

West Virginia Department of Environmental Protection
Division of Air Quality

Austin Caperton
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:

Equitrans, L.P.
Logansport #49 Compressor Station, Smithfield, WV
R30-10300033-2018

A handwritten signature in blue ink, appearing to read "William F. Durham", written over a horizontal line.

William F. Durham

Director, Division of Air Quality

Issued: May 15, 2018 • Effective: May 29, 2018
Expiration: May 15, 2023 • Renewal Application Due: November 15, 2022

Permit Number: **R30-10300033-2018**
Permittee: **Equitrans, L. P.**
Facility Name: **Logansport #49 Compressor Station**
Permittee Mailing Address: **Route 1, Box 26 Smithfield, WV 25437**

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:	Smithfield, Wetzel County, West Virginia
Facility Mailing Address:	Route 1, Box 26, Smithfield, WV 25437
Telephone Number:	(304) 889-2130
Type of Business Entity:	Corporation
Facility Description:	Natural gas transmission facility
SIC Codes:	Primary 4922; Secondary: None; Tertiary: None
UTM Coordinates:	538.78 km Easting • 4378.47 km Northing • Zone 17

Permit Writer: Robert Mullins

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					
001-01	C001 Stack 1	Reciprocating Engine/Integral Compressor, Cooper Bessemer GMV6; 2SLB	1953	800 HP	None
002-01	C002 Stack 2	Reciprocating Engine/Integral Compressor, Cooper Bessemer GMV6; 2SLB	1953	800 HP	None
003-01	G001 Stack 3	Reciprocating Engine/Generator, Waukesha F18GL; 4SLB	1998	265 HP	None
003-02	G002 Stack 4	Reciprocating Engine/Generator, Waukesha F18GL; 4SLB	2000	265 HP	None
Dehydrator					
TEG Dehy	COMB-1	Dehydrator Still Column Dehydrator Flash Tank	2018	148 mmscf/day	Enclosed Combustor
	COMB-1				
COMB-1	COMB-1	Enclosed Combustor	2018	7.00 mmBtu/hr	N/A
Boilers					
BLR	BLR	Heating Boiler 2	2017	2.34 MMBtu/hr	None
BLR02	BLR02	Dehydration #2 Boiler, Type: Triethylene Glycol	2018	3.10 mmBtu/hr	None
Heaters					
HTR	HTR	Indirect Gas Fired Heater	1993	1.0 MMBtu/hr	None
LHTR	LHTR	Indirect Gas Fired Line Heater	2013	2.52 MMBtu/hr	None
CHTR-1 & CHTR 2	CHTR-1 & CHTR-2	(2) Catalytic Heaters	2015	3500 Btu/hr	None
CHTR-3 & CHTR-4	CHTR-3 & CHTR-4	(2) Catalytic Heaters	2016	3500 Btu/hr	None
SHTR-1	SHTR-1	Space Heater	2017	0.03 MMBtu/hr	None
Tanks					
Tank 1	Tank 1	Separator Triethylene Glycol Tank	1996	300 gallon	None
Tank 2	Tank 2	Pipeline Condensate	1996	7,500 gallon	None
Tank 3	Tank 3	New Oil	1996	1,500 gallon	None
Tank 4	Tank 4	Ethylene Glycol	1996	1,500 gallon	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Tank 5	Tank 5	Used Oil	1996	2,000 gallon	None
Tank 6	Tank 6	New TEG	2018	2,000 gallon	None
Tank 7	Tank 7	Used TEG	2018	2,000 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 number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-3371A	March 13, 2018

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 monthly 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	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

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 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 or allow 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 45CSR34]
- 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; State-Enforceable Only]

3.2. Monitoring Requirements

- 3.2.1. None.

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.

- d. The permittee shall submit a report of the results of the stack test within 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.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) 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.; 45CSR13, R13-3371, Condition 4.4.1]

- 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. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, 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 or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

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

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

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

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

- 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. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[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. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[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. Logansport #49 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 Dc	This subpart applies to steam generating units greater than 10 MMBtu/hr and less than 100 MMBtu/hr. Logansport # 49 Station does not have any steam generating units greater than 10 MMBtu/hr.
40 C.F.R. 60 Subpart GG	Standards of Performance for Stationary Gas Turbines. There are no turbines at the Logansport #49 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 Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. All tanks storing volatile organic liquids 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. Logansport #49 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 Logansport #49 Compressor Station.
40 C.F.R. 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Engines. All engines at Logansport #49 Compressor Station are spark ignition engines.
40 C.F.R. 60 Subpart JJJJ	This subpart applies to stationary spark ignition internal combustion engines that have been constructed, reconstructed, or modified after various dates, the earliest of which is June 12, 2006. All the engines at Logansport #49 Compressor Station were installed before June 12, 2006 and have not been reconstructed or modified.
40 C.F.R. 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines. There are no turbines at the Logansport #49 Compressor Station.
40 C.F.R. 60 Subpart OOOO and OOOOa	Standards of Performance for Oil and Natural Gas Production, Transmission, and Distribution, applies to affected facilities that commenced construction, reconstruction, or modification after August 23, 2011 and before September 18, 2015 for OOOO and after September 18, 2015 for OOOOa. Tanks 6 & 7 were constructed after September 18, 2015, but do not meet the 6 tpy threshold. They are therefore not subject to OOOOa.
40 C.F.R. 63 Subpart HH	National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. The Logansport #49 Compressor Station is not subject to Subpart HH since Logansport #49 Compressor Station is not a natural gas production facility.
40 C.F.R. 63 Subpart HHH	Natural Gas Transmission and Storage Facilities. The Logansport #49 Compressor Station is a transmission facility but it is an area source of HAPs thus is not subject to this rule.
40 C.F.R. 63 Subpart DDDDD	This MACT standard applies to Industrial, Commercial, and Institutional Boilers and Process Heaters at major sources of HAPs. Logansport #49 Compressor Station is not major for HAPs.
40 C.F.R. 63 Subpart JJJJJ	This MACT standard applies to industrial, commercial, and institutional boilers at area sources of HAPs. All boilers at Logansport #49 Compressor Station fire natural gas exclusively. Natural gas boilers are exempt from the rule per 40 C.F.R. §63.11195(e).
40 C.F.R. 64.	Since the R13-3371A permit specifies a “continuous compliance determination method” (e.g. continuously monitoring the flare using a thermocouple to detect the presence of a flame) which was included in the Title V permit, CAM does not apply (exemption per 40 C.F.R. §64.2(b)(1)(vi)).

4.0 Source-Specific Engine Requirements [emission point ID(s): C001, C002, G001 and G002]

4.1. Limitations and Standards

- 4.1.1. The permittee must comply with the general provisions of 40 C.F.R. 63 as shown in Table 8 of 40 C.F.R. Part 63 except for the following as per 40 C.F.R. § 63.6645(a)(5); 40 C.F.R. §§ 63.7(b) and (c), 40 C.F.R. §§ 63.8(e), (f)(4), and (f)(6), and 40 C.F.R. §§ 63.9(b)-(e), (g) and (h).
[40 C.F.R. §63.6665, 40 C.F.R. §63.6645(a)(5), Table 8 of 40 C.F.R. 63 Subpart ZZZZ, 45CSR34]
- 4.1.2. For existing stationary RICE located at an area source of HAP emissions, the permittee must comply with the following requirements from Table 2d of 40 C.F.R. 63 Subpart ZZZZ.
- a. The compressor engines 001-01 and 002-01 are classified as 2-stroke, lean-burn, non-emergency, spark ignition (SI) units greater than 500 horsepower at an area source and as such are subject to the following requirements:
 - i. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; and
 - ii. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and
 - iii. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.
 - b. The generators 003-01 and 003-02 are classified as 4-stroke, lean burn, non-emergency, SI units less than 500 horsepower at an area source and as such are subject to the following requirements:
 - i. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; and
 - ii. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and
 - iii. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.
 - iv. **[40 C.F.R. § 63.6603(a), Table 2d of 40 C.F.R. 63 Subpart ZZZZ, 45CSR34]**
- 4.1.3. **General Requirements for complying with 40 C.F.R 63 Subpart ZZZZ.**
- a. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 C.F.R 63 Subpart ZZZZ that apply to you at all times.
 - b. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 C.F.R. § 63.6605, 45CSR34]

- 4.1.4. The permittee must demonstrate continuous compliance with each emission limitation or operating limitation in Table 2d of 40 C.F.R. 63 Subpart ZZZZ that apply according to the following methods from Table 6 of 40 C.F.R. 63 Subpart ZZZZ:
- a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
 - b. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 C.F.R §63.6640(a), Table 6 of 40 C.F.R. 63 Subpart ZZZZ, 45CSR34]

- 4.1.5. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 C.F.R. §63.6625(e); 45CSR34]
- 4.1.6. If the permittee operates a new, reconstructed, or existing stationary engine, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 C.F.R. Part 63, Subpart ZZZZ apply.
[40 C.F.R. §63.6625(h); 45CSR34]
- 4.1.7. If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to 40 C.F.R. Part 63, Subpart ZZZZ or in items 5, 6, 7, 9, or 11 of Table 2d to 40 C.F.R. Part 63, Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 C.F.R. Part 63, Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 C.F.R. Part 63, Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
[40 C.F.R. §63.6625(j); 45CSR34]

4.2. Monitoring Requirements

- 4.2.1. None.

4.3. Testing Requirements

- 4.3.1. None.

4.4. Recordkeeping Requirements

- 4.4.1. The permittee must keep records in accordance with 40 C.F.R § 63.6655, except for 40 C.F.R. §§ 63.6655(c) and (f) which do not apply.
[40 C.F.R. §63.6655, 45CSR34]

4.5. Reporting Requirements

- 4.5.1. The permittee must report each instance in which each applicable emission limitation or operating limitation in Table 2d of 40 C.F.R 63 Subpart ZZZZ was not met. These instances are deviations from the emission and operating limitations of 40 C.F.R 63 Subpart ZZZZ. These deviations must be reported according to the requirements of 40 C.F.R § 63.6650.
[40 C.F.R. §63.6640(b), 45CSR34]
- 4.5.2. The permittee must report each instance in which the applicable requirements in Table 8 of 40 C.F.R. Part 63 Subpart ZZZZ were not met.
[40 C.F.R. §63.6640(e), 45CSR34]
- 4.5.3. 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

- v. The appropriate certification by a responsible official.

[45CSR§30-12.7.]

4.6. Compliance Plan

- 4.6.1. None.

5.0 Source-Specific Requirements [emission point ID(s): BRL, BRL02, HTR, LHTR, COMB-1]

5.1. Limitations and Standards

- 5.1.1. Potential facility-wide HAP emissions shall be less than 10 TPY of any single HAP or 25 TPY of any combination of HAPs. For purposes of determining major or area source status at transmission and storage facilities, the methods specified in 40 CFR 63, Subpart HHH shall be used. **[45CSR§30-12.7]**
- 5.1.2. The permittee has defined the facility as an area source of HAPs for MACT applicability purposes. As a result, the subject facility shall conduct monitoring, testing, and reporting as specified below in order to provide adequate justification for maintaining area source status. These requirements are tailored to incorporate the methods specified in 40 CFR 63, Subpart HHH. Additionally, these requirements shall in no way restrict the permittee from conducting more frequent testing to quantify emission changes. **[40CFR§63.10(b)(3)]**
- 5.1.3. The 2.5 MMBtu/hr indirect heater (BLR) shall only be fired with natural gas. **[45CSR§30-12.7](BLR)**
- 5.1.4. The indirect gas fired heater, heating boiler, and dehydrator 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](HTR, LHTR, BLR)**
- 5.1.5. 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 by this permit. In accordance with the information filed in Permit Application R13-3371, 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. **[45CSR13, R13-3371 Condition 4.1.1] (TEG Dehy, BLR02, COMB-1)**
- 5.1.6. The maximum dry natural gas throughput to the triethylene glycol (TEG) Glycol Dehydration Unit (GDU), identified as TEG Dehy, shall not exceed 148 mmscf/day or 54,020 mmscf/year. **[45CSR13, R13-3371 Condition 4.1.2] (TEG Dehy)**
- 5.1.7. The GDU, identified as TEG Dehy shall meet the following requirements:
 - a. The maximum aggregate emissions from the Glycol Dehydrator Regeneration Still Vent and Flash Tank, as emitted after combustion at the enclosed combustor (COMB-1), shall not exceed the limits given in the following table:

Table 5.1.7.a: Glycol Dehydrator Controlled Emission Limits⁽¹⁾

Pollutant	PPH	TPY
VOC	0.65	2.84
Benzene	0.07	0.29
Toluene	0.08	0.37
Ethylbenzene	0.11	0.48
Xylene	0.15	0.65
Total HAPs	0.31	1.37

⁽¹⁾ Emissions based on GRI-GLYCALC Version 4.0 using dry gas throughputs as limited under 5.1.6 and including a 10% safety factor for VOC emissions and Total HAP emissions and a 50% safety factor for BTEX emissions.

[45CSR13, R13-3371 Condition 4.1.3](TEG Dehy)

- 5.1.8. The Glycol Dehydrator Reboiler, identified as BLR02, shall meet the following requirements:
- a. The MDHI of the unit shall not exceed 3.10 mmBtu/hr and shall only be fired by natural gas;
 - b. The maximum emissions from the Reboiler's combustion exhaust shall not exceed the limits given in the following table;

Table 5.1.8.b: Reboiler Emission Limits

Pollutant	PPH	TPY
CO	0.23	1.02
NO _x	0.28	1.21

- c. 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 for the Reboiler; and
- d. 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. [45CSR§2-3.1]

[45CSR13, R13-3371 Condition 4.1.4](BLR02)

- 5.1.9. The permittee shall operate the enclosed combustor, identified as COMB-1, according to the following requirements:

- a. The combustion exhaust emissions from the enclosed combustor (does not include pass-through VOC/HAP emissions from the GDU Regenerator Still Vent and Flash Tank) shall not exceed the following limits:

Table 5.1.9.a: Enclosed Combustor Combustion Exhaust Emission Limits

Pollutant	PPH	TPY
CO	0.53	2.31
NO _x	0.63	2.75

- b. The enclosed combustor shall have an MDHI not to exceed 7.0 mmBtu/hr;
- c. The pilot flame shall be present at all times when the enclosed combustor is operating, as determined by methods specified in section 5.2.5;
- d. The enclosed combustor shall be designed for and operated with no visible emissions as determined by the methods specified in permit section 5.2.6 except for either (1) or (2):
 - (1) Periods not to exceed a total of one minute during any 15 minute period, determined on a monthly basis; or
 - (2) Periods not to exceed a total of 2 minutes during any hour, determined on a quarterly basis if the enclosed combustion device installed was a model tested under §60.5413(d) which meets the criteria in §60.5413(d)(11).
- e. The enclosed combustor shall be operated at all times when emissions may be vented to it. To ensure compliance with 5.1.9.e, the permittee shall monitor in accordance with 5.2.5;

- f. The enclosed combustor shall be designed, operated and maintained according to good engineering practices or manufacturing recommendations so as to achieve, at a minimum, a hydrocarbon destruction and removal efficiency (DRE) of 98.0%; and
- g. The permittee shall operate and maintain the enclosed combustor according to the manufacturer's specifications for operating and maintenance requirements to maintain the guaranteed control efficiency given under 5.1.9.f. To demonstrate compliance with 5.1.9.g, the permittee shall maintain records of the manufacturer's specifications for operating and maintenance requirements to maintain the control efficiency; and
- h. The enclosed combustor is subject to 45CSR6. The applicable requirements of 45CSR6 include but are not limited to the following:

- (1) The permittee shall not cause, suffer, allow, or permit particulate matter to be discharged from the flares 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 indicated in Table I below:

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

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

[45CSR§6-4.1]

- (2) 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]
- (3) The provisions of paragraph (2) 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]
- (4) No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5]
- (5) Incinerators, 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]
- (6) Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§6-8.2]

[45CSR13, R13-3371 Condition 4.1.5](COMB-1)

- 5.1.10. The existing GDU shall cease operation upon startup of the new GDU and the existing GDU shall be rendered inoperable by cutting all fuel and process gas lines to the unit within ninety (90) days of the startup of the new GDU.
[45CSR13, R13-3371 Condition 4.1.6]
- 5.1.11. 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.
[45CSR13, 45CSR§13-5.11; R13-3371 Condition 4.1.7]

5.2. Monitoring Requirements

- 5.2.1. In order to demonstrate compliance with the area source status using GRI-GLYCalc V3 or higher, the dehydration system must be accurately defined by monitoring and recording actual annual average operating parameters associated with the dehydration system. These parameters shall be measured at least quarterly, with the exception of wet gas composition, in order to define annual average values or, if monitoring is not practical, some parameters may be assigned default values in accordance with the stipulations listed below. Annual average operating parameter, shall be interpreted as the average result of periodic monitoring recorded a number of times throughout the calendar year, which is sufficient enough to reflect annual variation. Therefore, this term is operating parameter and site dependent.

The WV Division of Air Quality requires the following actual operating parameters be measured or assumed to equal the default values listed below in order to satisfy this monitoring requirement when using the Gas Analysis and Process Data, GLYCalc emission modeling method:

Note: if you are measuring and using actual wet or dry gas water content then you are also required to measure the lean glycol recirculation rate rather than using the default value.

- Natural Gas Flowrate:
 - number of days operated per month,
 - monthly throughput (MMscf/month),
 - annual daily average (MMscf/day), and
 - maximum design capacity (MMscf/day)
- Absorber temperature and pressure
- Lean glycol circulation rate
- Glycol pump type
- Flash tank temperature and pressure, if applicable
- Stripping Gas flow rate, if applicable
- Wet gas composition (upstream of the absorber – dehydration column) sampled in accordance with GPA method 2166 and analyzed consistent with GPA extended method 2286 as well as the procedures presented in the GRI-GLYCalc Technical Reference User Manual and Handbook V3.
- Wet gas water content (lbs H₂O/MMscf)
- Dry gas water content (lbs H₂O/MMscf) at a point directly after exiting the dehydration column and before any additional separation points

The following operating parameter(s) may be assigned default values when using GRI-GLYCalc:

- Dry Gas water content can be assumed to be equivalent to pipeline quality at 7 lb H₂O / MMscf.
- Wet gas water content can be assumed to be saturated
- Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI.

- Lean glycol circulation rate may be estimated using the recirculation ratio of 3 gal TEG / lb H₂O removed.

[45CSR§30-5.1.c.]

- 5.2.2. At such reasonable times as the Secretary may designate, the permittee shall conduct visible emissions observations using Method 22 for the purpose of demonstrating compliance with Section 5.1.4. If visible emissions are observed, the permittee shall conduct a Method 9 reading unless the cause for visible emissions is corrected within 24 hours. Records of observation will be kept for at least 5 years from the date of observation.

[45CSR§30-5.1.c.]

- 5.2.3. **GDU Dry Gas Throughput.**

For the purpose of demonstrating compliance with the maximum dry gas throughput limit set forth in 5.1.6, the permittee shall monitor daily, monthly, and rolling twelve-month records of the dry gas throughput of the Glycol Dehydration Unit.

[45CSR13, R13-3371 Condition 4.2.1](TEG Dehy)

- 5.2.4. **Fuel Burning Unit Visibility Compliance (BLR02)**

For the purposes of demonstrating compliance with the visible emission standard set forth in 5.1.8.d, the permittee shall do the following:

- At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with 5.1.8.d of this permit. Method 9 shall be conducted in accordance with 40 C.F.R. 60 Appendix A.
- The permittee shall maintain records of all monitoring data required by section 5.2.4 of this permit documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 -10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.
- Any deviation(s) from the allowable visible emission requirement for any source discovered during the observations using 40 C.F.R. Part 60, Appendix A, Method 9 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.

[45CSR13, R13-3371 Condition 4.2.2](BLR02)

- 5.2.5. **Enclosed Combustor Pilot Flame Monitoring.**

The permittee shall demonstrate compliance with the pilot flame requirements of 5.1.9.c by continuous monitoring using a thermocouple or any other equivalent device to detect the presence of a flame when emissions are vented to the combustor and shall, upon detection of no flame, immediately shut the dehydration unit down and record the date and time of the incident.

[45CSR13, R13-3371 Condition 4.2.3](COMB-1)

5.2.6. Enclosed Combustor Visibility Monitoring

To demonstrate compliance with the visible emissions requirements of section 5.1.9.d, the permittee shall conduct the following checks and/or opacity monitoring and recordkeeping:

- a. The visible emission check shall determine the presence or absence of visible emissions. The observations shall be conducted according to Section 11 of EPA Method 22. 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 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course. The observation period shall be:
 - (1) Reserved.
 - (2) a minimum of 15 minutes if demonstrating compliance with 5.1.9.d(1); or
 - (3) a minimum of 1 hour if demonstrating compliance with 5.1.9.d(2)
- b. The visible emission check shall be conducted initially within 180 days of start-up to demonstrate compliance;
- c. If during this visible emission check or at any other time visible emissions are observed, compliance with section 5.1.9.d shall be determined by conducting opacity tests in accordance with Method 9 or 40 CFR 60, Appendix A; and
- d. For the purpose of demonstrating compliance with the visible emissions and opacity requirements, the permittee shall maintain records of the visible emission opacity tests and checks. The permittee shall maintain records of all monitoring data required by section 5.2.6 documenting the date and time of each visible emission check, the emission point or equipment / source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-3371 Condition 4.2.5](COMB-1)

- 5.2.7. The permittee shall meet all applicable monitoring, compliance demonstration, recording and reporting requirements given in 45CSR2 and 45CSR6.
[45CSR13, R13-3371 Condition 4.2.6]

5.3. Testing Requirements

- 5.3.1. Within the 3rd year of this permit term, the permittee shall determine the composition of the wet natural gas by sampling in accordance with GPA Method 2166 and analyzing according to extended GPA Method 2286 analysis as specified in the GRI-GLYCalc V3 or higher Technical Reference User Manual and Handbook. As specified in the handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration contactor column, but after any type of separation device, in accordance with GPA method 2166. 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.
[45CSR§30-5.1.c]
- 5.3.2. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations or minimum control device efficiencies established in this permit and/or applicable regulations.
[45CSR13, R13-3371 Condition 4.3.1]

- 5.3.3. In order to demonstrate compliance with 5.1.7.a, upon request of the Director, the permittee shall demonstrate compliance with the VOC/HAP emissions limits using GLYCalc Version 3.0 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.
[45CSR13, R13-3371 Condition 4.3.2]
- 5.3.4. The permittee shall meet all applicable performance testing requirements given in 45CSR2 and 45CSR6.
[45CSR13, R13-3371 Condition 4.3.3]

5.4. Recordkeeping Requirements

- 5.4.1. For the purpose of documenting compliance with the emission limitations and/or HAP major source thresholds, the permittee shall maintain records of all monitoring data, wet gas sampling, and annual GLYCalc emission estimates.
[45CSR§30-5.1.e]
- 5.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-3371 Condition 4.4.2]
- 5.4.3. **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:
- a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-3371 Condition 4.4.3]

- 5.4.4. The permittee shall meet all applicable record-keeping requirements given in 45CSR2 and 45CSR6.
[45CSR13, R13-3371 Condition 4.4.4]

5.5. Reporting Requirements

- 5.5.1. The permittee shall submit by March 31st of the year following the wet gas analysis, an emission summary for the dehydration unit (TEG Dehy), which incorporates the wet gas testing results required by 5.3.1. The permittee shall also supply a copy of the most recent report within the facility's subsequent Title V renewal application. These reports shall include an actual annual average emission estimate for the calendar year of the sample, modeled using GLYCalc V3 or higher software, which incorporates site specific parameters measured in accordance with 5.2.1. The permittee shall also supply all supporting documentation where site specific operating parameters are tabulated to define the annual average values. The report shall incorporate a copy of the lab analysis obtained from the wet gas testing 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. Additionally, the permittee shall identify where the compressor station is located with respect to a custody transfer point. This report shall be signed by a responsible official upon submittal.
[45CSR§30-5.1.c]
- 5.5.2. Any deviation of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 per section 5.2.6 must 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.
[45CSR13, R13-3371 Condition 4.5.1]
- 5.5.3. Any bypass event of the registered control device must 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 date of the bypass, the estimate of VOC emissions released to the atmosphere as a result of the bypass, the cause or suspected cause of the bypass, and any corrective measures taken or planned.
[45CSR13, R13-3371 Condition 4.5.2]
- 5.5.4. Any time the air pollution control device is not operating when emissions are vented to it, 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 discovery.
[45CSR13, R13-3371 Condition 4.5.3]

5.6. Compliance Plan

- 5.6.1. None.