it presented to the EQB on June 14 and October 12, 2022, the ACHD will make several changes as outlined in the comments below from ACHD.

1. **COMMENT**: Due to the changes made by the PA DEP, the proposed regulation should be changed to indicate that it addresses "unconventional" and "conventional" oil and natural gas sources.

COMMENTER: ACHD.

RESPONSE: ACHD has added the words "unconventional" and "conventional" to the title of §2105.87, Control of VOC Emissions from <u>Unconventional</u> and <u>Conventional</u> Oil and Natural Gas Sources. ACHD has also added language to "incorporate by reference" the requirements of the recently promulgated 25 Pa. Code §§ 129.131—129.140, addressing only "conventional" oil and natural gas sources.

2. **COMMENT**: §2105.87.b.2 should be changed to delete references to the "Air Program Manager" and clarify that the term "appropriate Department Regional Office," found in the promulgated PA DEP regulations under 25 Pa. Code §§ 129.121—129.140, shall mean the term "ACHD" in Article XXI.

COMMENTER: ACHD.

RESPONSE: That change has been made.

3. **COMMENT:** §2105.87.b.3, identifying the Article XXI term analogous to the PA DEP term "Bureau of Waste Management," should be deleted because the reference in the promulgated PA DEP regulations under 25 Pa. Code §§ 129.131—129.140 was deleted. **COMMENTER:** ACHD.

RESPONSE: That change has been made.

CERTIFICATION of APPROVAL and ADOPTION

To the best of my knowledge, information, and belief, I the undersigned hereby certify that the amendment adding §2105.87, "Control of VOC Emissions from Unconventional and Conventional Oil and Natural Gas Sources," to Article XXI, Rules and Regulations of the Allegheny County Health Department, Air Pollution Control, adopted by the Allegheny County Board of Health on November 2, 2022, ratified by the Allegheny County Council on January 24, 2023 (Ordinance 02-23-OR, Bill No. 12553-23), approved by the Allegheny County Chief Executive on January 26, 2023, and effective February 5, 2023, as a revision to the County's Portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of the National Ambient Air Quality Standards, were duly and properly enacted as prescribed by the Local Health Administration Law and the Allegheny County Home Rule Charter, and as such, are fully and legally enforceable by the Allegheny County Health Department and the County of Allegheny as provided for by the within authority.

Jason Willis, Esq.

Solicitor

Allegheny County Health Department