



AIR QUALITY PROGRAM

301 Thirty-ninth Street, Bldg. #7
Pittsburgh, PA 15201-1891

Synthetic Minor Source/Minor Modification INSTALLATION PERMIT

Issued To: Peoples Natural Gas
Company, LLC
1201 Pitt Street
Wilksburg, PA 15221

ACHD Permit No.: 0033-1001a

Date of Issuance: April 15, 2014

Revised: May 2, 2016

Expiration Date: (See Section III, 12)

Issued By: 
Sandra L. Etzel
Air Pollution Control Mgr.


Prepared By: 
Michael Dorman
Air Quality Engineer

TABLE OF CONTENTS

I.	CONTACT INFORMATION.....	3
II.	FACILITY AND INSTALLATION DESCRIPTION.....	4
III.	GENERAL CONDITIONS -- MINOR MODIFICATION.....	6
IV.	SITE LEVEL TERMS AND CONDITIONS	11
V.	EMISSION UNIT LEVEL TERMS AND CONDITIONS	19
	A. PROCESS P002, P003: NATURAL GAS-FIRED ENGINES AND COMPRESSORS	19
VI.	MISCELLANEOUS CONDITIONS.....	24
VII.	ALTERNATIVE OPERATING SCENARIOS.....	25
VIII.	EMISSION LIMITATIONS SUMMARY	26

AMENDMENTS:

DATE	SECTION
5/2/2016	Section I: Change in the name of the “Responsible Official” to Paul W. Becker

I. CONTACT INFORMATION

All inquiries concerning this permit should be directed to:

Facility Location: **Dice Compressor Station**
2300 PA Route 286
Plum Borough, PA 15239

Permittee/Owner: **Peoples Natural Gas
Company, LLC**
1201 Pitt Street
Wilkinsburg, PA 15221

**Permittee/Operator:
(if not Owner)**

Responsible Official: **Paul W. Becker**
Title: Vice President, Operations & Engineering
Company: Peoples Natural Gas
Company, LLC
Address: 225 North Shore Drive
Pittsburgh, PA 15212

Telephone Number: 412-258-4406
Fax Number:

Facility Contact: **Alex M. Pavick**
Title: Sr. Environmental Engineer
Telephone Number: 412-244-2531
Fax Number: 412-244-2505
E-mail Address: Alex.M.Pavick@peoples-gas.com

AGENCY ADDRESSES:

ACHD Contact: **Chief Engineer**
Allegheny County Health Department
Air Quality Program
301 39th Street, Building #7
Pittsburgh, PA 15201-1891

II. FACILITY AND INSTALLATION DESCRIPTION

FACILITY DESCRIPTION

Peoples Natural Gas - Dice Compressor Station is a natural gas compression and transmission station located in Plum Borough, PA that currently operates one (1) 400 hp reciprocating internal combustion engine (RICE), two (2) 600 hp RICE, one (1) 145 hp emergency generator, one (1) 0.574 MMBtu/hr pipeline heater. The source also has miscellaneous combustion sources including a natural gas-fired Cleaver Brooks boiler, water heater, three (3) space heaters, and furnace.

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

Upon completion of the removal and replacement of the two (2) 600 hp RICE by new engines and the removal or electrification of Compressor 1, the facility will become a natural minor source for all criteria pollutants as defined in §2101.20 of Article XXI.

INSTALLATION DESCRIPTION

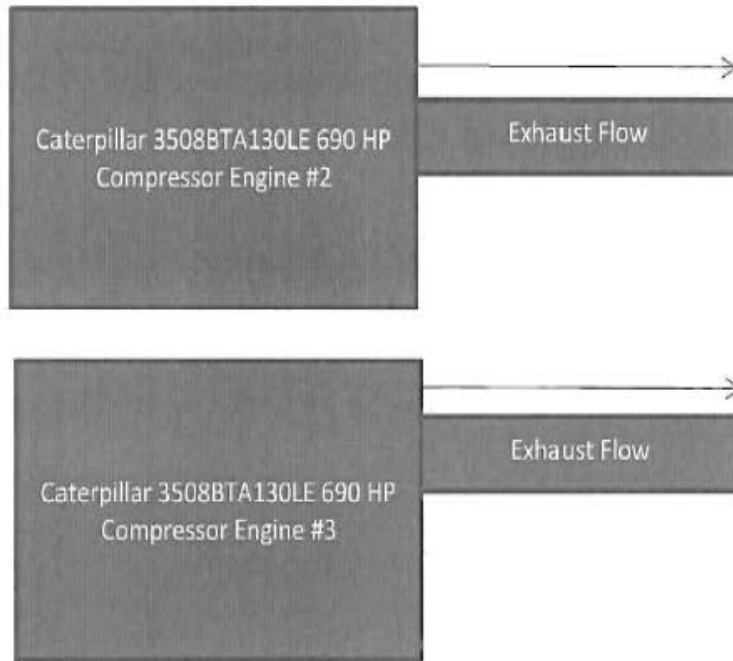
This application is for the installation of two compressor engines that will replace two existing engines which will be taken out of service. Either Engine 002 or 003 will be replaced by June 1, 2014. The remaining engine will be replaced by June 1, 2015. Engine 001 will be removed from service by December 31, 2015. PNG may elect to accelerate the Engine removal and replacement timeline.

Emission Sources

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P002	Compressor 2: Caterpillar Model: G3508B	Oxidation Catalyst	690 hp	Natural Gas	S002
P003	Compressor 3: Caterpillar Model: G3508B	Oxidation Catalyst	690 hp	Natural Gas	S003



Dice Station
Compressor Engine Process 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 installation. The equipment shall be installed and operated in conformity with the plans, specifications, conditions, and instructions that 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 -- MINOR MODIFICATION**1. Prohibition of Air Pollution (§2101.11)**

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 Article XXI, 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:

- a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
- b. Cause an exceedance of the ambient air quality standards established by §2101.10 of Article XXI; or
- c. May reasonably be anticipated to endanger the public health, safety, or welfare.

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. 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 an applicable regulation, a “year” shall be defined as any 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; or
 - 5) The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit.
- 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 one (1) year after such construction has been suspended, if construction is not resumed within such period. In any event, this Installation Permit shall expire upon completion of construction, except that this Installation Permit 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 this Permit.

13. Annual Installation Permit Administrative Fee (§2102.10.c & e)

No later than 30 days after the date of issuance of this Installation Permit and on or before the last day of the month in which this permit was issued in each year thereafter, during the term of this permit until a subsequent corresponding Operating Permit or amended Operating Permit is properly applied for, the owner or operator of such source shall pay to the Department, in addition to all other applicable emission and administration fees, an Annual Installation Permit Administration Fee in an amount of \$750.

14. Severability Requirement (§2103.12.l)

The provisions of this permit are severable, and if any provision of this permit is determined to by a court of competent jurisdiction 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 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 31 of each year for the time period beginning January 1 and ending June 30.
 - 2) One semiannual report is due by January 31 of each year for the time period beginning July 1 and ending December 31 of the previous year.
 - 3) The first semiannual report shall be due July 31, 2014 for the time period beginning on the issuance date of this permit through June 30, 2014.

16. Minor Installation Permit Modifications (§2102.10.d)

Modifications to this Installation Permit may be applied for but only upon submission of an application with a fee in the amount of \$300 and where:

- a. No reassessment of any control technology determination is required; and
- b. No reassessment of any ambient air quality impact is required.

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 §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, no person shall 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.

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. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person 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.

7. 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 person responsible for such equipment 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.7.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.

8. 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 person responsible for such equipment or source 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.

9. 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.

10. Monitoring of Malodorous Matter Beyond Facility Boundaries (§2104.04)

The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to insure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 is not perceptible and record all findings and corrective action measures taken.

11. Orders (§2108.01.f)

In addition to meeting the requirements Site Level Conditions IV.7 above through IV.10 above, inclusive, the person responsible for any source 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.

12. Violations (§2108.01.g)

The failure to submit any report or update thereof required by Site Level Conditions IV.7 above through IV.11 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.

13. Emissions Testing (§2108.02)

- a. **Orders:** 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 person responsible for the affected source 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 person responsible 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.

14. Abrasive Blasting (§2105.51)

- a. Except where such blasting is a part of a process requiring an operating permit, no person shall 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, no person shall 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.

15. 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.

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

No person shall 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.

17. Fugitive Emissions (§2105.49)

The person responsible for a source of fugitive emissions, 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.

18. Episode Plans (§2106.02)

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.

19. 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 any person 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 such person 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. Any person who operates, or allows to be operated, any source subject to any NSPS 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.

20. Diesel Powered Mobile Vehicle Idling (§2105.92)

- a. **Applicability:** This Section applies to the operation of every diesel powered motor vehicle, except school buses:
- b. **General:**
 - 1) No Driver shall cause or allow the engine of any heavy duty diesel powered motor vehicle subject to this section to idle prior to, during layover between, at the destination of or at the conclusion of any trip or route for more than five (5) consecutive minutes, except under conditions described in subsection c, below.
 - 2) No Driver shall cause or allow the engine of any heavy duty diesel powered motor vehicle subject to this section to be accelerated while idling, unless such action is taken in order to operate vehicle mounted accessory or service equipment.
- c. **Exemptions.** This section does not apply for the period or periods during which idling is necessary for:
 - 1) **Traffic Conditions.**
 - a) For traffic conditions over which the driver has no control;
 - b) For an official traffic control device or signal; or
 - c) At the direction of a uniformed police officer or one of those persons authorized to direct traffic by the Vehicle Code, 67 Pa. Code §101.2
 - 2) **Boarding and Discharging Passengers.**
 - a) When vehicles intended for commercial passenger transportation are boarding or discharging passengers; or
 - b) When vehicles intended for transporting people with disabilities are boarding or discharging passengers.
 - 3) **Queuing.** When a vehicle, situated in a queue with other vehicles, must intermittently move forward to perform work or a service, and when shutting the vehicle engine off would impede the progress of the queue and is impracticable.

- 4) **Turbo-Charged Diesel Engine Cool Down or Warm Up.** When the manufacturer’s specifications require more time than the five minute limitation in §2105.92.b.1, above, to cool or warm up a turbo-charged diesel engine.
- 5) **Cold/Hot Weather.**
 - a) If the outside temperature is less than 40° F, then idling is allowed for a period or periods aggregating not more than 20 minutes in any 60 minute period; or
 - b) If the outside temperature is greater than 75° F and a vehicle is equipped with air conditioning, then idling is allowed for a period or periods aggregating not more than 20 minutes in any 60 minute period.
 - c) Notwithstanding subparagraphs a and b, in order to supply heat and air conditioning necessary for the comfort of the passengers, a vehicle intended for commercial passenger transportation may idle for up to 10 minutes prior to passenger boarding and anytime passengers are onboard.
 - d) The Department may, upon request of an owner or manager of a bus terminal, approve alternate limits for warm-up of buses stored outdoors at the terminal when the temperature is below 40° F. Such plan shall include enforceable time limits that minimize bus idling.
- 6) **Sleeping.** When idling is necessary to power a heater, air conditioner or any ancillary equipment during sleeping and resting in a truck or sleeper berth.
- 7) **Safety and Emergencies.**
 - a) To verify that the vehicle is in safe operating condition and equipped as required by all provisions of law, and all equipment is in good working order, either as part of the driver’s daily vehicle inspection, or as otherwise needed;
 - b) To operate defrosters, or other equipment to ensure the safe operation of the vehicle, or as otherwise required by federal or state motor carrier safety regulations, or other requirements; or
 - c) Use of vehicle as an emergency vehicle.
- 8) **Operability and Maintenance**
 - a) To provide power for vehicle mounted accessory or service equipment; or
 - b) When being operated by a mechanic for testing, servicing, repairing or diagnostic purposes.

21. In-Use Off-Road Diesel Powered Mobile Equipment Engine Idling (§2105.93)

- a. **Applicability:** This Section applies to any person or business that owns or operates any diesel-fueled off-road compression ignition vehicle engine with maximum power of 25 horsepower (hp) or greater that is used to provide motive power in any vehicle that:
 - 1) Is not designed to or cannot be registered and driven safely on-road; and
 - 2) Is not an implement of husbandry.

Vehicles with engines subject to this Section are used in construction, mining, rental, landscaping, recycling, landfilling, manufacturing, warehousing, composting, airport ground support equipment, industrial, and other operations. This Section does not apply to locomotives, commercial marine vessels, marine engines, recreational vehicles, or military equipment. This

Section also does not apply to stationary or portable equipment, or equipment or vehicles used in agricultural operations, or equipment at ports or intermodal railyards. Off-road diesel vehicles owned and operated by an individual for personal, noncommercial purposes are exempt from the provisions of this Section

Permittees subject to this Condition shall comply with requirements of §2105.93.a through §2105.93.h of Article XXI

b. **General:**

- 1) No vehicles or engines subject to this Section may idle for more than five consecutive minutes, except as permitted under Subsection c;
- 2) Idling of a vehicle that is owned by a rental company is the responsibility of the renter or lessee; and
- 3) Equipment subject to this Subsection must be located away from sensitive receptors, such as building fresh air intakes, to the extent possible.

c. **Exemptions:** The idling limit does not apply to:

- 1) Idling necessary to ensure the safe operation of the equipment, including idling to verify that the equipment is in safe operating condition and equipped as required by all provisions of law, and all equipment is in good working order, either as part of the daily equipment inspection, or as otherwise needed.
- 2) Idling required to bring the machine system to operating temperature;
- 3) Idling for testing, servicing, repairing, or diagnostic purposes;
- 4) Engine operation necessary to accomplish work for which the equipment was designed (such as operating a crane);
- 5) Idling necessary for the operator's physical well being while accomplishing such work;
- 6) Idling when queuing, i.e., when an off-road vehicle, situated in a queue of other vehicles, must intermittently move forward to perform work or a service, and when shutting the vehicle engine off would impede the progress of the queue and be impractical. This does not include the time an operator may wait motionless in line in anticipation of the start of a workday or opening of a location where work or a service will be performed; and
- 7) Idling by any vehicle being used in an emergency or public safety capacity.

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Process P002, P003: Natural Gas-Fired Engines and Compressors

Process Description:	Natural Gas Fired Engines and Compressors (Caterpillar G3508B)
Facility ID:	P002 and P003
Max. Design Rate/Units:	5.66 MMBtu/hr fuel usage, each
Capacity:	690 bhp; each
Raw Materials:	Natural Gas
Control Device(s):	Oxidation Catalyst: DCL America, Inc. Model DC64-12 CC

1. Restrictions

- a. The engines shall combust only natural gas. (§2102.04.b.6, §2104.03.a)
- b. Each engine shall be equipped with an oxidation catalyst. (§2102.04.b.6)
- c. The permittee shall install instrumentation to continuously measure and record: (§2102.04.b.6)
 - 1) The inlet temperature of each oxidation catalyst; (§2102.04.b.6) and
 - 2) The differential pressure across each oxidation catalyst. (§2102.04.b.6)
- d. Each engine, oxidation catalyst and compressor shall be constructed, operated and maintained according to manufacturers' specifications. (§2102.04.b.6)
- e. Particulate matter emissions shall not exceed 0.012 lb/MMBtu. (§2104.02.a.1)
- f. The permittee shall operate and maintain each Caterpillar G3508B natural gas-fired engine with its oxidation catalyst such that each engine maintains the following emissions standards over the entire life of the engine. Meeting these emission standards demonstrates compliance with the limitations of 40 CFR Part 60 Subpart JJJJ Table 1 (40 CFR §60.4233(e), 40 CFR §60.4234; §2102.04.b.6, §2102.04.e.)
 - 1) $\text{NO}_x \leq 0.5 \text{ g/hp-hr}$; (40 CFR §60.4233(e), 40 CFR §60.4234; §2102.04.b.6, §2102.04.e.)
 - 2) $\text{CO} \leq 0.18 \text{ g/hp-hr}$; (40 CFR §60.4233(e), 40 CFR §60.4234; §2102.04.b.6, §2102.04.e.) and
 - 3) $\text{VOC} \leq 0.25 \text{ g/hp-hr}$; (40 CFR §60.4233(e), 40 CFR §60.4234; §2102.04.b.6, §2102.04.e.)
 - 4) $\text{CH}_2\text{O} \leq 0.05 \text{ g/hp-hr}$; (40 CFR §60.4233(e), 40 CFR §60.4234; §2102.04.b.6, §2102.04.e.)
- g. Each compressor engine shall have a non-resettable hour meter. (§2102.04.b.6)
- h. The permittee shall operate an Emergency Shut Down system so that inlet and outlet valves can be closed to prevent the blowdown of gas into the atmosphere from the facility unless necessary for safety reasons. (§2102.04.b.6)
- i. Visible emissions shall not equal or exceed: (§2102.04.b.6; §2102.04.e, §2104.01.a)
 - 1) An opacity of 10% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
 - 2) An opacity of 30% at any time.
- j. Emissions from compressor engines P002 and P003 shall not exceed the limitations in Table V.A.1 below. (§2102.04.b.6, §2103.20.b.4, §2104.03.a):

Table V.A.1 – Natural Gas-fired Engines Emission Limits

POLLUTANT	HOURLY EMISSION LIMIT: SINGLE ENGINE (lbs/hr)	HOURLY EMISSION LIMIT: COMBINED ENGINES (lbs/hr)	ANNUAL EMISSION LIMIT: COMBINED ENGINES (tons/year) ¹
PM	0.07	0.14	0.61
PM-10	0.07	0.14	0.61
PM-2.5	0.07	0.14	0.61
SO ₂	0.004	0.008	0.035
NO _x	0.76	1.52	6.66
CO	0.27	0.54	2.37
VOCs (including CH ₂ O)	0.38	0.76	3.33
CH ₂ O	0.076	0.152	0.67

¹ A year is defined as any 12 consecutive months

² All particulate is considered PM2.5. PM2.5 is total particulate

³ PM, PM10 and PM2.5 emissions include both filterable and condensable particulate

2. Testing Requirements

- a. Emissions testing shall be performed in accordance with the Site Level Condition IV.13 above and §2108.02 for (“Emissions Testing Requirements”). (§2102.04.b.6, §2108.02)
- b. Emission testing shall be performed at least once every 8,760 hours or three (3) years, whichever comes first. (40 CFR §60.4243(a)(2)(iii), §2103.12.h.1, §2108.02)
- c. The permittee shall test each engine for the following emissions: (40 CFR Part 60 Appendix A, 40 CFR §60.4244, 40 CFR Part 60 Subpart JJJJ Table 2, §2107.02, §2107.03, §2107.04, §2107.05, §2108.02)
 - 1) PM : filterable and condensable (Methods, 5 and 202) (40 CFR Part 60 Appendix A, 40 CFR §60.4244, 40 CFR Part 60 Subpart JJJJ Table 2, §2107.02, §2107.03, §2107.04, §2107.05, §2108.02)
 - 2) SO₂: (Methods, 6, 6A, 6B or 6C); (40 CFR Part 60 Appendix A, 40 CFR §60.4244, 40 CFR Part 60 Subpart JJJJ Table 2, §2107.02, §2107.03, §2107.04, §2107.05, §2108.02)
 - 3) NO_x: (Methods, 7E); (40 CFR Part 60 Appendix A, 40 CFR §60.4244, 40 CFR Part 60 Subpart JJJJ Table 2, §2107.02, §2107.03, §2107.04, §2107.05, §2108.02)
 - 4) CO: (Methods 10); (40 CFR Part 60 Appendix A, 40 CFR §60.4244, 40 CFR Part 60 Subpart JJJJ Table 2, §2107.02, §2107.03, §2107.04, §2107.05, §2108.02)
 - 5) VOCs: (Method 25A and 18); (40 CFR Part 60 Appendix A, 40 CFR §60.4244, 40 CFR Part 60 Subpart JJJJ Table 2, §2107.02, §2107.03, §2107.04, §2107.05, §2108.02) and
 - 6) Formaldehyde: (Method 1, 2, 3, 4, 320). (40 CFR Part 60 Appendix A, 40 CFR §60.4244, 40 CFR Part 60 Subpart JJJJ Table 2, §2107.02, §2107.03, §2107.04, §2107.05, §2108.02)
- d. The permittee shall conduct each performance test according to the following conditions: (40 CFR §60.4244(a), §60.4244(b), §60.4244(c), §2108.02)

- 1) Each test must be conducted within 10% of 100% peak (or the highest achievable) load; (40 CFR §60.4244(a), §60.4244(b), §60.4244(c), §2108.02)
 - 2) According to the requirements of 40 CFR §60.8; (40 CFR §60.4244(a), §60.4244(b), §60.4244(c), §2108.02)
 - 3) Under the specific conditions specified in Table 2 of 40 CFR Part 60 Subpart JJJJ; (40 CFR §60.4244(a), §60.4244(b), §60.4244(c), §2108.02)
 - 4) Not during periods of startup, shutdown or malfunction; (40 CFR §60.4244(a), §60.4244(b), §60.4244(c), §2108.02)
 - 5) Each performance test shall consist of three (3) separate test runs; (40 CFR §60.4244(a), §60.4244(b), §60.4244(c), §2108.02) and
 - 6) Each test run shall last at least an hour. (40 CFR §60.4244(a), §60.4244(b), §60.4244(c), §2108.02)
- e. The permittee shall determine compliance with: (40 CFR §60.4244, §2108.02)
- 1) NO_x mass per unit output emission limitation using the equation in 40 CFR §60.4244(d); (40 CFR §60.4244, §2108.02)
 - 2) CO mass per unit output emission limitation using the equation in 40 CFR §60.4244(e); (40 CFR §60.4244, §2108.02) and
 - 3) VOC mass per unit output emission limitation using the equation in 40 CFR §60.4244(f). (40 CFR §60.4244, §2108.02)
- f. All stack test report(s) shall be submitted to the Department within 60 days after the completion of the stack testing. (40 CFR §60.4245(d), §2108.02)
- g. The Department reserves the right to require additional 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, §2108.02)

3. Monitoring Requirements

- a. The permittee shall install and maintain the necessary meter(s) to monitor the following for each of the natural gas fired engines on a monthly basis: (§2102.04.b.6, §2103.12.i)
 - 1) Fuel consumption; (§2102.04.b.6, §2103.12.i)
 - 2) Operating hours: (§2102.04.b.6, §2103.12.i) and
 - 3) Monthly volume of natural gas processed by the facility. (§2102.04.b.6, §2103.12.i)
- b. The permittee shall conduct a weekly facility-wide inspection during daylight hours while the sources are in operation. The inspection shall include: (§2102.04.b.6, §2103.12.i)
 - 1) Observation for visible stack emissions; (§2102.04.b.6, §2103.12.i)
 - 2) Determination of malodors at the property line; (§2102.04.b.6, §2103.12.i) and
 - 3) Inspection for equipment malfunctions. (§2102.04.b.6, §2103.12.i)
- c. The permittee shall continuously monitor: (§2102.04.b.6, §2103.12.i)
 - 1) The inlet temperature of each oxidation catalyst; (§2102.04.b.6, §2103.12.i) and
 - 2) The differential pressure across each oxidation catalyst. (§2102.04.b.6, §2103.12.i)

4. Record Keeping Requirements

- a. The permittee shall record the following for each of the natural gas fired engines on a monthly basis: (§2102.04.b.6, §2103.12.j)

- 1) Fuel consumption; (§2102.04.b.6, §2103.12.j)
 - 2) Operating hours; (§2102.04.b.6, §2103.12.j) and
 - 3) Monthly volume of natural gas processed by the facility. (§2102.04.b.6, §2103.12.j)
- b. The permittee shall keep a record of the following: (40 CFR §60.4245, §2102.04.b.6, §2103.12.j)
- 1) A description of each time maintenance was done at the facility; (40 CFR §60.4245, §2102.04.b.6, §2103.12.j)
 - 2) Each time maintenance was done on an engine; (40 CFR §60.4245, §2102.04.b.6, §2103.12.j) and
 - 3) Documentation that each engine meets specified emission standards. (40 CFR §60.4245, §2102.04.b.6, §2103.12.j)
- c. The permittee shall maintain a log of the inspections required by Condition V.A.3.b above. (§2102.04.b.6, §2103.12.j)
- d. The permittee shall record the following information daily: (§2102.04.b.6, §2103.12.j)
- 1) The inlet temperature of each oxidation catalyst; (§2102.04.b.6, §2103.12.j) and
 - 2) The differential pressure across each oxidation catalyst. (§2102.04.b.6, §2103.12.j)
- e. The results of inspections, episodes of non-compliance and corrective actions taken shall be recorded upon occurrence. (§2103.12.j)
- f. The permittee shall retain records of all required monitoring data and support information for at least five (5) years. (§2103.12.j)

5. Reporting Requirements

- a. The permittee shall submit semiannual monitoring reports to the Department in accordance with General Condition III.15 above. (§2102.04.b.6, §2103.12.k)
- b. The permittee shall report: (§2102.04.b.6, §2103.12.k)
- 1) The inlet temperature of each oxidation catalyst; (§2102.04.b.6, §2103.12.k) and
 - 2) The differential pressure across each oxidation catalyst. (§2102.04.b.6, §2103.12.k)
- c. The semiannual reports shall include: (§2102.04.b.6, §2102.04.e., §2103.12.k)
- 1) Monthly fuel usage; (§2102.04.b.6, §2102.04.e., §2103.12.k)
 - 2) Monthly hours of operation; (§2102.04.b.6, §2102.04.e., §2103.12.k) and
 - 3) Monthly volume of natural gas processed by the facility. (§2102.04.b.6, §2102.04.e., §2103.12.k)
- d. Reporting instances of non-compliance, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2102.04.b.4, §2103.12.k)

6. Work Practice Standard

- a. The engine and oxidation catalyst shall be constructed, operated and maintained according to manufacturers' specifications. (§2102.04.b.6)

- b. The permittee shall correct, as soon as practicable, all deficiencies noted in the daily inspection required by Condition V.A.3.b above. (§2102.04.b.6)

7. Additional Requirements

The permittee shall notify the Department in writing at least ten (10) days prior to start-up of the facility. The Department reserves the right to inspect and approve the equipment before it is placed into normal operation. (§2102.04.b.6)

VI. MISCELLANEOUS CONDITIONS

No miscellaneous conditions exist for this Installation.

VII. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios exist for this Installation.

VIII. EMISSION LIMITATIONS SUMMARY

Annual emissions from Peoples Natural Gas Company – Dice Compressor Station shall not exceed the following at any time:

POLLUTANT	TOTAL (tons/year)
PM	0.61
PM-10	0.61
PM-2.5	0.61
SO ₂	0.035
NO _x	6.66
CO	2.37
VOCs (including CH ₂ O)	3.33
CH ₂ O	0.67
CO ₂ e	9,540.686