

*West Virginia Department of Environmental Protection
Division of Air Quality*

*Joe Manchin, III
Governor*

*Stephanie R. Timmermeyer
Cabinet Secretary*

Permit to Operate



*Pursuant to
Title V
of the Clean Air Act*

Issued to:
Equitrans, L. P.
Burnsville #71 Compressor Station, Burnsville, WV
R30-00700006-2007

*John A. Benedict
Director*

Issued: November 5, 2007 • Effective: November 19, 2007
Expiration: November 5, 2012 • Renewal Application Due: May 5, 2012

Permit Number: **R30-00700006-2007**
Permittee: **Equitrans, L. P.**
Facility Name: **Burnsville #71 Compressor Station**
Mailing Address: **100 Allegheny Center Mall, Pittsburgh, PA 15212-5331**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Burnsville, Braxton County, West Virginia
Mailing Address:	P. O. Box 191, Burnsville, WV 26335
Telephone Number:	(304) 853-2736
Type of Business Entity:	Corporation
Facility Description:	Natural gas transmission facility
SIC Codes:	Primary 4922; Secondary: None; Tertiary: None
UTM Coordinates:	529.40 km Easting • 4301.40 km Northing • Zone 17

Permit Writer: Wayne Green

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.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Engines					
C-001	C-001	Reciprocating Engine/Integral Compressor	1984	600 HP	None
		Superior 66-825			
		300339			
C-002	C-002	Reciprocating Engine/Integral Compressor	1984	1350 HP	None
		Cooper Bessemer			
		GMVH 48957			
C-003	C-003	Reciprocating Engine/Integral Compressor	1984	1350 HP	None
		Cooper Bessemer			
		GMVH 48958			
G-001	G-001	Reciprocating Engine/Generator	1984	251 Hp	None
		Cummins			
		GTA-743 25125199			
Dehydrator					
TEG	TEG	TEG Dehydrator	1984	34.0 MMCFD	00C-02
Boilers					
BLR	BLR	Heating Boiler	1984	1.25 MMBtu/hr	None
DEHY	DEHY	Dehydration Boiler	1984	0.025 MMcf/day	None
Flare					
FLARE	FLARE	Dehydration Flare	1984	1.02 MMBtu/hr	None
		Model: 320-2			
		Efficiency: 95 % Destruction Efficiency			
Tanks					
Tank 1	Tank 1	Tank containing waste fluid	1993	10,000 gallon	None
Tank 2	Tank 2	Tank containing lube oil	1993	12,000 gallon	None
Tank 3	Tank 3	Tank containing Triethylene Glycol	1993	3,000 gallon	None
Tank 4	Tank 4	Tank containing Ethylene Glycol	1993	3,000 gallon	None
Tank 5	Tank 5	Tank containing Scrubber Oil	1993	2,000 gallon	None
Tank 6	Tank 6	Tank containing Maintenance Oil	1993	1,000 gallon	None

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit numbers: (e. g. R13-2397). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
N/A	

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.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

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	PM₁₀	Particulate Matter less than 10µm in diameter
C.F.R. or CFR	Code of Federal Regulations	pph	Pounds per Hour
CO	Carbon Monoxide	ppm	Parts per Million
C.S.R. or CSR	Codes of State Rules	PSD	Prevention of Significant Deterioration
DAQ	Division of Air Quality	psi	Pounds per Square Inch
DEP	Department of Environmental Protection	SIC	Standard Industrial Classification
FOIA	Freedom of Information Act	SIP	State Implementation Plan
HAP	Hazardous Air Pollutant	SO₂	Sulfur Dioxide
HON	Hazardous Organic NESHAP	TAP	Toxic Air Pollutant
HP	Horsepower	TPY	Tons per Year
lbs/hr or lb/hr	Pounds per Hour	TRS	Total Reduced Sulfur
LDAR	Leak Detection and Repair	TSP	Total Suspended Particulate
M	Thousand	USEPA	United States Environmental Protection Agency
MACT	Maximum Achievable Control Technology	UTM	Universal Transverse Mercator
MM	Million	VEE	Visual Emissions Evaluation
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	VOC	Volatile Organic Compounds
MMCF/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. 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; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. 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;
 - 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.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would 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.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably 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.

[45CSR§30-5.7.a.]

- 2.17.2. 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 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. 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. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, 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, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. 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 modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required 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.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. 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.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. 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 defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

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

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

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.
[40 C.F.R. §61.145(b) and 45CSR15]
- 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. **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]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.

[45CSR§17-3.1]

3.2. Monitoring Requirements

- 3.2.1. *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, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are 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.

- 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.

[WV Code § 22-5-4(a)(15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **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§30-5.1.c. 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.
[45CSR§§30-4.4. and 5.1.c.3.D.]
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]
- 3.5.3. 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, mailed first class or by private carrier 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 SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

45CSR21	Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds. Burnsville #71 station is not located in Cabell, Kanawha, Putnam, Wayne, or Wood counties that are affected by 45CSR21.
45CSR27	To Prevent and Control the Emissions of Toxic Air Pollutants. Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."
40 C.F.R. 60 Subpart GG	Standards of Performance for Stationary Gas Turbines. There are no turbines at the Burnsville #71 Compressor Station.
40 C.F.R. 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. All tanks are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. All tanks are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Kb	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. All tanks are below 75 m ³ in capacity.
40 C.F.R. 60 Subpart KKK	Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants. Burnsville #71 Compressor Station is not engaged in the extraction of natural gas from field gas or in the fractionation of mixed natural gas liquids to natural gas products.
40 C.F.R. 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO ₂ Emissions. There are no sweetening units at the Burnsville #71 Compressor Station.
40 C.F.R. 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines. There are no turbines at the Burnsville #71 Compressor Station.
40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Burnsville #71 Compressor Station is not subject to Subpart HHH since the Burnsville's gas custody transfer is at an extraction facility and not to a natural gas transmission facility.
40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). The Burnsville #71 Compressor Station is not subject to RICE since the station is not major source of HAPs.

4.0 Source-Specific Requirements [Reciprocating Engine (C-001, C-002, C-003, and G-001) group and emission point ID (C-001, C-002, C-003, and G-001)]

4.1 Limitations and Standards

4.1.1. *Reserved*

4.2 Monitoring Requirements

4.2.1. *Reserved*

4.3 Testing Requirements

4.3.1. *Reserved*

4.4 Recordkeeping Requirements

4.4.1. *Reserved*

4.5 Reporting Requirements

- 4.5.1. For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:
- a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;
 - b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;
 - c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;
 - d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;
 - e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:
 - i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
 - ii. Identification of the engine(s) being temporarily replaced;
 - iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
 - iv. Projected duration of the replacement engine(s); and

- i. The appropriate certification by a responsible official.

[45CSR§30-12.7.]

4.6. Compliance Plan

- 4.6.1. None

5.0 Source-Specific Requirements [TriEthylene Glycol Dehydration (TEG) with Flare (FLARE), Heating Boiler (BLR), and Dehydration Boiler (DEHY) and emission point ID (FLARE,BLR, DEHY)]

5.1 Limitations and Standards

- 5.1.1. (a) Potential HAP emissions from the entire facility shall be less than 10 TPY of any single HAP or 25 TPY of any combination of HAPs. For purposes of determining potential HAP emissions at production-related facilities, the methods specified in 40 CFR 63, Subpart HH (i.e. excluding compressor engines from HAP PTE) shall be used unless HAPs are specifically limited by a federally enforceable permit condition.

Or,

- (b) If the permittee chooses to apply the less than 1.0 tons/yr of Benzene per dehydration unit either thru 45CSR13 limit or by this condition, the permittee is not subject to 5.1.1.(a).

Table 1.0 Glycol Dehydration Unit

Description	Mg/yr	Tons/Yr
Benzene	0.9	< 1.0

[45CSR§30-12.7.]

The following requirements for flares make the flare federally and practically enforceable. If a flare is being used to provide the natural gas source with synthetic minor status or reduce the potential HAPs to below major source levels, the one ton of benzene exemption for MACT, or even if the source is minor without the flare, but would like to reduce their PTE by the use of a flare, the following control device requirements shall be used.

- 5.1.2. The flare (FLARE) shall be designed and operated in accordance with the following:
- (a) Flares shall be steam-assisted, air-assisted, or non-assisted.
 - (b) Flares 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.
 - (c) Flares shall be operated at all times when emissions may be vented to them, except during SSM (Startup, Shutdown, Malfunctions) events.
 - (d) Flares shall be operated with a flame present at all times.
 - (e) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 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:

H_T = 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.

$K = \text{Constant} = 1.740 \times 10^{-7} [1/\text{ppmv}][\text{g-mole/scm}][\text{MJ/kcal}]$,
where the standard temperature for (g-mole/scm) is 20 °C.

C_i = Concentration of sample component i in ppmv on a wet basis, which may be measured for organics by 40 C.F.R. Part 60 Appendix A, Test Method 18, but is not required to be measured using Method 18 (unless designated by the Director).

H_i = 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.

- (f) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec). 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 40 C.F.R. Part 60 Appendix A, Test Method 2, 2A, 2C, or 2D in to, as appropriate, but is not required to be determined using these Methods (unless designated by the Director).
- (g) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in Section 5.1.2.f, 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).
- (h) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in Section 5.1.2.f, less than the velocity V_{\max} , as determined by the method 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:

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

Where:

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

28.8 = Constant.

31.7 = Constant.

H_T = The net heating value as determined in Section 5.1.2.e.

[45CSR§30-12.7., FLARE]

- 5.1.3. Flares are not required to conduct a flare compliance assessment for concentration of sample (i.e. 40 C.F.R. Part 60 Appendix A, Method 18) and tip velocity (i.e. 40 C.F.R. Part 60 Appendix A, Method 2), until such time as the Director requests a flare compliance assessment to be conducted in accordance with section 5.3.3, but the permittee is required to conduct a flare design evaluation in accordance with section 5.3.2.

[45CSR§30-5.1.c., FLARE]

- 5.1.4. The facility operates one triethylene glycol dehydrator (TEG). The TEG shall not exceed the below operating limitations:
- a. The throughput of wet natural gas through the TEG facility shall not exceed 20.0 MMCFD;
 - b. The vapors/overheads from the still column and skimmer tank shall be routed through a closed-vent system to the dehydration boiler (DEHY) at all times when there is a potential that vapor emissions can be generated from still column and/or flash or skimmer tank;
 - c. The closed-vent system shall be operated with no detectable emissions.
 - d. The DEHY shall be operated at all times when there is a potential of vapor emissions to be generated from the skimmer tank and/or still column;
 - e. The DEHY shall be fired with vapors from the still column and skimmer tank. Natural gas may only be used as supplemental fuel;
 - f. The vapors/overheads from the still column and skimmer tank shall be introduced into the flame zone of the DEHY.
 - g. HAP emission shall be reduced by 95.0 percent or more.
 - h. The 1.25 MMBtu/hr heating boiler shall only be fired with natural gas.

[45CSR§30-12.7.]

- 5.1.5. To claim less than 1 ton of Benzene exemption as stated in Section 5.1.1 or an average flow rate less than 85 thousand standard cubic meters per day, the permittee shall adhere to 40 C.F.R. Part 63 Subpart HH.

40 C.F.R. § 63.764 (e) *Exemptions.*

- (1) The owner or operator is exempt from the requirements of 40 C.F.R. §§ 63.764 (c) (1) and (d) if the criteria listed in 40 C.F.R. § 63.764 (e) (1) (i) or (ii) are met, except that the records of the determination of these criteria must be maintained as required in 40 C.F.R. § 63.774 (d) (1).
 - (i) The actual annual average flowrate of natural gas to the glycol dehydration unit is less than 85 thousand standard cubic meters per day, as determined by the procedures specified in 40 C.F.R. § 63.772 (b) (1); or
 - (ii) 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 40 C.F.R. § 63.772 (b) (2).

40 C.F.R. § 63.772 (b) *Determination of glycol dehydration unit flowrate or benzene emissions.*

The procedures of 40 C.F.R. § 63.772 (b) shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate or benzene emissions to meet the criteria for an exemption from control requirements under 40 C.F.R. § 63.764 (e) (1).

- (1) The determination of actual flowrate of natural gas to a glycol dehydration unit shall be made using the procedures of either 40 C.F.R. § 63.772 (b) (1) (i) or (b) (1) (ii).
 - (i) The owner or operator shall install and operate a monitoring instrument that directly measures natural gas flowrate to the glycol dehydration unit with an accuracy of plus or minus 2 percent or better. The owner or operator shall convert annual natural gas flowrate to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processed natural gas.
 - (ii) The owner or operator shall document, to the Administrator's satisfaction, that the actual annual average natural gas flowrate to the glycol dehydration unit is less than 85 thousand standard cubic meters per day.
- (2) The determination of actual average benzene emissions from a glycol dehydration unit shall be made using the procedures of either 40 C.F.R. § 63.772 (b) (2) (i) or (b) (2) (ii). Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.
 - (i) The owner or operator shall determine actual average benzene 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
 - (ii) The owner or operator shall determine an average mass rate of benzene emissions in kilograms per hour through direct measurement using the methods in 40 C.F.R. § 63.772 (a) (1) (i) or (ii), or an alternative method according to 40 C.F.R. § 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 C.F.R. § 63.774 (d) (1)

- (1) An owner or operator of a glycol dehydration unit that meets the exemption criteria in 40 C.F.R. § 63.764 (e) (1) (ii) shall maintain the records specified in 40 C.F.R. § 63.774 (d) (1) (ii), for that glycol dehydration unit.
 - (ii) The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with 40 C.F.R. § 63.772 (b) (2).

[45CSR34; 40 C.F.R. 63 Subpart HH]

- 5.1.6. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator 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

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

Calculations for PM Emissions

$$(5.43) * (564 \text{ LB / hr}) * (\text{ton} / 2000 \text{ LB}) = 1.5339 \text{ LB/hr}$$

Thus, the particulate matter discharged from open flare shall not exceed 1.5339 LB/hr.

[45CSR§6-4.1., FLARE]

- 5.1.7. No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.

[45CSR§6-4.3., FLARE]

- 5.1.8. The provisions of Section 5.1.7 [45CSR§6-4.3.] shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.

[45CSR§6-4.4., FLARE]

- 5.1.9. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from the flare which are large enough to be individually distinguished in the open air shall not be allowed or permitted.

[45CSR§6-4.5., FLARE]

- 5.1.10. The flare, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

[45CSR§6-4.6., FLARE]

- 5.1.11. The heating and dehydration boilers, on an individual basis, shall not 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.

[45CSR§2-3.1, BLR and DEHY]

5.2. Monitoring Requirements

- 5.2.1. In order to demonstrate compliance with the continuous flame requirements of Section 5.1.2 (d) the permittee shall monitor the presence or absence of a flare pilot flame using a thermocouple or any other equivalent device. **[45CSR§30-5.1.c., 40 C.F.R. § 64.6 (c) and § 64.7 (d)]**
- 5.2.2. **Closed-vent system.** To demonstrate compliance with Section 5.1.4 (c), the permittee shall conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices. **[45CSR§30-5.1.c.]**
- 5.2.3. Compliance with the emission for PM₁₀ shall be determined based on the gas and/or liquid throughput and gas usage limitation. If a monitoring timeframe is not already established and there are hourly emissions, records indicating the monthly emissions with operating records shall be available for a period of no less than five (5) years. If a monitoring timeframe is not already established and there are yearly emission limits, records indicating the twelve month total emissions shall be available for a period of no less than five (5) years. If the permit or applicable standard so indicates, such yearly totals shall be recorded on a rolling twelve calendar month basis. **[45CSR§30-5.1.c.]**
- 5.2.4. Compliance with the emission for PM-10 from the flare shall be determined by using the emission factors listed in Section 1.4-2 for Natural Gas Combustion of the 5th edition of USEPA's AP-42 and the design heat input of the flare. **[45CSR§30-5.1.c.]**
- 5.2.5. The permittee must input operating parameters that provide the highest HAP emissions when using GRI-GLYCalc V4 or higher. If the permittee does not want to use operating parameters that provide the highest HAP emissions, then the permittee may monitor the glycol dehydration unit while conducting the wet gas sampling requirements in Section 5.3.4. The permittee may use actual monitored and recorded operating parameters associated with the dehydration system, in order to demonstrate compliance with the emission limits of Section 5.1.1 using GRI-GLYCalc V4 or higher or may use operating parameters that provide the highest HAP emissions.

As an alternative to the "Gas Analysis and Process Data", emission estimating method discussed above, the permittee may elect to incorporate the following alternative calculation methods as provided by GLYCalc V4: [Gas Analysis and ARL Method (R/L+Gas)] or the [GRI ARL Method (for TEG units only)]

These alternative methods can be used to demonstrate compliance with Section 5.1.1, provided emissions are 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). Additionally, the alternative methods shall also adhere to the recommendations for sampling and analysis of the wet glycol stream as presented in the GLYCalc Technical Reference User Manual and Handbook V4 when applicable.

[45CSR§30-5.1.c.]

5.3. Testing Requirements

- 5.3.1. In order to demonstrate compliance with the flare opacity requirements of Section 5.1.2 (b) the permittee shall conduct a 40 C.F.R. Part 60 Appendix A, Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40 C.F.R. Part 60 Appendix A, Method 22. The permittee shall conduct this test within thirty (30) days of permit issuance or initial startup whichever is later and a second opacity test within six months from the time the permit expires. The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60 Appendix A, Method 22 or from the lecture portion of 40 C.F.R. Part 60 Appendix A, Method 9 certification course.
[45CSR§30-5.1.c.]
- 5.3.2. In order to demonstrate compliance with the flare design criteria requirements of Section 5.1.2, the permittee shall conduct a flare design evaluation demonstrating compliance with the criteria set forth by Section 5.1.2. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, all supporting concentration calculations, and other related information requested. The permittee may elect to demonstrate compliance with the flare design criteria requirements of section 5.1.2 by complying with the compliance assessment testing requirements of Section 5.3.3.
[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]
- 5.3.3. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with the flare requirements of Section 5.1.2 and the flare design evaluation. This compliance assessment testing shall be conducted in accordance with 40 C.F.R. Part 60 Appendix A, Test Method 18 for organics and 40 C.F.R. Part 60 Appendix A, Test Method 2, 2A, 2C, or 2D, as appropriate, or other equivalent testing approved in writing by the Director. Also, 40 C.F.R. Part 60 Appendix A, Test Method 18 may require the permittee to conduct 40 C.F.R. Part 60 Appendix A, Test Method 4 in conjunction with 40 C.F.R. Part 60 Appendix A, Test Method 18.
[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]
- 5.3.4. The permittee shall demonstrate compliance with Section 5.1.1 by 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. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date. As specified in the handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration column, but after any type of separation device, in accordance with GPA method 2166. Compliance with this condition demonstrates compliance with Section 5.1.5 [40 C.F.R. § 63.772 (b) (2) (i)].
[45CSR§30-5.1.c.]

5.4. Recordkeeping Requirements

- 5.4.1. For the purpose of demonstrating compliance with Sections 5.1.2. (d) and 5.2.1, the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.
[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]
- 5.4.2. For the purpose of demonstrating compliance with Sections 5.1.2 and 5.3.2, the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, all supporting concentration calculations, and other information requested.
[45CSR§30-5.1.c.]
- 5.4.3. For the purpose of demonstrating compliance with the requirements set forth in Sections 5.1.2 and 5.3.3, the permittee shall maintain records of testing conducted in accordance with 5.3.3.
[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]
- 5.4.4. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of 5.2 and testing requirements of 5.3.
[45CSR§30-5.1.c.]
- 5.4.5. For the purpose of demonstrating compliance with section 5.1.2. (c), the permittee shall maintain records of the visible emission opacity tests conducted per Section 5.3.1.
[45CSR§30-5.1.c.]
- 5.4.6. For the purpose of demonstrating compliance with Section 5.1.1, the permittee shall maintain a record of all potential to emit (PTE) HAP calculations for the entire facility. These records shall include the natural gas compressor engines and ancillary equipment.

[The above recordkeeping is not needed if permittee is complying with Section 5.1.1 (b)]

[45CSR§30-5.1.c.]
- 5.4.7. The permittee shall maintain a record of the wet natural gas throughput through the dehydration system to demonstrate compliance with the natural gas throughput limit.
[45CSR§30-5.1.c., 40 C.F.R. § 64.6 (c)]
- 5.4.8. For the purpose of demonstrating compliance with Section 5.1.1, the permittee shall maintain a record of the wet gas sampling required by Section 5.3.4. This record shall include a potential to emit (PTE) HAP estimate modeled using GlyCalc Version 4 or higher software, which incorporates site specific parameters measured in accordance with Section 5.2.5. The emission estimate shall also incorporate a copy of the lab analysis obtained from the wet gas sampling as well as a description of how and where the sample was taken. This record shall include a reference to all sampling and analytical methods utilized and identification of where the compressor station is located before or after the liquids extraction plant.
[45CSR§30-5.1.c.]

5.4.9. **General recordkeeping requirements for CAM,**

- (1) The owner or operator shall comply with the recordkeeping requirements of Sections 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 C.F.R. §64.9 (b)]

5.5. Reporting Requirements

- 5.5.1. Any and all malfunctions dehydrator flare shall be documented in writing. The following information must be documented for each malfunction:
- a. The equipment involved in the malfunction and the associated cause.
 - b. Steps taken to correct the malfunction.
 - c. The steps taken to minimize the emissions during the malfunction.
 - d. The duration of the malfunction.
 - e. The increase in emissions during the malfunction.
 - f. Steps taken to prevent a similar malfunction in the future.

These records shall be maintained on site for the duration of the operation.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.7 (d)]

- 5.5.2. For demonstrating compliance with section 5.3.3, the permittee shall submit a testing protocol thirty (30) days prior to testing and shall submit a notification of the testing date fifteen (15) days prior to testing. Also, the permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.

[45CSR§30-5.1.c.]

- 5.5.3. Any deviation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40 C.F.R. 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 within ten (10) calendar days of the occurrence and shall include, at a minimum, 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.

[45CSR§30-5.1.c.]

- 5.5.4 Any deviation(s) of the flare design and operation criteria in Section 5.1.2 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days.
[45CSR§30-5.1.c.]
- 5.5.5 The permittee shall submit a report of the wet gas sampling required by 5.3.4 of this permit within 90 days of conducting the sampling of the wet gas stream. This report shall include a potential to emit (PTE) estimate modeled using GlyCalc Version 4 or higher software, which incorporates site specific parameters measured in accordance with 5.2.5 or operating parameters that provide the highest HAP emissions when using GRI-GLYCalc V4 or higher. The emission estimate shall also incorporate a copy of the lab analysis obtained from the wet gas sampling as well as a description of how and where the sample was taken. The report shall include a reference to all sampling and analytical methods utilized and identification of where the compressor station is located before or after the liquids extraction plant.
[45CSR§30-5.1.c.]
- 5.5.6 **General reporting requirements** for CAM. A report for monitoring under 40 C.F.R. Part 64 shall include, at a minimum, the information required in Sections 3.5.6 and 3.5.8 and the following information as applicable:
- (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9 (a) (2)]

5.6. Compliance Plan

- 5.6.1. None

5.7. CAM Plan Summary of Requirements for Flare (FLARE)

		Indicator No. 1
I.	Indicator	Presence of Flame (permit condition 5.1.2.d.)
	Monitoring Approach	Use of thermocouple, infrared device, or equivalent (permit condition 5.2.1.).
II.	Indicator Range or Designated Condition	Indicator provides data regarding presence or absence of flame.
III.	Performance Criteria	A thermocouple, infrared detector, pilot eye, or equivalent device will be installed to continuously monitor the presence of a pilot flame (permit condition 5.2.1.).
	A. Data Representativeness	A thermocouple, infrared detector, pilot eye, or equivalent device will be installed to continuously monitor the presence of a pilot flame (permit condition 5.2.1.).
	B. Verification of Operational Status	All manufacturer's recommendations regarding periodic testing/checks for the proper installation and operation of the pilot eye device will be followed (permit condition 5.3.3.).
	C. QA/QC Practices and Criteria	For the device that detects the presence of a flame, calibration, maintenance and operation will be conducted in accordance with manufacturer's specifications (permit condition 5.3.2.).
	D. Monitoring Frequency	Continuously
	Data Collection Procedures	Records of all flame outs or loss of pilot eye, along with any applicable corrective actions will be documented and maintained (permit condition 5.4.1 and 5.5.1.).
	Data averaging periods	No averaging periods