



## AIR QUALITY PROGRAM

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

### Synthetic Minor Source/Minor Modification INSTALLATION PERMIT

**Issued To:** Superior Appalachian  
Pipeline, LLC  
7130 S. Lewis Ave., Suite 510  
Tulsa, OK 74136

**ACHD Permit#:** 0837-I001

Date of Issuance: -----

Expiration Date: (See Section III.12)

**Issued By:** \_\_\_\_\_  
Sandra L. Etzel  
Air Pollution Control Mgr.

**Prepared By:** Michael Dorman  
Air Quality Engineer

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DATE	SECTION
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## I. CONTACT INFORMATION

All inquiries concerning this permit should be directed to:

**Facility Location:** Superior Appalachian Pipeline, LLC  
Kissick Lane  
Frazer Township, PA 15084

**Permittee/Owner:** Superior Appalachian Pipeline, LLC  
7130 S. Lewis Ave., Suite 510  
Tulsa, OK 74136

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

**Responsible Official:** Robert H. Parks, Jr.  
Title: President  
Company: Superior Appalachian Pipeline, LLC  
Address: 7130 S. Lewis Ave., Suite 510  
Tulsa, OK 74136

Telephone Number: 918-382-7200  
Fax Number: 918-382-7222

**Facility Contact:** Chad A. VanBerschot  
Title: Environmental Specialist  
Telephone Number: 918-477-5749  
Fax Number: 918-493-7711  
E-mail Address: Chad.vanberschot@unitcorp.com

### AGENCY ADDRESSES:

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

**EPA Contact:** Enforcement Programs Section (3AP12)  
USEPA Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

## II. FACILITY AND INSTALLATION DESCRIPTION

### FACILITY DESCRIPTION

This permit is for the installation of a natural gas compressor and transmission facility on Kissick Lane, Frazer Township, Allegheny County, PA. Natural gas from area wells enters the facility through an inlet separator. Natural gas fired compressor engines compress the gas received from the inlet separator. Upon exiting the compressors, the natural gas enters the TEG dehydration units. These dehydration units remove any water remaining in the gas through glycol absorption of the water in a contactor vessel. The water rich glycol goes to a glycol dehydrator reboiler where the water is boiled to restore the glycol. The emissions from the natural gas fired reboilers exhaust to atmosphere. Water from the inlet separator is stored in two (2) 300 barrel storage tanks.

The facility is 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 (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), volatile organic Compounds (VOCs) and hazardous air pollutants (HAPs) as defined in section 2101.20 of Article XXI.

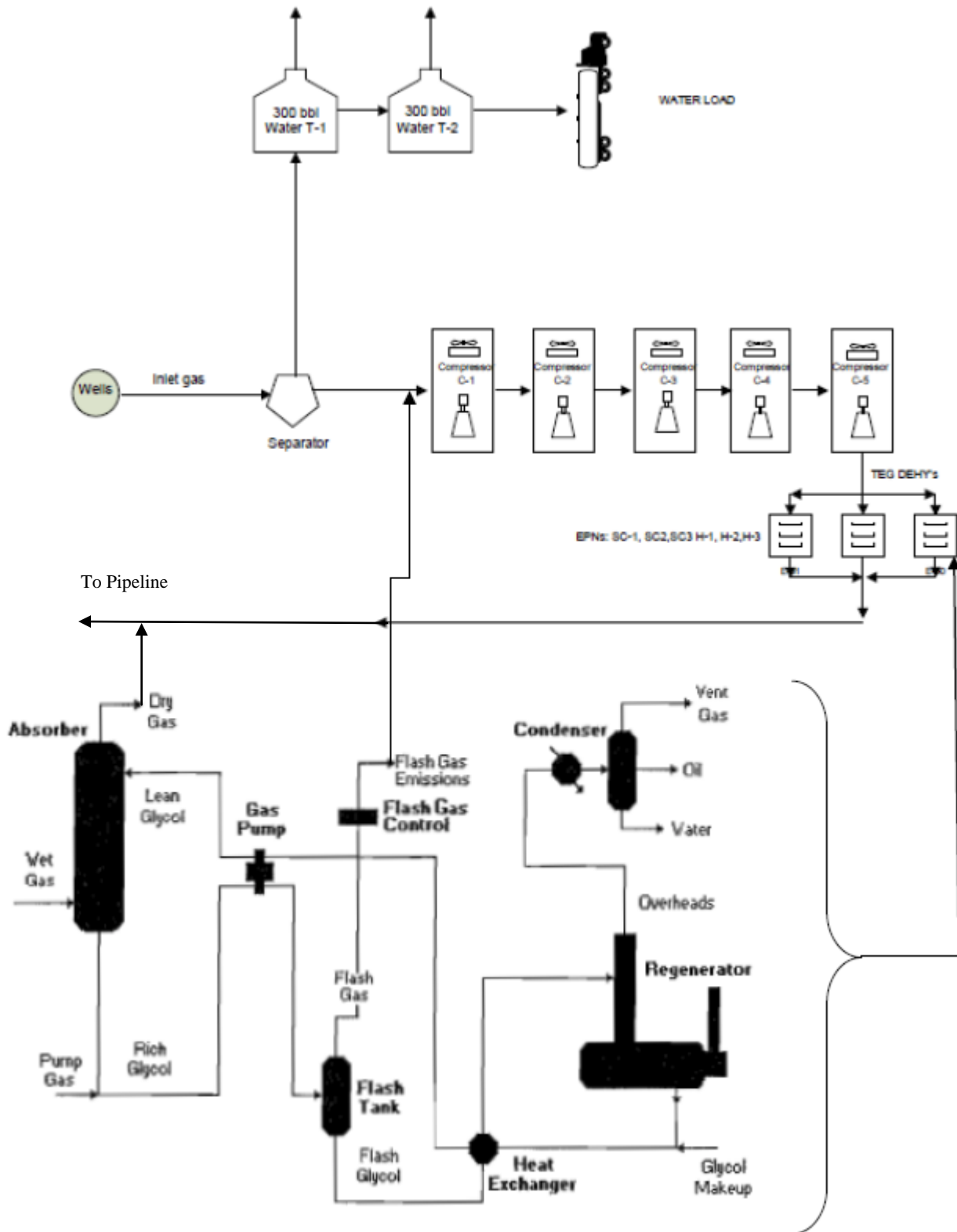
### INSTALLATION DESCRIPTION

This permit is for the installation of a natural gas compressor and transmission facility comprising five (5) Caterpillar G3516B natural gas fired engines each driving a compressor, three (3) natural gas heated dehydrator/reboilers and two (2) 300 barrel storage tanks. Natural gas from area wells enters the facility through an inlet separator. Natural gas fired compressor engines compress the gas received from the inlet separator. Upon exiting the compressors, the natural gas enters the TEG dehydration units. These dehydration units remove any water remaining in the gas through glycol absorption of the water in a contactor vessel. The water rich glycol goes to a glycol dehydrator reboiler where the water is removed to restore the glycol. The emissions from the natural gas fired reboilers exhaust to atmosphere. Water from the inlet separator is stored in two (2) 300 barrel storage tanks.

**Installation Emission Unit Summary:**

<b>I.D.</b>	<b>SOURCE DESCRIPTION</b>	<b>CONTROL DEVICE(S)</b>	<b>MAXIMUM CAPACITY</b>	<b>FUEL/RAW MATERIAL</b>	<b>STACK I.D.</b>
C001	Compressor 1: Caterpillar G3516B	Afterburner	14 MMScf/day	Natural Gas	S001
C002	Compressor 2: Caterpillar G3516B	Afterburner	14 MMScf/day	Natural Gas	S002
C003	Compressor 3: Caterpillar G3516B	Afterburner	14 MMScf/day	Natural Gas	S003
C004	Compressor 4: Caterpillar G3516B	Afterburner	14 MMScf/day	Natural Gas	S004
C005	Compressor 5: Caterpillar G3516B	Afterburner	14 MMScf/day	Natural Gas	S005
H001	Dehydrator/Reboiler	None	35 MMScf/day	Natural Gas	S006
H002	Dehydrator/Reboiler	None	35 MMScf/day	Natural Gas	S007
H003	Dehydrator/Reboiler	None	45 MMScf/day	Natural Gas	S008
WT001	Water/Condensate Tank	None	300 bbl	Water	S009
WT002	Water/Condensate Tank	None	300 bbl	Water	S010

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**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:
  - i. Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
  - ii. The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
  - iii. Air contaminants will not be controlled to the degree indicated by this permit;
  - iv. Any term or condition of this permit has not been complied with;
  - v. 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 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 February 1 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, 2012 for the time period beginning on the issuance date of this permit through June 30, 2012.

**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.

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**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:
  - i. 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;
  - ii. The reasons for the shutdown;
  - iii. The expected length of time that the equipment will be out of service;
  - iv. Identification of the nature and quantity of emissions likely to occur during the shutdown;
  - v. 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;
  - vi. 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
  - vii. 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:
  - i. 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.
  - ii. The nature and probable cause of the breakdown.
  - iii. The expected length of time that the equipment will be inoperable or that the emissions will continue.
  - iv. 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.
  - v. The estimated quantity of each material being or likely to be emitted.
  - vi. 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.

- vii. 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.

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**V. EMISSION UNIT LEVEL TERMS AND CONDITIONS**

**A. Process C001, C002, C003, C004 and C005 : Natural Gas-Fired Engine and Compressor**

**Process Description:** Natural Gas Fired Engine and Compressor (Caterpillar G3516B)  
**Facility ID:** C001, C002, C003, C004 and C005  
**Max. Design Rate/Units:** 14 MMScf/day throughput of compressed gas, each  
**Capacity:** 11.39 MMBtu/hr; each  
**Raw Materials:** Natural Gas  
**Control Device(s):** Oxidation Catalyst: Emit Technologies, ELH-420oZ-1616F-30CEO-36

The permittee is also subject to the following conditions:

**1. Restrictions**

- a. The engines shall combust only natural gas. (§2102.04.b.6, §2104.03.a)
- b. Each engine shall be equipped with a catalytic converter. (§2102.04.b.6)
- c. The engine, catalytic converter and compressor shall be constructed, operated and maintained according to manufacturers' specifications. (§2102.04.b.6)
- d. The NOx emissions shall not exceed 0.5 g/bhp-hr for each of the Caterpillar G3516B engines. (§2102.04.b.6, 40 CFR §60.4233(e))
- e. Particulate matter emissions shall not exceed 0.012 lb/MMBtu. (§2104.02.a.1)
- f. The permittee shall operate and maintain the natural gas-fired engines such that they maintain the following emissions standards over the entire life of the engine. (40 CFR §60.4233(e), 40 CFR §60.4234, 40 CFR Part 60 Table 1; §2102.04.b.6, §2102.04.e.)
  - i.  $NO_x \leq 0.5 \text{ g/HP-hr}$ ;
  - ii.  $CO \leq 2.0 \text{ g/HP-hr}$ ; and
  - iii.  $VOC \leq 0.7 \text{ g/HP-hr}$ ;
- g. Each engine shall have a non-resettable hour meter. (§2102.04.b.6).
- h. Visible emissions shall not equal or exceed: . (§2102.04.b.6; §2102.04.e, §2104.01.a)
  - i. An opacity of 10% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
  - ii. An opacity of 30% at any time.
- i. Emissions from Processes C001, C002, C003, C004 and C005 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 Engine Emission Limits**

<b>POLLUTANT</b>	<b>HOURLY EMISSION LIMIT: SINGLE ENGINE (lbs/hr)</b>	<b>ANNUAL EMISSION LIMIT: COMBINED ENGINES (tons/year) <sup>1</sup></b>
PARTICULATE MATTER <sup>2</sup>	0.14	3.05
PM-10 <sup>2</sup>	0.14	3.05
PM-2.5 <sup>2</sup>	0.14	3.05
SULFUR OXIDES	0.008	0.18
NITROGEN OXIDES	1.52	33.30
CARBON MONOXIDE	0.52	11.40
VOLATILE ORGANIC COMPOUNDS	0.73	16.00
FORMALDEHYDE	0.321	7.05

<sup>1</sup> A year is defined as any 12 consecutive months

<sup>2</sup> All particulate is considered PM2.5. PM2.5 is total 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 five (5) years. (§2103.12.h.1, §2103.12.i)
- 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)
  - i. PM : filterable and condensable (Methods, 5 and 202)
  - ii. SO<sub>2</sub>: (Methods, 6, 6A, 6B or 6C);
  - iii. NO<sub>x</sub>: (Methods, 7E);
  - iv. CO: (Methods 10);
  - v. VOCs: (Method 25A and 18); and
  - vi. Formaldehyde: (Method 1, 2, 3, 4, 320).
- d. The permittee shall conduct each performance test according to the following conditions: .. (40 CFR §60.4244(a), §60.4244(b), §60.4244(c))
  - i. Each test must be conducted within 10% of 100% peak load;
  - ii. According to the requirements of 40 CFR §60.8;
  - iii. Under the specific conditions specified in Table 2 of 40 CFR Part 60 Subpart JJJJ;
  - iv. Not during periods of startup, shutdown or malfunction;
  - v. Each performance test shall consist of three (3) separate test runs; and
  - vi. Each test run shall last at least an hour.
- e. The permittee shall determine compliance with: (40 CFR §60.4244)

- i. NO<sub>x</sub> mass per unit output emission limitation using the equation in 40 CFR §60.4244(d);
- ii. CO mass per unit output emission limitation using the equation in 40 CFR §60.4244(e); and
- iii. VOC mass per unit output emission limitation using the equation in 40 CFR §60.4244(f).

- f. Each test run shall last at least one (1) hour. (40 CFR §60.4244 (b), )
- g. 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), )
- h. 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 monitor the following for each of the natural gas fired engines on a monthly basis: (§2102.04.b.6, §2103.12.i)
  - i. Fuel consumption;
  - ii. Operating hours; and
  - iii. Monthly volume of natural gas processed by the facility.
- b. The permittee shall conduct a daily facility-wide inspection during daylight hours while the sources are in operation. The inspection shall include: (§2102.04.b.6)
  - i. Observation for visible stack emissions;
  - ii. Determination of malodors at the property line; and
  - iii. Any equipment malfunctions.

**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)
  - i. Fuel consumption;
  - ii. Operating hours; and
  - iii. Monthly volume of natural gas processed by the facility.
- b. The permittee shall keep a record of the following: (40 CFR §60.4245, §2102.04.b.6)
  - i. A description of each time maintenance was done at the facility;
  - ii. Each time maintenance was done on an engine; and
  - iii. Documentation that each engine meets the emission standards.
- 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 results of inspections, episodes of non-compliance and corrective actions taken shall be recorded upon occurrence. (§2103.12.j)
- e. 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 reports shall include: (§2102.04.b.6, §2102.04.e., §2103.12.k)
  - i. Monthly fuel usage;
  - ii. Monthly hours of operation; and
  - iii. Monthly volume of natural gas processed by the facility.
- c. 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 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 ten (10) days prior to start-up of the facility. The installation of the equipment included in this permit shall be inspected and approved by the Department before being placed into normal operation. (§2102.04.b.6)

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**B. Process H001 and H002: Dehydrator/Reboiler**

<b>Process Description:</b>	Dehydration of Natural Gas (Exterran 8 Tray Absorber/1.0 MMBtu/hr Reboiler)
<b>Facility ID:</b>	H001 and H002
<b>Max. Design Rate/Units:</b>	35MMScf/day, each
<b>Capacity:</b>	1 MMBtu/hr
<b>Raw Materials:</b>	Natural Gas
<b>Control Device(s):</b>	Condenser, Flash Gas Control

The permittee is also subject to the following conditions:

**1. Restrictions**

- a. Each dehydrator shall combust only natural gas. (§2104.03.a (§2102.04.b.6, §2102.04.e.)
- b. Dehydrator emissions shall be controlled by a condenser. (§2102.04.b.6, §2102.04.e.)
- c. The dehydrator shall not be operated unless the condenser, and flash gas control are in operation.
- d. Flash gas emissions from the dehydrator shall be routed to the inlet of Compressor No. 1. (§2102.04.b.6, §2102.04.e.)
- e. The final exhaust temperature of the dehydrator shall be less than 110° F. (§2102.04.b.6, §2102.04.e.)
- f. The glycol recirculation rate shall not exceed the circulation rate for peak gas flow plus 10%. (§2102.04.b.6)
- g. Visible emissions shall not exceed: .. (§2102.04.b.6; §2102.04.e, §2104.01.a)
  - i. An opacity of 10% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
  - ii. An opacity of 30% at any time. (§2102.04.b.6; §2102.04.e.)
- h. Emissions from H001 and H002 shall not exceed the limitations in Table V.B.1 below. (§2102.04.b.6):

**Table V.B.1 – Dehydrator/Reboiler No. 1 and No. 2**

<b>POLLUTANT</b>	<b>HOURLY EMISSION LIMIT: SINGLE DEHYDRATOR/REBOILER (lbs/hr)</b>	<b>ANNUAL EMISSION LIMIT: COMBINED DEHYDRATOR/REBOILER (tons/year) <sup>1</sup></b>
PARTICULATE MATTER	0.008	0.07
PM-10	0.008	0.07
PM-2.5	0.008	0.07
SULFUR OXIDES	.00007	0.006
NITROGEN OXIDES	0.11	1.0
CARBON MONOXIDE	0.09	0.83
VOLATILE ORGANIC COMPOUNDS, REBOILER	0.006	0.054
VOLATILE ORGANIC COMPOUNDS, DEHYDRATOR	0.0642	0.5622

<sup>1</sup> A year is defined as any 12 consecutive months.

**2. Testing Requirements**

- a. 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, §2102.04.b.6, §2102.04.e, §2108.02)

**3. Monitoring Requirements**

- a. The permittee shall inspect the condenser for proper operation and measure the outlet temperature at least one day each month during daylight hours..... (§2102.04.b.6, §2103.12.i)
- b. The permittee shall monitor the throughput of wet natural gas fed to the Dehydrator/Reboiler Units H001 and H002 on a monthly basis. (§2102.04.b.6)

**4. Record Keeping Requirements**

- a. The permittee shall record the glycol recirculation rate upon startup and the date, time and rate (gpm) whenever a change is made. (§2102.04.b.6, §2103.12.j)
- b. The permittee shall record episodes of non-compliance with conditions and corrective actions taken upon occurrence. (§2102.04.b.6, §2103.12.j)
- c. The permittee shall record the results of the condenser inspection and maintenance, and the outlet temperature required by Condition V.B.3.a above. (§2102.04.b.6, §2103.12.j)

**5. Reporting Requirements**

- a. Monthly fuel usage and monthly hours of operation shall be reported to the Department on a semi-annual basis. (§2102.04.b.6, §2103.12.k)
- b. 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**

None except as provided elsewhere.

**7. Additional Requirements**

The permittee shall notify the Department in writing ten (10) days prior to start-up of the facility. The installation of the equipment included in this permit shall be inspected and approved by the Department before being placed into normal operation. (§2102.04.b.6)

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**C. Process H003: Dehydrator/Reboiler**

<b>Process Description:</b>	Dehydration of Natural Gas (Exterran 8 Tray Absorber/1.5 MMBtu/hr Reboiler)
<b>Facility ID:</b>	H003
<b>Max. Design Rate/Units:</b>	45MMScf/day
<b>Capacity:</b>	1.5 MMBtu/hr
<b>Raw Materials:</b>	Natural Gas
<b>Control Device(s):</b>	None

The permittee is also subject to the following conditions:

**1. Restrictions**

- a. The dehydrator shall combust only natural gas. (§2104.03.a (§2102.04.b.6, §2102.04.e.)
- b. Dehydrator emissions shall be controlled by a condenser. (40 CFR 60.42(c)(d); §2102.04.b.6, §2102.04.e.)
- c. Flash gas emissions from the dehydrator shall be routed to the inlet of Compressor No. 1. (§2102.04.b.6, §2102.04.e.)
- d. The daily average final exhaust temperature of the dehydrator shall be less than 110° F (§2102.04.b.6, §2102.04.e.)
- e. Visible emissions shall not exceed: .. (§2102.04.b.6; §2102.04.e, §2104.01.a)
  - i. An opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
  - ii. An opacity of 60% at any time.
- f. Emissions from H003 shall not exceed the limitations in Table V.C.1 below. (§2102.04.b.6):

**Table V.C.1 – Dehydrator/Reboiler No. 3**

<b>POLLUTANT</b>	<b>HOURLY EMISSION LIMIT: DEHYDRATOR/REBOILER (lbs/hr)</b>	<b>ANNUAL EMISSION LIMIT: DEHYDRATOR/REBOILER (tons/year)<sup>1</sup></b>
PARTICULATE MATTER	0.12	0.053
PM-10	0.12	0.053
PM-2.5	0.12	0.053
SULFUR OXIDES	0.001	0.0044
NITROGEN OXIDES	0.17	0.74
CARBON MONOXIDE	0.14	0.61
VOLATILE ORGANIC COMPOUNDS, REBOILER	0.0093	0.041
VOLATILE ORGANIC COMPOUNDS, DEHYDRATOR	0.0825	0.3614

<sup>1</sup> A year is defined as any 12 consecutive months.

**2. Testing Requirements**

- a. Emissions testing shall be performed at the dehydrator for VOCs in accordance with the Site Level Condition IV.13 above (“Emissions Testing Requirements”). (2108.02)
- b. 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. (§2102.04.b.6, §2102.04.e, §2103.12.h.1, §2108.02)

**3. Monitoring Requirements**

- a. The permittee shall inspect the condenser for proper operation and measure the outlet temperature at least one day each month during daylight hours. (§2102.04.b.6, §2103.12.i)
- b. The permittee shall monitor the throughput of wet natural gas fed to the Dehydrator/Reboiler Unit H003 on a monthly basis. (§2102.04.b.6)

**4. Record Keeping Requirements**

- a. Episodes of non-compliance and corrective actions taken shall be recorded upon occurrence. (§2102.04.b.6)
- b. he permittee shall record fuel usage, hours of operation, etc. on a monthly basis.

**5. Reporting Requirements**

- a. Monthly fuel usage, monthly hours of operation shall be reported to the Department on a semi-annual basis. (§2102.04.b.6)
- b. Reporting instances of non-compliance, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition 6, if appropriate. (§2102.04.b.4)

**6. Work Practice Standard**

- a. None except as provided elsewhere.

**7. Additional Requirements**

The permittee shall notify the Department in writing ten (10) days prior to start-up of the facility. The installation of the equipment included in this permit shall be inspected and approved by the Department before being placed into normal operation. (§2102.04.b.6)

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## **VI. MISCELLANEOUS**

### **A. Process WT001 and WT002: Water/Condensate Storage Tanks**

Process Description:	Water/Condensate Storage Tanks
Facility ID:	WT001 and WT002
Capacity:	300 bbl each (12,600 gal each)
Raw Materials:	Water/Condensate
Control Device(s):	None

The permittee is also subject to the following conditions:

#### **1. Restrictions**

- a. Each condensate tank shall have a submerged fill pipe. (§2102.04.b.6)
- b. Each condensate tank shall have all openings to atmosphere covered when not in use. (§2102.04.b.6)

#### **2. Testing Requirements**

- a. Within 90 days of start-up, the permittee shall analyze the fluid in the/condensate storage tanks for VOC and HAP.
- b. The permittee shall analyze the water/condensate storage tanks for VOC emissions at six (6) month intervals thereafter. (§2103.12.h.1, §2108.02)
- c. All analyses shall be performed in accordance with SW-846 Method 8260B or other method specified by the Department. The sampling method and protocol shall be approved by the Department. (§2103.12.h.1, §2108.02)
- d. 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 monitor the condensate throughput (gallons into and out) of the condensate tanks. (§2102.04.b.6, §2103.12.i)

#### **4. Record Keeping Requirements**

- a. The permittee shall keep records of the condensate removed from the condensate tank on a weekly, monthly and annual basis: (§2102.04.b.6, §2103.12.j)
- b. The results of inspections, episodes of non-compliance and corrective actions taken shall be recorded upon occurrence. (§2103.12.j)

c.

**5. Reporting Requirements**

- a. The permittee shall submit semiannual monitoring reports (including instances of noncompliance) to the department in accordance with General Condition III.15 above. (§2102.04.b.6, §2103.12.k)
- b. Weekly and monthly volumes of condensate removed from the condensate tank shall be reported to the Department on a semi-annual basis in accordance with General Condition III.15 above. . (§2102.04.b.6, §2103.12.k)
- c. The results of the analyses required by Condition VI.A.2 above shall be reported to the Department on a semi-annual basis. (§2102.04.b.6, §2103.12.k)
- d. Reporting instances of non-compliance semiannually, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition 6, if appropriate. (§2102.04.b.4, §2103.12.k)

**6. Work Practice Standard**

None except as provided elsewhere.

**7. Additional Requirements**

None except as provided elsewhere.

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## VII. ALTERNATIVE OPERATING SCENARIOS

*No alternative operating scenarios exist for this Installation.*

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**VIII. EMISSION LIMITATIONS SUMMARY**

Annual emissions from Superior Appalachian Pipeline facility shall not exceed the following at any time:

<b>POLLUTANT</b>	<b>TOTAL (tons/year)</b>
PARTICULATE MATTER	3.65
PM10	3.65
PM2.5	3.65
SULFUR OXIDES	0.19
NITROGEN OXIDES	35.04
CARBON MONOXIDE	12.84
VOLATILE ORGANIC COMPOUNDS	17.02
FORMALDEHYDE	7.05

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