

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Antero Midstream, LLC
Pennington Compressor Station
017-00056

Issued: DRAFT • Effective: DRAFT

This permit supercedes and replaces Permit R13-3080.

Facility Location: Smithburg, Doddridge County, West Virginia

Mailing Address: 1615 Wynkoop Street

Facility Description: Natural Gas Compressor Station

NAICS Codes: 221210

UTM Coordinates: 527.952 km Easting • 4348.901 km Northing • Zone 17

Permit Type: Modification

Description of Change: Update reduction efficiencies for the engine catalyst based on new catalyst information and compressor specifications modified. The dehydrator throughput has been increased to 70 MMscfd. A fuel conditioning heater will be added. Other emission sources at the facility have been updated using more recent data such as the storage tanks and compressor engines. A primary and backup VRU have been added as a control device on the storage tanks rather than the flare.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is not subject to 45CSR30.

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1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
COMP-1	1E	GE Waukesha, 7044 GSI 4-Stroke Rich Burn (4SRB) Compressor Engine	2016	1680 hp	NSCR (1C)
COMP-2	2E	GE Waukesha, 7044 GSI 4-Stroke Rich Burn (4SRB) Compressor Engine	2016	1680 hp	NSCR (2C)
COMP-3	1E	Compressor Engine #3 GE Waukesha, 7044 GSI 4-Stroke Rich Burn (4SRB) Compressor Engine	2016	1680 hp	NSCR (3C)
GEN1	4E	Capstone C65 NG Standard Natural Gas Micorturbine	2013	65kWe	None
GEN2	11E	Capstone C65 NG Standard Natural Gas Micorturbine	2013	65kWe	None
DEHY1	5E	Dehydrator Still Vent	2016	70MMscfd	Flare (4C)
DFLSH1	6E	Dehydrator Flash Tank	2016	70 MMscfd	98% control
DREB1	7E	Dehydrator Reboiler	2013	0.75 MMBtu/hr	None
TK-1	8E	Produced Fluids Storage Tank	2016	400 Barrel	VRUs (5C and 6C)
TK-2	9E	Produced Fluids Storage Tank	2016	400 Barrel	VRUs (5C & 6C)
LDOUT1	10E	Product Loadout Rack	2016	212 bbl/day	None
FLARE1	4C	Flare Combustion Device	2013	2.1 MMBtu/hr	None
FUEL1	12E	Fuel Conditioning Heater	2016	0.5 MMBtu/hr	None
VRU-100	5C	Vapor Recovery Unit 1	2017		None
VRU-200	6C	Vapor Recovery Unit 2	2017		None

1.1. Control Devices

Emission Unit	Pollutant	Control Device	Control Efficiency
1,680 hp Waukesha 7044 4SRB RICE (COMP-1 through COMP-3)	Nitrogen Oxides	Non-Selective Catalytic Reduction	97.5 %
	Carbon Monoxide		97.5 %
	Volatile Organic Compounds		84.0 %
	Formaldehyde		90.0 %
	Methane		70.0 %
70 MMscfd TEG Dehydrator Still (DEHY1)	Volatile Organic Compounds	Flare	98.0 %
	Hazardous Air Pollutants		98.0 %
Storage Tanks (TK-1 and TK-2)	Volatile Organic Compounds	Vapor Recovery Unit (VRU) with VRU back up	98.0 %
	Hazardous Air Pollutants		98.0 %
	CO ₂ e		98.0 %

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the “West Virginia Air Pollution Control Act” or the “Air Pollution Control Act” mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The “Clean Air Act” means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. “Secretary” means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary’s designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM_{2.5}	Particulate Matter less than 2.5 µm in diameter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than 10µm in diameter
CO	Carbon Monoxide	Ppb	Pounds per Batch
C.S.R. or CSR	Codes of State Rules	Pph	Pounds per Hour
DAQ	Division of Air Quality	Ppm	Parts per Million
DEP	Department of Environmental Protection	Ppmv or ppmv	Parts per Million by Volume
dscm	Dry Standard Cubic Meter	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	Psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
M	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	TSP	Total Suspended Particulate
MDHI	Maximum Design Heat Input	USEPA	United States Environmental Protection Agency
MM	Million	UTM	Universal Transverse Mercator
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	VEE	Visual Emissions Evaluation
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour	VOC	Volatile Organic Compounds
NA	Not Applicable	VOL	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

- 2.4.1. This permit supersedes and replaces previously issued Permit R13-3080. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3080A, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13.
[45CSR§13-10.1.]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] *[State Enforceable Only]*
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling

connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language;
 2. The result of the test for each permit or rule condition; and,
 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information

includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§4. State Enforceable Only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance
(3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. **Operating Fee**

- 3.5.4.1. In accordance with 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually,

shall be maintained on the premises for which the certificate has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

- 4.1.1 **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
- The date, place as defined in this permit, and time of sampling or measurements;
 - The date(s) analyses were performed;
 - The company or entity that performed the analyses;
 - The analytical techniques or methods used;
 - The results of the analyses; and
 - The operating conditions existing at the time of sampling or measurement.
- 4.1.2. **Minor Source of Hazardous Air Pollutants (HAP).** HAP emissions from the facility shall be less than 10 tons/year of any single HAP or 25 tons/year of any combination of HAPs. Compliance with this Section shall ensure that the facility is a minor HAP source.
- 4.1.3. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]
- 4.1.4. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- The equipment involved.
 - Steps taken to minimize emissions during the event.
 - The duration of the event.
 - The estimated increase in emissions during the event.
- For each such case associated with an equipment malfunction, the additional information shall also be recorded:
- The cause of the malfunction.
 - Steps taken to correct the malfunction.
 - Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 4.1.5. Only those emission units/sources as identified in Table 1.0, with the exception of any *de minimis* sources as identified under Table 45-13B of 45CSR13, are authorized at the permitted facility. In accordance with the information filed in Permit Applications R13-3095, R13-3095A, and R13-3095B, the emission units/sources identified under Table 1.0 of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, shall use the specified control devices, and comply with any other information provided under Table 1.0.

- 4.1.6. The permittee shall meet all applicable requirements, including those not specified below, as given under 45CS2, 45CSR6, 40 CFR 60, Subpart JJJJ, and Subpart OOOO, and 40 CFR 63, Subpart HH and Subpart ZZZZ.
- 4.1.7. The permittee shall meet all applicable Performance Testing Requirements as given under 45CS2, 45CSR6, 40 CFR 60, Subpart JJJJ, and Subpart OOOO, and 40 CFR 63, Subpart HH and Subpart ZZZZ
- 4.1.8. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in this permit and/or applicable regulations.

5.0. Source-Specific Requirements (Engines, COMP-1 through COMP-3 and Catalytic Converters 1C through 3C)

5.1. Limitations and Standards

- 5.1.1 The compressor engines, identified as COMP-1 through COMP-3, shall meet the following requirements:
- Each unit shall be a GE Waukesha, 7044 GSI 4SRB 1,680 hp compressor engine and shall only be fired by natural gas;
 - A catalytic converter (1C through 3C) shall be used for emissions control, at all times, on each engine that is in operation;
 - The maximum emissions from each engine, as controlled by the catalytic converter specified under 5.1.1(b), shall not exceed the limits given in the following table:

Table 5.1.1(c): Compressor Engine Emission Limits

Pollutant	lb/hr ⁽¹⁾	tpy
CO	1.15	5.03
NO _x	1.23	5.39
PM _{2.5} /PM ₁₀ ⁽²⁾	0.27	1.17
VOC	0.28	1.22
Formaldehyde	0.02	0.08

- (1) lb/hr emissions based on specific model of engine, engine size, and control technology.
(2) Includes condensables.

- As the annual emissions are based on 8,760 hours of operation, there is no annual limit on hours of operation or natural gas combusted on an annual basis;
- 5.1.2 The catalytic converters (1C through 3C) shall be equipped with automatic air/fuel ratio controllers or closed-loop automatic feedback controllers that shall provide a warning or indication to the operator and/or be interlocked with the engine ignition system to cease engine operation in case of a masking, poisoning or overrich air/fuel ratio situation which results in performance degradation or failure of the catalyst element;
- 5.1.3 No person shall knowingly:
- Remove or render inoperative any air pollution or auxiliary air pollution control device installed subject to the requirements of this permit;
 - Install any part or component when the principal effect of the part or component is to bypass, defeat or render inoperative any air pollution control device or auxiliary air pollution control device installed subject to the requirements of this permit; or
 - Cause or allow engine exhaust gases to bypass any catalytic reduction device;
- 5.1.4 The permittee shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The permittee shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:

- (1) Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller;
- (2) Following operating and maintenance recommendations of the catalyst element manufacturer.

5.2. Monitoring Requirements

- 5.2.1. The permittee shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs.
- 5.2.2. The permittee shall track the compressor run time in hours or number of months in order to determine when the rod packing replacement required in section 5.7 needs to take place.

5.3. Testing Requirements

- 5.3.1. The permittee shall, pursuant to the timing and other requirements of 40 CFR 60, Subpart JJJJ, conduct, or have conducted, performance testing on the compressor engines to determine the emission rates of CO, NO_x, and VOCs. The testing shall, in addition to meeting all applicable requirements under 40 CFR 60, Subpart JJJJ, be in accordance with 3.3.1. Results of the this performance testing shall be used to determine compliance with the CO, NO_x, and VOC emission limits given under 5.1.1(c) unless a waiver is granted in writing by the Director.

5.4. Recordkeeping Requirements

- 5.4.1. The permittee shall maintain records of the inlet temperature monitoring of the catalyst and records of high temperature alarms that cause the engine to shut off before thermal deactivation of the catalyst.

5.5. Reporting Requirements

- 5.5.1 See Facility-Wide Reporting Requirements Section 3.5 and Reporting Requirements of Sections 5.6.

5.6. 40 CFR 60, Subpart JJJJ

Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.

[40 CFR §60.4233(e)]

The permittee shall comply with all applicable monitoring, compliance demonstration and record-keeping requirements as given under 40 CFR 60, Subpart JJJJ including the following:

If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

[40 CFR §60.4243(b)]

- a. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

[40 CFR §60.4243(b)(2)]

- (1) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
[40 CFR §60.4243(b)(2)(ii)]

5.7. 40 CFR 60, Subpart OOOO

You must comply with the standards in paragraphs (a) through (d) of this section for each reciprocating compressor affected facility.

- (1) You must replace the reciprocating compressor rod packing according to either paragraph (a)(1) or (2) of this section.
 - (i) Before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
[40 CFR §60.5385(a)(1)]
 - (ii) Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating compressor for which the rod packing has not yet been replaced.
[40 CFR §60.5385(a)(2)]

5.8 43 CFR 63, Subpart ZZZZ

An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[40 CFR §63.6590(c)]

- (1) A new or reconstructed stationary RICE located at an area source;
[40 CFR §63.6590(c)(1)]

6.0. Source-Specific Requirements (Microturbine Generators, GEN1 and GEN2)

6.1. Limitations and Standards

- 6.1.1. Each unit shall be a Capstone C65 NG Standard 65kWe (output) Microturbine and shall only be fired by natural gas;
- 6.1.2. The maximum emissions from each Microturbine shall not exceed the limits given in the following table:

Table 6.1.2. Microturbines Emission Limits

Pollutant	lb/hr⁽¹⁾	tpy
CO	0.08	0.35
NO_x	0.03	0.13
CO₂	98.80	432.74

(1) PPH emissions based on specific model of Microturbine.

- 6.1.3. As the annual emissions are based on 8,760 hours of operation, there are no annual limits on hours of operation or natural gas combusted on an annual basis.

6.2. Testing Requirements

- 6.2.1. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in this permit and/or applicable regulations.

7.0. Source-Specific Requirements (Glycol Dehydration Unit, Glycol Dehydration Still Vent, DEHY1, and Glycol Dehydration Flash tank, DFLSH1)

7.1. Limitations and Standards

- 7.1.1 The maximum dry natural gas throughput to the Exterran Glycol Dehydration Unit shall not exceed 25,550 MMscf/year.
- 7.1.2 The Glycol Deydration Unit shall meet the following requirements:
- a. The maximum emissions from the Glycol Dehydrator Regeneration Still Vent, identified as DEHY1, as emitted after combustion at the flare (4C), shall not exceed the limits given in the following table:

Table 7.1.2(a): Glycol Dehydrator Regeneration Still Vent (DEHY1) Controlled Emission Limits⁽¹⁾

Pollutant	PPH	TPY
VOC(1)	1.00	4.37
<i>Benzene(1)</i>	<i>0.05</i>	<i>0.21</i>
<i>Ethylbenzene(1)</i>	<i>0.04</i>	<i>0.16</i>
<i>Toluene(1)</i>	<i>0.27</i>	<i>1.17</i>
<i>Xylene(1)</i>	<i>0.03</i>	<i>0.14</i>
Total HAPs(1)	0.40	1.75

(1) Emissions based on GLYCalc Version 4.0 using dry gas throughputs as limited under 7.1.1.

- b. The maximum emissions from the Glycol Dehydrator Flash Tank, identified as DFLSH1, as emitted after combustion in the Reboiler, shall not exceed the limits given in the following table:

Table 7.1.2(b): Glycol Dehydrator Flash Tank (DFLSH1) Controlled Emission Limits(1)

Pollutant	PPH	TPY
VOC(1)	0.96	4.19
<i>Hexane(1)</i>	<i>0.02</i>	<i>0.19</i>
Total HAPs(1)	0.06	0.25

(1) Emissions based on GLYCalc Version 4.0 using dry gas throughputs as limited under 7.1.1.

- 7.1.3. Dehydrator still vent shall be controlled by the flare (FLARE1).
- 7.1.4. Dehydrator flash tank vent gas shall be used in the reboiler or routed to the vapor recovery unit (VRU-100) or it back up (VRU-200).

7.2. Monitoring Requirements

- 7.2.1. For the purposes of demonstrating compliance with the maximum dry gas throughput limit set forth in 7.1.1., the permittee shall monitor and record the monthly dry gas throughputs and calculate the rolling twelve month total of the dry gas throughput of the Glycol Dehydration Unit.

7.3. Testing Requirements

- 7.3.1. In order to demonstrate compliance with 7.1.2 (a) and (b), upon request of the Director, the permittee shall demonstrate compliance with the VOC/HAP emissions thresholds using GLYCalc Version 4.0 or higher. The permittee shall sample in accordance with GPA Method 2166 and analyze the samples utilizing the extended GPA Method 2286 as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook.

7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain records of testing conducted in accordance with section 7.3.
- 7.4.2. The permittee shall maintain records of dry gas throughput and the calculated rolling twelve month total dry gas throughput, required in section 7.2.1.
- 7.4.3. All recordkeeping required in section 7.4 shall be in accordance with the recordkeeping requirements of section 3.4.1.

7.5 43 CFR 63, Subpart HH

Exemptions. The owner or operator of an area source is exempt from the requirements of paragraph (d) of this section if the criteria listed in paragraph (e)(1)(i) or (ii) of this section are met, except that the records of the determination of these criteria must be maintained as required in § 63.774(d)(1).

[40 CFR §63.764(e)(1)]

- (1) The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in § 63.772(b)(2) of this subpart.

[40 CFR §63.764(e)(1)(ii)]

The permittee shall comply with all applicable monitoring, compliance demonstration and record-keeping requirements as given under 40 CFR 63, Subpart HH including the following:

Determination of glycol dehydration unit flowrate, benzene emissions, or BTEX emissions. The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate, benzene emissions, or BTEX emissions.

[40 CFR §63.772(b)]

- a. The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either paragraph (b)(2)(i) or (ii) of this section. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

[40 CFR §63.772(b)(2)]

- (1) The owner or operator shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” (GRI-95/0368.1); or

[40 CFR §63.772(b)(2)(i)]

- (2) The owner or operator shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement using the methods in § 63.772(a)(1)(i) or (ii), or an alternative method according to § 63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

[40 CFR §63.772(b)(2)(ii)]

8.0. Source-Specific Requirements (Dehydration Unit Reboiler, DREB1)

8.1. Limitations and Standards

- 8.1.1. The maximum design heat input of the reboiler shall not exceed 0.75 MMBtu/hr and the unit shall only be fired by dehydrator flash tank off-gases or natural gas;
- 8.1.2. The maximum emissions from the reboiler combustion exhaust shall not exceed the limits given in the following table;

Table 8.1.2: Reboiler Emission Limits

Pollutant	lb/hr ⁽¹⁾	TPY
CO	0.07	0.27
NO _x	0.08	0.32

(1) lb/hr emissions based on MDHI of Reboiler and emission factors from AP-42, Section 1.4.

- 8.1.3. As the annual emissions are based on 8,760 hours of operation, there is no annual limit on hours of operation or natural gas combusted on an annual basis.
- 8.1.4. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[40CSR§2-3.1]

8.2. Monitoring Requirements

- 8.2.1. *Reserved*

8.3. Testing Requirements

- 8.3.1. At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Section 8.1.4. Method 9 shall be conducted in accordance with 40 CFR 60 Appendix A.

8.4. Recordkeeping Requirements

- 8.4.1. Maintain records of the visible emission opacity tests conducted per Section 8.2.1.
- 8.4.2. All recordkeeping required in section 8.4 shall be in accordance with the recordkeeping requirements of section 3.4.1.

8.5. Reporting Requirements

- 8.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

9.0. Source-Specific Requirements (Dehydration Unit Still Vent Flare, FLARE1)

9.1. Limitations and Standards

- 9.1.1. The flare shall be non-assisted and the maximum capacity of the flare shall not exceed 2.10 MMBtu/hr;
- 9.1.2. The flare shall be designed, operated, and maintained according to good engineering practices or manufacturing recommendations so as to achieve, at a minimum, a hydrocarbon combustion rate of 98.0%
- 9.1.3. The flare shall be operated at all times when emissions may be vented to it.
- 9.1.4. The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- 9.1.5. The flare shall be operated with a flame present at all times.
- 9.1.6. A flare shall be used only where the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or where the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

Where:

HT=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

K=Constant=

$$1.740 \times 10^{-7} \left(\frac{1}{ppmv} \right) \left(\frac{g\text{-mole}}{scm} \right) \left(\frac{MJ}{kcal} \right)$$

where the standard temperature for (g-mole/scm) is 20 °C.

Ci=Concentration of sample component i in ppmv on a wet basis, which may be measured for organics by Test Method 18, but is not required to be measured using Method 18 (unless designated by the Director).

Hi=Net heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 if published values are not available or cannot be calculated.

n=Number of sample components.

- 9.1.7. Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided by 9.1.8. and 9.1.9. of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), by the unobstructed (free) cross-sectional area of the flare tip, which may be determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, but is not required to be determined using these Methods (unless designated by the Director).

- 9.1.8. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 9.1.7. of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
- 9.1.9. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 9.1.7. of this section, less than the velocity V_{max} , as determined by the calculation specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max} , for flares complying with this paragraph shall be determined by the following equation:

$$\text{Log}_{10}(V_{max}) = (HT + 28.8) / 31.7$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

28.8 = Constant.

31.7 = Constant.

HT = The net heating value as determined in 9.1.6. of this section

- 9.1.10 The permittee is not required to conduct a flare compliance assessment for concentration of sample (i.e. Method 18) and tip velocity (i.e. Method 2) until such time as the Director requests a flare compliance assessment to be conducted in accordance with section 9.3.1., but the permittee is required to conduct a flare design evaluation in accordance with section 9.1.7. Alternatively, the permittee may elect to demonstrate compliance with the flare design criteria requirements of 9.1. by complying with the compliance assessment testing requirements of section 9.3.1.
- 9.1.11. The permittee shall not cause, suffer, allow or permit particulate matter to be discharged from the flare into the open air in excess of the quantity determined by use of the following formula:

$$\text{Emissions (lb/hr)} = F \times \text{Incinerator Capacity (tons/hr)}$$

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

<u>Incinerator Capacity</u>	<u>Factor F</u>
A. Less than 15,000 lbs/hr	5.43
B. 15,000 lbs/hr or greater	2.72

[45CSR§6-4.1]

9.2. Monitoring Requirements

- 9.2.1 The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- 9.2.2. Conduct monthly Method 22 visible emission observations of the flare to ensure proper operation for a minimum of ten (10) minutes each month the unit is in operation.

9.3. Testing Requirements

- 9.3.1. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with section 9.1. This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, or other equivalent testing approved in writing by the Director. Also, Test Method

18 may require the permittee to conduct Test Method 4 in conjunction with Test Method 18. If a flare design evaluation is required, the permittee shall maintain a record of the net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations and other related information requested by the Director.

- 9.3.2 For the purposes of demonstrating compliance with visible emissions limitations set forth in 9.1.4 the permittee shall:
- a. Conduct an initial Method 22 visual emission observation on the flare to determine the compliance with the visible emission provisions. The permittee shall take a minimum of two (2) hours of visual emissions observations on the units.
 - b. In the event visible emissions are observed in excess of the limitations given under 9.1.4, the permittee shall take immediate corrective action.

9.4. Recordkeeping Requirements

- 9.4.1. Records of the maintenance performed on the flare shall be kept in accordance with the recordkeeping requirements in section 4.1.3.
- 9.4.2 The permittee shall maintain records of all startups, shutdowns, and/or malfunctions of the flare. These records shall include the date, time, and duration of each event.
- 9.4.3 The permittee shall maintain records of the date, time, and duration each time the permittee does not detect the presence of a pilot flame in the flare.
- 9.4.4. Records of malfunction of the flare shall be kept in accordance with the recordkeeping requirements in section 4.1.4.
- 9.4.5. The permittee shall maintain records of the visible emission opacity tests conducted per section 9.2.2 and 9.3.2 and records of any testing required by the Director in accordance with section 9.3.1.
- 9.4.6 All recordkeeping required in section 9.4 shall be in accordance with the recordkeeping requirements of section 3.4.1.

9.5. Reporting Requirements

- 9.5.1. Any deviation(s) from the flare design and operation criteria in Section 9.1 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of discovery of such deviation.
- 9.5.2. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

10.0 Source-Specific Requirements (Truck Loadout, LDOUT1)

10.1. Limitations and Standards

- 10.1.1. The maximum quantity of produced fluids from truck loading (LDOUT1) that shall be loaded shall not exceed 3,249,960 gallons per year. Compliance with the Maximum Yearly Operation Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the throughput at any given time during the previous twelve consecutive calendar months.
- 10.1.2. All trucks shall be loaded using the submerged-fill method.

10.2. Monitoring Requirements

- 10.2.1. For the purposes of demonstrating compliance with the truck loadout throughput limit set forth in 10.1.1, the permittee shall monitor the throughput of truck loadout on a monthly basis and calculate the yearly throughput each month as a rolling twelve month total.

10.3 Recordkeeping Requirements

- 10.3.1. All records required under Section 10.3 shall be kept in accordance with permit condition 3.4.1.
- 10.3.2. Records shall be kept of the monthly and the rolling twelve month total of the truck loadout throughput.

10.4 Reporting Requirements

- 10.4.1. See Facility-Wide Reporting Requirements Section 3.5.

11.0 Source-Specific Requirements (Venting Emissions (Compressor Blowdowns, Compressor Startups, Plant Shutdowns), Fugitive Emissions)

11.1. Limitations and Standards

- 11.1.1. The maximum number of compressor blowdown events per year shall not exceed 936 events, with an estimated 2,429 scf per event. Compliance shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the compressor blowdown events at any given time during the previous twelve consecutive calendar months.
- 11.1.2. The maximum number of compressor startup events per year shall not exceed 936 events, with an estimated 1,050 scf per event. Compliance shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the compressor startup events at any given time during the previous twelve consecutive calendar months.
- 11.1.3. The maximum number of plant shutdown events per year shall not exceed 2 events, with an estimated 100,000 scf per event. Compliance shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the plant shut downs at any given time during the previous twelve consecutive calendar months. Unscheduled emergency shutdowns shall not be counted as plant shutdown events.
- 11.1.4. The Company shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to prevent any substantive fugitive escape of regulated air pollutants. Any above-ground piping, valves, pumps, etc. that shows signs of excess wear and that have a reasonable potential for substantive fugitive emissions of regulated air pollutants shall be replaced.

11.2 Recordkeeping Requirements

- 11.2.1. All records required under section 11.2 of this permit shall be kept in accordance with permit condition 3.4.1.
- 11.2.2. To demonstrate compliance with permit condition 11.1.1 of this permit, the permittee shall maintain a record of the compressor blowdown events on a monthly and rolling twelve month total.
- 11.2.3. To demonstrate compliance with permit condition 11.1.2 of this permit, the permittee shall maintain a record of the compressor startup events on a monthly and rolling twelve month total.

12.0 Source-Specific Requirements (Tanks, TK-1 and TK-2)

12.1. Limitations and Standards

- 12.1.1 Use of storage tanks, identified as TK-1 and TK-2, shall be in accordance with the following:
 - a. Tank size and material stored shall be limited as specified under Table 1.0 of this permit.
- 12.1.2 The permittee shall route all VOC emissions (working/breathing/flashing) generated in the storage tanks to the vapor recovery unit (VRU-100) or to the back-up vapor recovery unit (VRU-200).
- 12.1.3 VOC emissions (working/breathing/flashing) generated in the storage tanks, as emitted after vapor recovery unit, shall not exceed 11.36 TPY.
- 12.1.4 *Operation and Maintenance of Air Pollution Control Equipment.* The permittee shall, to the extent practicable, install, maintain, and operate the vapor recovery unit (VRU-100) with vapor recovery backup unit (VRU-200) and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

12.2 Monitoring Requirements

- 12.2.1 The permittee shall monitor the throughput to the storage tanks (TK-1 and TK-2) on a monthly basis.
- 12.2.2 To demonstrate compliance with permit condition 12.1.1, the permittee shall monitor the vapor recovery unit in accordance with the plans and specifications and manufacturer's recommendations.

12.3 Recordkeeping Requirements

- 12.3.1 All records required under Section 12.3 shall be kept in accordance with permit condition 3.4.1.
- 12.3.2 *Record of Maintenance of VRUs.* The permittee shall maintain accurate records of the vapor recovery unit equipment inspection and/or preventative maintenance procedures.
- 12.3.3 *Record of Malfunctions of VRU.* The permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the vapor recovery unit during which excess emissions occur. For each malfunction, the permittee shall record the information as required in in condition 4.1.4.
- 12.3.4 To demonstrate compliance with permit condition 12.1.3, the permittee shall maintain a record of the aggregate throughput for the storage tanks on a monthly and rolling twelve month total.
- 12.3.5 The permittee shall maintain a copy all design records of the process, maintenance records of equipment and any downtime hours associated with the vapor recovery units.
 - i. The initial compliance requirements;
 - ii. Each annual visual inspection conducted to demonstrate continuous compliance, including records of any repairs that were made as results of the inspection;
 - iii. Bypass requirements.

- a. Each occurrence that the control device was bypassed. If the device was bypassed, the records shall include the date, time, and duration of the event and shall provide the reason the event occurred. The record shall also include the estimate of emissions that were released to the environment as a result of the bypass.
- iv. Any part of the system that has been designated as “unsafe to inspect” or “difficult to inspect”.
[45CSR§13-5.11]

13.0 Source-Specific Requirements (Fuel Conditioner, FUEL1)

13.1 Limitations and Standards

- 13.1.1 The maximum design heat input of the fuel conditioner shall not exceed 0.5 MMBtu/hr and the unit shall only be fired by natural gas;
- 13.1.2 The maximum emissions from the fuel conditioner combustion exhaust shall not exceed the limits given in the following table;

Table 13.1.2: Fuel Conditioner Emission Limits

Pollutant	lb/hr ⁽¹⁾	TPY
CO	0.04	0.18
NO _x	0.05	0.21

(2) lb/hr emissions based on emission factors from AP-42, Section 1.4.

- 13.1.3 As the annual emissions are based on 8,760 hours of operation, there is no annual limit on hours of operation or natural gas combusted on an annual basis.
- 13.1.4 No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[40CSR§2-3.1]

13.2 Monitoring Requirements

- 13.2.1 *Reserved*

13.3 Testing Requirements

- 13.3.1 At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Section 8.1.4. Method 9 shall be conducted in accordance with 40 CFR 60 Appendix A.

13.4 Recordkeeping Requirements

- 13.4.1 Maintain records of the visible emission opacity tests conducted per Section 13.2.1.
- 13.4.2 All recordkeeping required in section 13.4 shall be in accordance with the recordkeeping requirements of section 3.4.1.

13.5. Reporting Requirements

- 13.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹

(please use blue ink)

Responsible Official or Authorized Representative

Date

Name & Title

(please print or type)

Name

Title

Telephone No.

Fax No.

¹ This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.