



AIR QUALITY PROGRAM
836 Fulton Street
Pittsburgh, PA 15233-2124

Minor Source/Minor Modification
INSTALLATION PERMIT

Issued To: Range Resources – Appalachia, LLC **ACHD Permit#:** 0994-I002
3000 Town Center Boulevard
Canonsburg, PA 15317 **Date of Issuance:** -----
Expiration Date: (See Section III.12)

Issued By: _____ **Prepared By:** _____
JoAnn Truchan, P.E. Michael Dorman
Program Manager, Engineering Air Quality Engineer

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AMENDMENTS:

<i>DATE</i>	<i>SECTION(S)</i>
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I. CONTACT INFORMATION

Facility Location: Gulick Unit 10029 Well Site
191 Fairfield Road
Frazer Township, PA 15084

Permittee/Owner: Range Resources – Appalachia, LLC
3000 Town Center Boulevard
Canonsburg, PA 15317

Permittee/Operator:
(if not Owner)

Responsible Official: Rodney Archibeque
Title: Vice President of Operations – Appalachia Operations
Company: Range Resources – Appalachia, LLC
Address: 3000 Town Center Boulevard
Canonsburg, PA 15317

Telephone Number: 724-743-6700
E-mail Address: rarchibeque@rangeresources.com

Facility Contact: Mark A. Wayner
Title: Environmental Compliance Manager
Telephone Number: 724-754-5363
E-mail Address: mwayner@rangeresources.com

AGENCY ADDRESSES:

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Allegheny County Health Department
Air Quality Program
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Pittsburgh, PA 15233-2124
aqpermits@alleghenycounty.us

II. FACILITY DESCRIPTION

FACILITY DESCRIPTION

The Gulick Unit 10029 well pad is located at 191 Fairfield Road, Frazer Township, Allegheny County, PA 15084. There are twelve (12) existing horizontal wells at the site. Additionally, Range Resources currently operates a natural gas driven, reciprocating compressor under Installation Permit #0994-I001, issued February 13, 2023. A COMM Engineering – Combustor Model 4 is being added to capture the emissions from the Produced Water Tank Battery, on site, to comply with the recently promulgated regulations under 40 CFR Part 60 Subpart OOOOb.

The facility is a minor source of particulate matter (PM), particulate matter < 10 microns in diameter (PM₁₀), particulate matter < 2.5 microns in diameter (PM_{2.5}), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic Compounds (VOCs) and hazardous air pollutants (HAPs) as defined in section 2101.20 of Article XXI.

INSTALLATION DESCRIPTION

This permit is for the installation of a COMM Engineering – Combustor Model 4 enclosed combustor to control GHG (methane) emissions from the produced water tank battery. The combustor shall reduce methane emissions from the produced water tank battery by at least 95% as required for compliance with the standards set forth by: *40 CFR 60, Subpart OOOOb, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, and Reconstruction Commenced After December 6, 2022.*

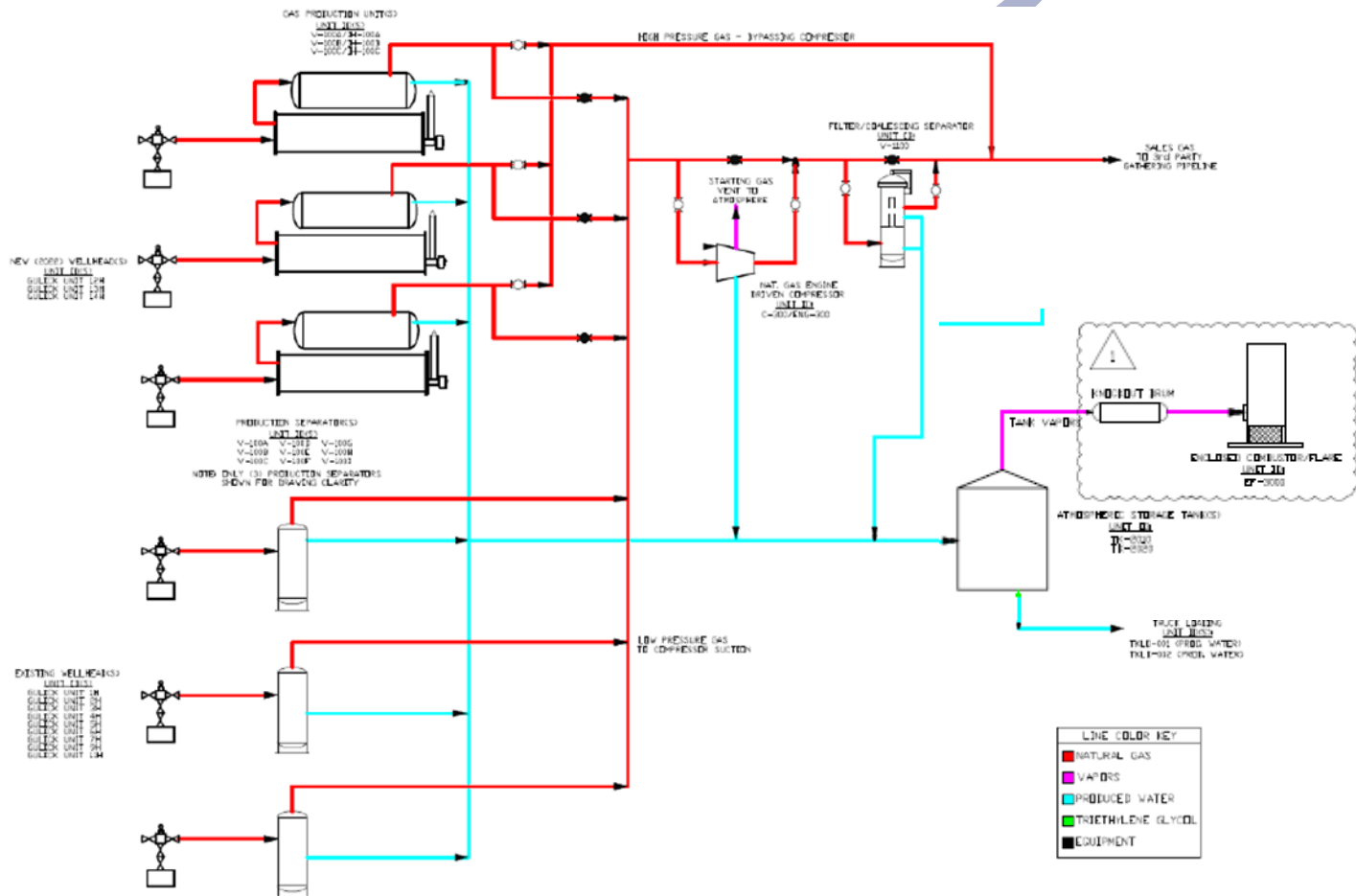
The emissions associated with the permit are the calculated potential emissions generated by the enclosed combustor during normal operations.

The emission units regulated by this permit are summarized in Table II-1:

TABLE II-1: Emission Unit Identification

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P001	Enclosed Combustor	Enclosed Combustion Unit: Combustor Model 4	12.2 MMBtu/hr	Natural Gas	S001

Flow Diagram



DECLARATION OF POLICY

Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.

The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control. The subject equipment has been conditionally approved for operation. The equipment shall be operated in conformity with the plans, specifications, conditions, and instructions which are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable Federal, State and Local laws and regulations.

III. GENERAL CONDITIONS

1. Prohibition of Air Pollution (§2101.11)

- a. It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:
 - 1) Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
 - 2) Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
 - 3) May reasonably be anticipated to endanger the public health, safety, or welfare.
- b. It shall be a violation of this permit to operate, or allow to be operated, any source in such manner as to allow the release of air contaminants into the open air or to cause air pollution as defined in Article XXI, except as is explicitly permitted by this permit or Article XXI.

2. Nuisances (§2101.13)

Any violation of any requirement of this Permit shall constitute a nuisance.

3. Definitions (§2101.20)

- a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.

- b. Unless specified otherwise in this permit or in the applicable regulation, the term “*year*” shall mean any twelve (12) consecutive months.

4. Certification (§2102.01)

Any report or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or Article XXI, and all equivalent compliance techniques that have been approved by the Department, shall be properly installed, maintained, and operated consistent with good air pollution control practice.

6. Conditions (§2102.03.c)

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02, for any person to fail to comply with any terms or conditions set forth in this permit.

7. Transfers (§2102.03.e)

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b.

8. Effect (§2102.03.g)

Issuance of this permit shall not in any manner relieve any person of the duty to fully comply with the requirements of Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of Article XXI or this Permit, whether occurring before or after the issuance of such permit. Further, the issuance of this permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of Article XXI or this Permit.

9. General Requirements (§2102.04.a)

It shall be a violation of this Permit giving rise to the remedies set forth in Article XXI §2109 for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment to which this Permit applies unless either:

- a. The Department has first issued an Installation Permit for such source or equipment; or
- b. Such action is solely a reactivation of a source with a current Operating Permit, which is approved under §2103.13 of Article XXI.

10. Conditions (§2102.04.e)

Further, the initiation of installation, modification, replacement, reconstruction, or reactivation under this Installation Permit and any reactivation plan shall be deemed acceptance by the source of all terms and conditions specified by the Department in this permit and plan.

11. Revocation (§2102.04.f)

- a. The Department may, at any time, revoke this Installation Permit if it finds that:
 - 1) Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
 - 2) The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
 - 3) Air contaminants will not be controlled to the degree indicated by this permit;
 - 4) Any term or condition of this permit has not been complied with;
 - 5) The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit; or
- b. Prior to the date on which construction of the proposed source has commenced the Department may, revoke this Installation Permit if a significantly better air pollution control technology has become available for such source, a more stringent regulation applicable to such source has been adopted, or any other change has occurred which requires a more stringent degree of control of air contaminants.

12. Term (§2102.04.g)

This Installation Permit shall expire in 18 months if construction has not commenced within such period or shall expire 18 months after such construction has been suspended, if construction is not resumed within such period. Installation Permits shall authorize temporary operation to facilitate shakedown of sources and air cleaning devices, to permit operations pending issuance of a related subsequent Operating Permit, or to permit the evaluation of the air contamination aspects of the source. Such temporary operation period shall be valid for a limited time, not to exceed 180 days, but may be extended for additional limited periods, each not to exceed 120 days, except that no temporary operation shall be authorized or extended which may circumvent the requirements of Article XXI.

For major sources, if the construction, modification or installation is not commenced within 18 months of the issuance of an installation permit or if there is more than an 18-month lapse in construction, modification, or installation, a new installation permit application shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. An applicant for an extension of an installation permit shall pay a fee in the amount set by the Board of Health and approved by Allegheny County Council. The fee for an extension of an installation permit will not apply if, through no fault of the applicant, an extension is required.

13. Prohibition of Operating Without a Permit (§2103.10.b.1)

Except as otherwise expressly provided under Article XXI §2103.10, no source may be operated, or allowed to operate, after the time a complete Operating Permit application for such source is required to be submitted under §2103.10, except in compliance with an Operating Permit issued under §2103.10.

14. Severability Requirement (§2103.12.l)

The provisions of this permit are severable, and if any provision of this permit is determined to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

15. Reporting Requirements (§2103.12.k)

- a. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.
- b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.
- c. All reports submitted to the Department shall comply with the certification requirements of General Condition III.4 above.
- d. Semiannual reports required by this permit shall be submitted to the Department as follows:
 - 1) One semiannual report is due by July 31st of each year for the time period beginning January 1st and ending June 30th of the current year.
 - 2) One semiannual report is due by February 1st of each year for the time period beginning July 1st and ending December 31st of the previous year.
 - 3) The first semiannual report shall be due July 31, 2024 for the time period beginning on the issuance date of this permit through June 30, 2024.
- e. Reports should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us.

16. Minor Modifications of an Installation Permit (§2102.10.c)

Modifications to this Installation Permits may be applied for but only upon submission of an application with a fee paid and where:

- a. No reassessment of any control technology determination is required;
- b. No reassessment of any ambient air quality impact is required; and
- c. There is no increase in emissions; and
- d. The applicable requirements of §2102.04.j, “Miscellaneous Notice Requirements,” are met.

The fee amount shall be set by the Board of Health.

17. Violations (§2104.06)

The violation of any emission standard established by this Permit shall be a violation of this Permit giving rise to the remedies provided by Article XXI §2109.02.

18. Other Requirements Not Affected (§2105.02)

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable federal, state, or county statute, rule, regulation, or the like, including, but not limited to, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology standards now or hereafter established by the EPA, and any applicable requirement of BACT or LAER as provided by Article XXI, any condition contained in this Installation Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Part I of Article XXI.

19. Other Rights and Remedies Preserved (§2109.02.b)

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit

20. Penalties, Fines, and Interest (§2109.07.a)

A source that fails to pay any fee required under this Permit or article XXI when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with of Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have its permit revoked.

21. Appeals (§2109.10)

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

IV. SITE LEVEL TERMS AND CONDITIONS

1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, the permittee shall not operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

- a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- b. Equal or exceed an opacity of 60% at any time.

3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line of such source. In addition, the Department may pursue the remedies provided by §2109.02 for any violation of this Section.

4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

5. Open Burning (§2105.50)

The permittee shall not conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to the permittee in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

6. Shutdown of Control Equipment (§2108.01.b)

- a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the permittee shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment is shut down.
- b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall

have a right to appeal in accordance with the provisions of Article XI.

- c. The prior report required by Site Level Condition IV.6.a above shall include:
- 1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
 - 2) The reasons for the shutdown;
 - 3) The expected length of time that the equipment will be out of service;
 - 4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
 - 5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
 - 6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
 - 7) Such other information as may be required by the Department.
- d. Written notice required by this condition should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us.

7. Breakdowns (§2108.01.c)

- a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the permittee shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.
- b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:
- 1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
 - 2) The nature and probable cause of the breakdown.
 - 3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
 - 4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
 - 5) The estimated quantity of each material being or likely to be emitted.
 - 6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
 - 7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.
- c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the

information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.

- d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.
- e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.
- f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.
- g. Written notice required by this condition should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us.

8. Cold Start (§2108.01.d)

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant. Cold start notifications should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us.

9. Orders (§2108.01.f)

In addition to meeting the requirements Site Level Conditions IV.6 above through IV.9 above, inclusive, the permittee shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

10. Violations (§2108.01.g)

The failure to submit any report or update thereof required by Site Level Conditions IV.6 above through IV.10 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

11. Emissions Testing (§2108.02)

- a. **New and Modified Sources:** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the permittee shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with the applicable requirements of this permit and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup but shall not extend the time beyond 60 days after achieving full production. Emissions testing shall comply with all applicable requirements of Article XXI, §2108.02.e.
- b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- c. **Testing Requirements:** No later than 45 days prior to conducting any tests required by this permit, the permittee shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the permittee shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.
- d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.
- e. **Violations:** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

12. Abrasive Blasting (§2105.51)

- a. Except where such blasting is a part of a process requiring an operating permit, the permittee shall not conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.
- b. In addition to complying with all applicable provisions of §2105.51, the permittee shall not conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

13. Asbestos Abatement (§2105.62, §2105.63)

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

14. Volatile Organic Compound Storage Tanks (§2105.12.a)

The permittee shall not place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

15. Fugitive Emissions (§2105.49)

The permittee, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

- a. The use of asphalt, oil, water, or suitable chemicals for dust control;
- b. The paving and maintenance of roadways, parking lots and the like;
- c. The prompt removal of earth or other material which has been deposited by leaks from transport, erosion or other means;
- d. The adoption of work or other practices to minimize emissions;
- e. Enclosure of the source; and
- f. The proper hooding, venting, and collection of fugitive emissions.

16. Episode Plans (§2106.01 and Article XXI Part F)

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02 and Article XXI Part F.

17. New Source Performance Standards (§2105.05)

- a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for the permittee to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if the permittee has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.
- b. If the permittee operates, or allows to be operated, any source subject to any NSPS, the permittee shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is

required by such standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.



V. EMISSION UNIT LEVEL TERMS AND CONDITIONS**A. Process P001: Enclosed Combustor**

Process Description: COMM Engineering – Combustor Model 4
Facility ID: P001
Max. Design Rate: 12.2 MMBtu/hr
Fuel Type: Natural Gas
Control Device: Enclosed Combustor

1. Restrictions:

- a. The permittee shall use natural gas as a fuel for the enclosed combustor. (§2102.04.b.6)
- b. The permittee shall determine the potential for methane and VOC emissions according to 40 CFR §60.5365b(e)(2). (§2102.04.b.6, 40 CFR §60.5395b(a)(1))
- c. The enclosed combustor shall reduce the methane and VOC emissions generated by the produced water tank battery by at least 95%. (§2102.04.b.6; 40 CFR §60.5395b(a)(2))
- d. The enclosed combustor must be designed and operated as follows: (§2102.04.b.6; 40 CFR §60.5413b(a)(3))
 - 1) For unassisted flares, maintain the net heating value (NHV) of the vent gas sent to the flare at or above 200 Btu/scf.
 - 2) Operate the combustor at or above the manufacturer's recommended minimum but less than the recommended maximum inlet gas flow rate.
 - 3) Operate the flare with no visible emissions, except for periods not to exceed a total of 1 minute during any 15-minute period. The permittee shall conduct the compliance determination with the visible emission limits using Method 22 of appendix A-7 to this part or monitor the flare using a camera according to § 60.5417b(h).
 - 4) Install and operate a continuous burning pilot or combustion flame. An alert must be sent to the nearest control room whenever the pilot or combustion flame is unlit.
- e. The tank battery shall be equipped with a cover and a closed vent system that exhausts to the enclosed combustor. (§2102.04.b.6; 40 CFR §60.5410b(j))
- f. The permittee shall survey the cover and closed vent system for leaks as part of its LDAR surveillance. (§2102.04.b.6)

- g. Emissions from the enclosed combustor shall not exceed the following at any time: (§2102.04.b.6)

TABLE V-A-1: Emission Unit P001 Emission Limitations

POLLUTANT	HOURLY EMISSION LIMIT (lb/hr)	ANNUAL EMISSION LIMIT (tons/year)*
Particulate Matter	0.098	0.43
Particulate Matter <10 µm (PM ₁₀)	0.098	0.43
Particulate Matter <2.5 µm (PM _{2.5})	0.098	0.43
Sulfur Oxides (SO _x)	0.007	0.031
Nitrogen Oxides (NO _x)	1.18	5.15
Carbon Monoxide (CO)	0.99	4.33
Volatile Organic Compounds (VOC)	0.065	0.28
HAPs (Total)	0.022	0.10

* A year is defined as any consecutive 12-month period.

2. Testing Requirements:

- a. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. (§2103.12.h.1)
- b. Notwithstanding the exemption from emissions testing, the permittee shall conduct a compliance determination with the visible emission limits using Method 22 of appendix A-7 to 40 CFR Part 60 at least once every calendar month. Each compliance determination shall be at least 15 days apart. (§2103.12.h; 40 CFR §5413b(a)(1))

3. Monitoring Requirements:

- a. The permittee shall conduct a weekly facility-wide inspection during daylight hours while the sources are in operation. The inspection shall include: (§2103.12.i)
 - 1) Observation for visible stack emissions;
 - 2) Determination of malodors at the property line; and
 - 3) Any equipment malfunctions.
- b. The permittee shall continuously monitor the site using telemetry accompanied by operational alarms. (§2103.12.i)
- c. The permittee shall install, operate and maintain a monitoring device to continuously detect the presence of a pilot or combustion flame. (§2103.12.i; 40 CFR §60.5417b(d)(8))
- d. The permittee shall install operate and maintain a continuous monitoring system for measuring the flow of gas to the enclosed combustion device. (§2103.12.i; 40 CFR §60.5417b)

- e. The permittee shall install, operate, and maintain a monitoring system that will demonstrate that the NHV of the inlet gas to the enclosed combustor consistently exceeds 200 BTU/scf. (§2103.12.i; 40 CFR §60.5417b(8))

4. Record Keeping Requirements:

- a. The permittee shall maintain a log of the inspections required by Condition V.A.3.a above. (§2103.12.j)
- b. The permittee shall maintain the following records: (§2103.12.j; 40 CFR §60.5420b(c))
 - 1) Records of any assessment conducted on the closed vent system routed to the enclosed combustor.
 - 2) For the enclosed combustor, records of:
 - a) Make;
 - b) Model;
 - c) Date of installation.
 - 3) Records of deviations:
 - a) Date;
 - b) Time;
 - c) Duration; and
 - d) Cause.
 - 4) Records of the monitoring plan.
 - 5) Records of:
 - a) Minimum and maximum operating parameter values;
 - b) Continuous parameter monitoring system data (including records that the pilot or combustion flame is present at all times);
 - c) Calculated averages of continuous parameter monitoring system data; and
 - d) Results of all compliance calculations.
 - 6) Records of:
 - a) Continuous parameter monitoring system equipment performance checks;
 - b) System accuracy audits;
 - c) Performance evaluations, or other audit procedures;
 - d) Results of all inspections specified in the monitoring plan; and
 - e) Records of calibration gas cylinders, if applicable.
 - 7) Records of:
 - a) Periods of monitoring system malfunctions;
 - b) Repairs associated with monitoring system malfunctions;
 - c) Required monitoring system quality assurance or quality control activities; and
 - d) Records of repairs on the monitoring system.
- c. The permittee shall record the NHV of the inlet gas to the enclosed combustor. (§2103.12.j)
- d. The results of inspections, episodes of non-compliance/malfunction and corrective actions taken shall be recorded upon occurrence. (§2103.12.j)
- e. All records required under this section shall be maintained on site or at the nearest local field office by the permittee for a period of five years following the date of such record. (§2103.12.j)

5. Reporting Requirements:

- a. The permittee shall submit semi-annual reports to the Department in accordance with General Condition III.15 above which shall include the following information: (§2103.12.k; 40 CFR §60.5420b(b)(3))
 - 1) Monthly fuel usage by the enclosed combustor;
 - 2) Monthly hours of operation of the enclosed combustor;
 - 3) Number of times produced water was shipped from the produced water tanks (monthly);
 - 4) Monthly volume of produced water taken offsite (gallons);
 - 5) NHV of the vent gas sent to the flare; and
 - 6) Instances of noncompliance.
- b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7 above, if appropriate. (§2103.12.k)

6. Work Practice Standard:

The permittee shall operate and maintain the enclosed combustor according to the manufacturer's instructions and recommendations. (§2102.04.b.6)

7. Additional Requirements:

The permittee shall notify the Department in writing ten (10) days prior to start-up of the enclosed combustor. Notification may be sent via email to the Department at aqreports@alleghenycounty.us. The Department reserves the right to inspect and approve the equipment before it is placed into normal operation. (§2102.04.b.6)

VI. MISCELLANEOUS

No miscellaneous sources exist for this installation.

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VII. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios exist for this installation.

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VIII. EMISSIONS LIMITATIONS SUMMARY

The annual emission limitations for the Range Resources – Appalachia, LLC, Gulick Unit 10029 Well Site are summarized in the following table:

TABLE VII-1: Emission Limitations Summary

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year)*
Particulate Matter	0.43
Particulate Matter <10 µm (PM ₁₀)	0.43
Particulate Matter <2.5 µm (PM _{2.5})	0.43
Sulfur Oxides (SO _x)	0.031
Nitrogen Oxides (NO _x)	5.15
Carbon Monoxide (CO)	4.33
Volatile Organic Compounds (VOC)	0.28
Total Hazardous Air Pollutants (HAP)	0.10

* A year is defined as any consecutive 12-month period.