west virginia department of environmental protection

Division of Air Quality
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Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
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January 22, 2016

CERTIFIED MAIL
91 7199 9991 7034 1376 2595

Mr. Randy DeLaune
Appalachia Midstream Services, LLC
P.O. Box 18312
Oklahoma City, OK 73154-0312

Re: Appalachia Midstream Services, LLC
Miller Compressor Station
Permit No. R13-2831E
Plant ID No.051-00130

Dear Mr. DeLaune:

Your application for a permit as required by Section 5 of 45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permit, General Permit, and Procedures for Evaluation" has been approved. The enclosed permit R13- is hereby issued pursuant to Subsection 5.7 of 45CSR13. Please be aware of the notification requirements in the permit which pertain to commencement of construction, modification, or relocation activities; startup of operations; and suspension of operations.

As a result of the granting of this permit, the source is not subject to 45CSR30.

In accordance with 45CSR22 - Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the Certificate has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

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.

Should you have any questions or comments, please contact me at (304) 926-0499, extension 1214.

Engineer's Name
Title

Enclosures

c. WVDEP/Division of Air Quality – NPRO
Dave Morris, Dave.Morris@williams.com
Kristin Ikard, Kristin.Ikard@williams.com
Kijun Hong, Kijun.Hong@williams.com

West Virginia Department of Environmental Protection

Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Permit to Modify

R13-2831E

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

Issued to:

Appalachia Midstream Services, LLC
Miller Compressor Station
051-00130

William F. Durham
Director

Issued: January 21, 2016

This permit will supercede and replace Permit R13-2831D.

Facility Location:	County Road 1/22 (Johnson Ridge) Bannen, Marshall County, West Virginia
Mailing Address:	P.O. Box 54368 Oklahoma City, OK 73154-1368
Facility Description:	Natural Gas Production Compressor Station
NAICS Codes:	211111
UTM Coordinates:	532.48 km Easting • 4,396.73 km Northing • Zone 17
Permit Type:	Modification
Description of Change:	This action is for the replacement of four compressor engines (EPCE-1, EPCE-9, EPCE-10, EPCE-11) with Caterpillar G3516B compressor engines, account for compressor blowdown emissions, and other miscellaneous emission sources due to undated gas analysis.

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

The source is not subject to 45CSR30.

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1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EUCE-2	EPCE-2	Waukesha L5794 Compressor Engine Engine SN: C-17723/1 Unit ID: AC3780	2010	1,380 hp	NSCR
EUCE-3	EPCE-3	Waukesha L5794 Compressor Engine Engine SN: C-17563/1 Unit ID: AC3574	2010	1,380 hp	NSCR
EUCE-4	EPCE-4	Waukesha L5794 Compressor Engine Engine SN: C-17570/1 Unit ID: AC3572	2010	1,380 hp	NSCR
EUCE-5	EPCE-5	Waukesha L5794 Compressor Engine Engine SN: C17771/1 Unit ID: AC3578	2010	1,380 hp	NSCR
EUCE-6	EPCE-6	Waukesha L5794 Compressor Engine Engine SN: C17569/1 Unit ID: AC3573	2010	1,380 hp	NSCR
EUCE-7	EPCE-7	Caterpillar G3516B Compressor Engine Engine SN: JEF01492 Unit ID: MC4113 Compressor SN:F-37392 Compressor DOM: 4/1/2014	2012	1,380 hp	Oxid. Cat.
EUCE-8	EPCE-8	Caterpillar G3516B Compressor Engine Engine SN: JEF01462 Unit ID: MC4112 Compressor SN: F-37820 Compressor DOM: 1/06/2012	2012	1,380 hp	Oxid. Cat.
EUCE-12	EPCE-12	Caterpillar G3516B Compressor Engine	2015	1,380 hp	Oxid. Cat.
EUCE-13	EPCE-13	Caterpillar G3516B Compressor Engine	2015	1,380 hp	Oxid. Cat.
EUCE-14	EPCE-14	Caterpillar G3516B Compressor Engine	2015	1,380 hp	Oxid. Cat.
EUCE-15	EPCE-15	Caterpillar G3516B Compressor Engine	2015	1,380 hp	Oxid. Cat.
EP-BD		Compressors Blowdown Vent	2010	N/A	N/A
EUGEN-1	EPGEN-1	Capstone C600 Micro Turbine Generator	2010	805 hp	None
EUGEN-2	EPGEN-2	Capstone C600 Micro Turbine Generator	2010	805 hp	None
EUGEN-3	EPGEN-3	Capstone C600 Micro Turbine Generator	2015	805 hp	None
EUDHY-1	EPSTL-1	TEG Glycol Dehydration Unit Still Vent	2010	53.8 MMscfd	APCCOND-1
		Flash Tank		N/A	Reboiler/Recompression/APC Flare
	EPRBL-1	Glycol Reboiler		1.0 mmBtu/hr	None
EUDHY-2	EPSTL-2	Glycol Dehydration Unit Still Vent	2010	53.8 MMscfd	APCCOND-2
		Flash Tank		N/A	Reboiler/Recompression/APC Flare
	EPRBL-2	Glycol Reboiler		1.0 mmBtu/hr	None
EUDHY-3	EPSTL-3	Glycol Dehydration Unit Still Vent	2012	53.8 MMscfd	APCCOND-3
		Flash Tank		N/A	Reboiler/Recompression/APC Flare
	EPRBL-3	Glycol Reboiler		1.0 mmBtu/hr	None
EUTK-1	EPTK-1	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-2	EPTK-2	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-3	EPTK-3	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-4	EPTK-4	Stabilized Condensate Storage Tank	2010	400 bbl	VRU

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EUTK-5	EPTK-5	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-6	EPTK-6	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-7	EPTK-7	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-8	EPTK-8	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-9	EPTK-9	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-10	EPTK-10	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-11	EPTK-11	Pipeline Fluids/Water Storage Tank	2010	400 bbl	VRU
EUTK-12	EPTK-12	Pipeline Fluids/Water Storage Tank	2010	400 bbl	VRU
EULOR	EPLOR	Tanker Loadout Rack	2010	NA	ACC
EUOH-1	EPOH-1	Hot Oil Heater	2010	3.35 MMBTU/hr	None
APCFLARE	APCFLARE	Pressure Assisted Flare	2010	65 scfh (pilot) 6154,116 scfh	None

NSCR – Non-selective catalytic reduction
Oxid Cat. - Oxidation catalyst
VRU – Vapor Recovery Unit
ACC - Activated Carbon Canister

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NOx**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor	**PM**	Particulate Matter
CES	Certified Emission Statement	**$PM_{2.5}$**	Particulate Matter less than 2.5 μm in diameter
C.F.R. *or* CFR	Code of Federal Regulations		
CO	Carbon Monoxide	**PM_{10}**	Particulate Matter less than 10μm in diameter
C.S.R. *or* CSR	Codes of State Rules		
DAQ	Division of Air Quality	**Ppb**	Pounds per Batch
DEP	Department of Environmental Protection	**Pph**	Pounds per Hour
		Ppm	Parts per Million
dscm	Dry Standard Cubic Meter	**Ppmv or ppmv**	Parts per Million by Volume
FOIA	Freedom of Information Act		
HAP	Hazardous Air Pollutant	**PSD**	Prevention of Significant Deterioration
HON	Hazardous Organic NESHAP		
HP	Horsepower	**Psi**	Pounds per Square Inch
lbs/hr	Pounds per Hour	**SIC**	Standard Industrial Classification
LDAR	Leak Detection and Repair		
M	Thousand	**SIP**	State Implementation Plan
MACT	Maximum Achievable Control Technology	**SO_2**	Sulfur Dioxide
		TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	**TPY**	Tons per Year
MM	Million	**TRS**	Total Reduced Sulfur
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**TSP**	Total Suspended Particulate
		USEPA	United States Environmental Protection Agency
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour		
		UTM	Universal Transverse Mercator
NA	Not Applicable	**VEE**	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	**VOC**	Volatile Organic Compounds
		VOL	Volatile Organic Liquids
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

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

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

2.4. Term and Renewal

2.4.1. This permit supersedes and replaces previously issued Permit R13-2831D. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2831, R13-2831A, R13-2831B, R13-2831C, R13-2831D, R13-2831E, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

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

2.7. Duty to Supplement and Correct Information

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

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

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

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by

improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

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

2.14. Suspension of Activities

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

2.15. Property Rights

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

2.16. Severability

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

2.17. Transferability

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

2.18. Notification Requirements

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

2.19. Credible Evidence

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

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.1.7. Minor Source of Hazardous Air Pollutants (HAP). HAP emissions from the facility shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of HAPs. Compliance with this Section shall ensure that the facility is a minor HAP source.

3.2. Monitoring Requirements

3.2.1. For the purpose of demonstrating compliance with emission sources subject to 45 CSR §10-5.1, the permittee shall conduct gas sampling at a point that is representative of the incoming natural gas to the facility and analyzing the sample to determine the hydrogen sulfide content of the sample. At the minimum, such sampling and analysis shall be conducted once per year. Once per

year shall mean between 11 months to 13 months from the previous gas sampling. Records of such monitoring shall be maintained in accordance with Condition 3.4.1. of this permit. **[45 CSR §10-8.3.a.]**

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

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

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.4.3. The permittee shall maintained documentation of the VOCs and HAPs in the fuel gas consumed in the permitted emission units at the facility. Such documentation may either be gas analysis of the fuel gas or predicted analysis that used acceptable process simulator with the actual facility operating parameters and most recent gas analysis of the incoming wet gas to the facility. Such records shall be maintained in accordance with Condition 3.4.1.

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

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

3.5.4. Operating Fee

3.5.4.1. In accordance with 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the certificate has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

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

4.0. Specific Requirements for the Compressor Engines and Associated Compressors

4.1. Limitations and Standards

4.1.1. The following conditions and requirements are specific to the engines identified as EUCE-2, EUCE-3, EUCE-4, EUCE-5, and EUCE-6:

a. Emissions from each engine shall not exceed the following:

i. The mass rate of NO_x emissions from each engine shall not exceed 1.48 pounds per hour and 6.48 tpy. Verification of the mass rate limit is satisfied if the measured concentration of NO_x does not exceed 37.76 ppmvd corrected to 15% oxygen during performance testing.

ii. The mass rate of CO emissions from each engine shall not exceed 1.81 pounds per hour and 7.92 tpy. Verification of the mass rate limit is satisfied if the measured concentration of CO does not exceed 75.43 ppmvd corrected to 15% oxygen during performance testing.

iii. The mass rate of VOC emissions shall not exceed 0.22 pounds per hour and 0.95 tpy. Formaldehyde is excluded from this VOC limit. Verification of the mass rate limit is satisfied if the measured concentration of VOCs does not exceed 5.86 ppmvd corrected to 15% oxygen during performance testing.
[40 CFR §60.4333(e) & Table 1 to Subpart JJJJ of Part 60—NO_x, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP]

iv. Formaldehyde emissions from each engine shall not exceed 0.08 pounds per hour and 0.33 tpy.

b. Each engine shall be equipped with non-selective catalytic reduction (NSCR) air pollution control device.

c. Each engine shall be equipped with air to fuel controller. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
[40 CFR §60.4243(g)]

d. Each engine shall be equipped with a non-resettable hour meter.

e. Compliance with the mass emission limits in item a of this condition is satisfied by Compiling with Condition 4.1.4.

4.1.2. The following conditions and requirements are specific to the internal combustion engines identified as EUCE-7, EUCE-8, EUCE-9, EUCE-12, EUCE-13, and EUCE-14 and compressors driven by such engines:

a. Emissions from the engine shall not exceed the following:

i. The mass rate of NO_x emissions shall not exceed 1.52 pounds per hour and 6.66 tpy. Verification of the mass rate limit is satisfied if the measured concentration of NO_x does not exceed 40.11 ppmvd corrected to 15% oxygen during performance testing.

ii. The mass rate of CO emissions shall not exceed 1.52 pounds per hour and 6.66 tpy. Verification of the mass rate limit is satisfied if the measured concentration of CO does not exceed 65.77 ppmvd corrected to 15% oxygen during performance testing.

iii. The mass rate of VOC emissions shall not exceed 1.10 pounds per hour and 4.84 tpy. Formaldehyde is excluded from this VOC limit. Verification of the mass rate limit is satisfied if the measured concentration of VOCs does not exceed 30.29 ppmvd corrected to 15% oxygen during performance testing.
[40 CFR §60.4333(e) & Table 1 to Subpart JJJJ of Part 60—NO_x, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP]

iv. Formaldehyde emissions from each engine shall not exceed 0.31 pounds per hour and 1.38 tpy.

b. Each engine shall be equipped with oxidation catalytic air pollution control device.

c. Each engine shall be equipped with a non-resettable hour meter.

d. Compliance with the mass emission limits in item a. of this condition is satisfied by Compiling with item b.

e. The rod packing for each compressor shall be replace once every 26,000 hours of operation **[40 CFR §60.5385(a)(1)]**

4.1.3. The permittee shall only operate these engines using fuel gas generator by the condensate stabilizer.

4.1.4. Requirements for Use of Catalytic Reduction Devices

a. Rich-bum natural gas compressor engines (EPCE-2 – EPCE-6) equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the potential to emit for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 0.5%.
[40CFR§60.4243(g)]

b. For natural gas compressor engines (EPCE-2 – EPCE-12), the permittee shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications, a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs. If the engine shuts off due to high temperature, the permittee shall also check for thermal deactivation of the catalyst before normal operations are resumed.

c. At least once per calendar quarter, the permittee shall conduct portable analyzer strip checks of Nitrogen Oxides (NO_x and Carbon Monoxide (CO) emissions from the engines when operating under representative conditions for that period to ensure proper operation of the catalytic reduction devices. The portable analyzer strip checks shall be conducted using the following procedure:

1. Samples of pollutant concentrations should be taken from sample ports in the stack or using a "Shepherd's hook" from a location in the stack such that a representative concentration is measured and bias (e.g., air leakage at weep holes) is prevented. The use of stainless steel tubing ran from sampling site to ground level may be used. A single sampling location near the center of the duct may be selected.

2. The emissions check should produce at least one test strip of concentration data for each of O_2, NO, NO_2 and CO. The analyzer should be run for minimum of *5* minutes to allow readings to stabilize. Then run analyzer for *5* minutes and verify stability in concentrations. Print a representative test strip on the analyzer.

3. With this test strip include (when available) unit number or lease name, rpm, manifold pressure, compressor suction and discharge pressures and any other information that may help determine horsepower during test.

d. Upon request by the Director or his/her duly authorized representative, testing shall be conducted using a portable analyzer in accordance with the MidCon Compression portable analyzer protocol submitted with Permit Application R13-2831B or other approved methods. Such controls shall ensure proper and efficient operation of the engine and air pollution control devices.

e. During any calendar quarter when a performance test is required under Section 4.3 of this permit, those test results will satisfy the requirements of item c of this condition in lieu of a portable analyzer strip check.

4.1.5. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

4.2.1. The permittee shall maintain a maintenance plan of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 CFR §60.4243(b)(2)(ii)]

4.2.2. The permittee shall monitor and record the hours of operation through the non-resettable hour meter for each engine on a monthly basis and record the number of hours the engine operated using propane. Records of such monitoring shall be maintained in accordance with Condition 3.4.1.
[40CFR§60.4245(b)]

4.3. Testing Requirements

4.3.1. The permittee must conduct an initial performance testing for engines EUCE-9, EUCE-10, EUCE-11, and EUCE-12 within one year of initial startup of each corresponding engine. Such testing shall be conducted in accordance with Condition 4.3.2.

[40 CFR §60.4243(a)(2)(iii)]

4.3.2. The permittee must conduct performance testing on each engine every 8,760 hours of operation or once every three years, whichever comes first. Such testing shall be conducted in accordance with the following the procedures and Condition 3.3.1.

a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to Subpart JJJJ.
[40CFR§60.4244(a)]

b. Permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If the stationary SI internal combustion engine is non-operational, permittee do not need to startup the engine solely to conduct a performance test; however, permittee must conduct the performance test immediately upon startup of the engine.
[40CFR§60.4244(b)]

c. Permittee must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
[40CFR§60.4244(c)]

d. If the permittee chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \qquad \text{(Eq. 4)}$$

Where:
RF_i= Response factor of compound i when measured with EPA Method 25A.

C_{Mi}= Measured concentration of compound i in ppmv as carbon.

C_{Ai}= True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \qquad \text{(Eq. 5)}$$

Where:
C_{icorr}= Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{imeas}= Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \qquad \text{(Eq. 6)}$$

Where:
C_{Peq}= Concentration of compound i in mg of propane equivalent per DSCM.
[40CFR§60.4244(g)]

Records of such testing shall be maintained in accordance with Condition 3.4.1. **[40CFR§60.4243(b)]**

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** 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.

4.4.2. **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.

4.4.3. **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.

4.4.4. For each compressor connected to Engines EUCE-7, EUCE-8, EUCE-12, EUCE-13, EUCE-14, and EUCE-15, the permittee shall maintain records of the following in accordance with Condition 3.4.1.

a. Record the cumulative number of hours of operation since initial startup or the previous replacement of the reciprocating compressor rod packing, whichever is later.

b. Record of the date of the recent replacement of the rod packing.
[40 CFR §60.5385(c)(3)]

4.4.5. The permittee shall maintain records of the monitoring as requirement in Condition 4.1.4. for each engine in accordance with Condition 3.4.1.

4.5. Reporting Requirements

4.5.1. The permittee shall submit annual compliance reports of compliance that indicates compliance with Condition 4.1.2.e. and 40 CFR §60.5385(a)(1) from the compressors connected to Engines EUCE-7, EUCE-8, EUCE-12, EUCE-13, EUCE-14, and EUCE-15 to the Director and Administrator in accordance with Conditions 3.5.1. and 3.5.3. The reporting period of such reports shall begin on October 15 and ends on October 14. Submission of report must be made within 90 days from the end of the reporting period. The permittee may submit one report for multiple affected facilities under Subpart OOOO to Part 60. Such reports shall include the he following information:

i. The company name and address of the affected facility

ii. An identification of each affected facility being included in the annual report.

iii. Beginning and ending dates of the reporting period.

iv. A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

v. The records as required in Condition 4.4.4. for each affected compressor.
[40 CFR §60.5420(b) and (b)(4)(ii)]

5.0. Source-Specific Requirements Micro Turbine Generator

5.1. Limitations and Standards

5.1.1. To demonstrate compliance with Section 5.1.2, the quantity of natural gas that shall be consumed in 805 hp natural gas fired micro turbine generator, Capstone C600 (EUGEN-1, EUGEN-2, and EUGEN-3) shall not exceed 6,980 cubic feet per hour and 61.15 x 10^6 cubic feet per year for each turbine.

5.1.2. Maximum emissions from each micro turbine generator (EUGEN-1, EUGEN-2, and EUGEN-3) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.25	1.09
Carbon Monoxide	0.56	2.46
Volatile Organic Compounds	0.01	0.06
Formaldehyde	0.01	0.02

5.2. Recordkeeping Requirements

5.2.1. To demonstrate compliance with Conditions 5.1.1-5.1.2, the permittee shall maintain records of the amount of natural gas consumed in the micro turbine generator and the hours of operation. Said records shall be maintained in accordance with Condition 3.4.1.

6.0. Specific Requirements for the Dehydration Units

6.1. Limitations and Standards

6.1.1. Maximum Throughput Limitation to demonstrate compliance with Condition 6.1.4, the maximum wet natural gas throughput to the glycol dehydration unit/still columns shall not exceed the following.

Emission Point ID	Maximum Wet Natural Gas Throughput
EPSTL-1	53.8 mmscf/day
EPSTL-2	53.8 mmscf/day
EPSTL-3	53.8 mmscf/day

6.1.2. Visible emissions from Emission Point EPRBL-1, EPRBL-2, and EPRBL-3 shall be limited to ten (10) percent opacity or less based on a six (6) minute average. Compliance with this limit is satisfied by complying with Condition 6.1.3.
[45 CSR §2-3.1]

6.1.3. Each reboiler for these dehydration units shall only be fuel with the non-condensable gas from the BTEX condenser, flash tank off gas, or fuel gas skid.

6.1.4. The emissions released from each of these emission points EPRBL-1, EPRBL-2, and EPRBL-3 (combustion stack of the reboiler) shall not exceed the following limits:

Table 10.1.4. Emission Limits for EPRBL-1, EPRBL-2, and EPRBL-3

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual* Emissions (ton/year)
Nitrogen Oxides	0.09	0.38
Carbon Monoxide	0.07	0.32
Volatile Organic Compounds	0.50	2.15
Benzene	0.03	0.11
Total HAPs	0.14	0.61

6.1.5. The still vent of each dehydration unit shall be routed to a dedicated BTEX Condenser and BTEX Accumulator (2-phase separator) though a closed vent system. The non-condensable gas from the each BTEX Accumulator shall be vented back to the respective reboiler though a closed vent system.

6.1.6. Each glycol dehydration unit/still column (EPSTL-1, EPSTL-2, & EPSTL-3) shall be equipped with a fully functional BTEX Buster (APCCOND-1, APCCOND-2, and APCOND-3) at all times. The control device(s) (APCCOND-1, APCCOND-2, and APCCOND-3) shall be operated according to manufacturer's specifications, and shall be properly maintained in a manner which prevents the unit from freezing.

6.1.7. Each dehydration unit (EPRBL-1, EPRBL-2 and EPRBL-3) shall be designed and operated in accordance with the following:

a. The non-condensable gas from the BTEX Accumulator shall be routed to the reboiler and combusted though a closed vent system.

b. The flash tank off-gases from each flash tank shall be routed to flash gas header to the reboiler burner or to the inlet separator of the station for re-processing. The routing of the flash tank off-gases shall be done through a closed vent system.

c. The pilot light for each reboiler burner shall be lit at all times when the dehydration unit is in operation.

d. The maximum flow rate of glycol through each dehydration unit shall not exceed 15 gpm. The unit be operated either with an electric or gas pneumatic driven pumps that does not exceed the above flow rate.

e. The maximum temperature of the outlet stream from the BTEX Condenser shall not exceed 120°F.

6.1.8. The closed vent system as required in Condition 6.1.5. shall meet the following:

a. The system shall be constructed of hard piping

b. The system shall be constructed and maintained free of leaks. A leaking component is defined as a measured instrument reading greater than 500 ppm above background using Method 21 or by visual inspection.

c. Detected leaks shall be repaired as soon as practicable with the first attempt at repair within 5 calendar days after detecting the leak. Repair shall be completed no later than 15 calendar days after the leak is detected.
[45 CSR §13-5.11.]

6.1.9. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

6.2. Monitoring Requirements

6.2.1. The permittee shall monitor and record the following parameters for the purpose of demonstrating compliance with Conditions 6.1.1., and 6.1.4.:

a. The throughput of natural gas processed through each dehydration unit on a daily basis, days the dehydration unit operated, and annual natural gas flowrate.
[40 CFR §63.774(d)(1)]

b. Determine actual annual average natural gas throughput (in terms of natural gas flowrate to the glycol dehydration unit per day) by converting the 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.
[40 CFR §63.772(b)(1)(i)]

c. Determination of the actual average benzene emissions from the dehydration unit shall be made using the model GRIGLYCalc™, 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).
[40 CFR §63.772(b)(2)(i) & 63.774(d)(1)(ii)]

d. Records of such monitoring shall be maintained in accordance with Condition 3.4.1.

6.2.2. The permittee shall monitor the throughput of liquid gathered in the storage tanks from each of the condensers (APCCOND-1, APCCOND-2, APCCOND-3) on a monthly basis. Records of such monitoring shall be maintained in accordance with Condition 3.4.1.

6.2.3. The permittee shall monitor the temperature of the outlet stream of each BTEX Condenser (APCCOND-1, APCCOND-2, and APCCOND-3) on a daily basis for the purpose of demonstrating compliance with Condition 6.1.8.e. The permittee is may use a portable temperature measuring device. Only one measurement is required to be measured per day if the measured temperature is at or less than 120^{0}F. For readings above 120^{0}F, the permittee shall take additional measurements in equal time intervals to develop a 3-hour average. Records of such monitoring shall be maintained in accordance with Condition 3.4.1. and include the time and date of measurements.

6.2.4. The permittee shall conduct an annual inspection for each component of the closed vent system that is for the control of fugitive escape of regulated air pollutants. Each component shall operate with no detectable emissions, as determined using audio-visual-olfactory (AVO) inspections, USEPA 40CFR60 Method 21, USEPA alternative work practice to detect leaks from equipment using optical gas imaging (OGI) camera (ex. FLIR camera), or some combination thereof. AVO inspections shall include, but not limited to, defects as visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices. If permittee uses USEPA Method 21, then no detectable emissions is defined as less than 500 ppm in accordance with Method 21. If permittee uses an OGI camera, then no detectable emissions is defined as no visible leaks detected in accordance with USEPA alternative OGI work practices.

If any leak is detected, the permittee shall repair the leak as soon as possible. The first attempt at repair must be made within five (5) calendar days of discovering the leak, and the final repair must be made within fifteen (15) calendar days of discovering the leak. The permittee shall record each leak detected and the associated repair. The leak will not be considered repaired until the same monitoring method or a more detailed instrument determines the leak is repaired.

Delay of repair of a closed vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, or if the permittee determine that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. The permittee must complete repair of such equipment by the end of the next shutdown. Records of such inspections shall be maintained in accordance with Condition 3.4.1
[45CSR§13-5.11.]

6.3. Recordkeeping Requirements

6.3.1. **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.

6.3.2. **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.

6.3.3. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.6.3.4.

6.3.4. For the purpose of demonstrating compliance with section 3.1.7. and 6.1.6, the permittee shall maintain a record of all potential to emit (PTE) HAP calculations for the entire affected facility. These records shall include the natural gas compressor engines and ancillary equipment.

7.0. Specific Requirements for the APCFLARE

7.1. Limitation and Standards

7.1.1. The permittee shall install a flare (APCFLARE) to control VOC emissions from upset conditions or maintenance activities as needed. To demonstrate compliance with Condition 7.1.2, the quantity of flare gas that shall be consumed in the flare shall not exceed 667,776 standard cubic feet per day with an annual rate not to exceed 243.7 MMscf/yr. Compliance with the flare gas throughput limit shall be demonstrated using a rolling 12-month total.

7.1.2. Maximum emissions from the flare (APCFLARE) shall not exceed the following limits:

Table 7.1.2. Emission Limits for APCFLARE

Pollutant	Maximum Hourly Rate (lb/hr)	Maximum Annual Rate (tpy)
VOC	18.48	2.43
NO_x	2.89	0.45
CO	15.62	2.11

7.1.3. The permittee shall operate and maintain the flare (APCFLARE) in a manner to minimize emissions. Such operation of the flare shall constitute the following:

a. The flare shall not exhibit any visible emissions, expect for periods not to exceed a total of 5 minutes during two consecutive hours.
[45 CSR §6-4.3.]

b. The pilot flame for the flare shall be lit at all times when any emission source at the permitted facility is operating that can generate effluent to be routed to the flare. The fuel source for the pilot light shall be either natural gas, flash tank off gas, or a combination of the two fuels.

c. The flare shall be constructed, operated, and maintained to achieve, at the minimum, 98% destruction efficiency for VOCs and volatile HAPs.

7.1.4. The effluent being routed to the flare shall not contain hydrogen sulfide in a concentration of greater than 50 grains per 100 cubic feet of carrier gas.
[45 CSR §10-5.1.]

7.1.5. The effluent and purge gas streams shall be routed to the flare through a closed vent system. The closed vent system as required in this condition shall meet the following:

a. The system shall be constructed of hard piping.

b. The system shall be constructed and maintained free of leaks. A leaking component is defined as a measured instrument reading greater than 500 ppm above background or by visual inspection.

c. Detected leaks shall be repaired as soon as practicable with the first attempt at repair within 5 calendar days after detecting the leak. Repair shall be completed no later than 15 calendar days after the leak is detected.
[45 CSR §13-5.11.]

7.1.6. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

7.2. Monitoring Requirements

7.2.1. The permittee shall determine the throughput of effluent to the flare on a monthly basis. Such records shall be maintained in accordance with Condition 3.4.1.

7.2.2. The presence of a flame the APCFLARE and identify any periods there was no flame present. Such records shall be maintained in accordance with Condition 3.4.1.

7.2.3. For the purpose of demonstrating proper operation of the APCFLARE, the permittee shall conduct a visible emission observation using Section 11 of Method 22 for one hour once every calendar quarter in which flare was in service. If during the first 30 minutes of the observation there were no visible emission observed, the permittee may stop the observation.

If at the end of the observation and visible emission were observed for more than 2 minutes, then the permittee shall follow manufacture's repair instruction, if available or best combustion engineering practice as outline in the unit inspection and maintenance plan. To return the flare to compliant operation, the permittee shall repeat the visible emission observation. Records of such monitoring and repair activities shall be maintained in accordance with Condition 3.4.1.

7.2.4. The permittee shall annually monitor and maintain records (calendar year) for each component of the closed vent system that was inspected for fugitive escape of regulated air pollutants. Each component shall operate with no detectable emissions, as determined using audio-visual-olfactory (AVO) inspections, USEPA 40CFR60 Method 21, USEPA alternative work practice to detect leaks from equipment using optical gas imaging (OGI) camera (ex. FLIR camera), or some combination thereof. AVO inspections shall include, but not limited to, defects as visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices. If permittee uses USEPA Method 21, then no detectable emissions is defined as less than 500 ppm. If permittee uses an OGI camera, then no detectable emissions is defined as no visible leaks detected in accordance with USEPA alternative OGI work practices.

If any leak is detected, the permittee shall repair the leak as soon as possible. The first attempt at repair must be made within five (5) calendar days of discovering the leak, and the final repair must be made within fifteen (15) calendar days of discovering the leak. The permittee shall record each leak detected and the associated repair. The leak will not be considered repaired until the same monitoring method or a more detailed instrument determines the leak is repaired.

Delay of repair of a closed vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, or if you determine that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. The permittee must complete repair of such equipment by the end of the next shutdown. Records of such inspections shall be maintained in accordance with Condition 3.4.1
[45CSR§13-5.11.]

7.3. Testing Requirements

[Reserved]

7.4. Recordkeeping Requirements

7.4.1. **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.

7.4.2. **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.

8.0 Specific Requirements for the Hot Oil Heater

8.1 Limitations and Standards

8.1.1. Maximum emissions from the 3.35 MMBtu/hr Hot Oil Heater (EPOH-1) shall not exceed the following limits:

Table 8.1.1. Emission Limits for the Hot Oil Heater

Pollutant	Maximum Hourly (lb/hr)	Maximum Annual (tpy)
NO_x	0.29	1.29
CO	0.25	1.08
VOC	0.02	0.07

8.1.2. To demonstrate compliance with Section 8.1.1, the quantity of natural gas that shall be consumed in the 3.35 MMBtu/hr Hot Oil Heater (EUOH-1) shall not exceed 3,350 cubic feet per hour and 29.35 x 10^6 cubic feet per year. The natural gas used as fuel for this emission unit shall not a total sulfur content of 1 grain per 100 cubic feet of gas.

8.1.3. Visible emissions from Emission Point EPOH-1shall be limited to ten (10) percent opacity or less based on a six (6) minute average. Compliance with this limit is satisfied by complying with Condition 8.1.2.
[45 CSR §2-3.1]

8.2. Monitoring Requirements

8.2.1. To demonstrate compliance with Conditions 8.1.1-8.1.3, the permittee shall maintain records of the amount of natural gas consumed in the Hot Oil Heater (EUOH-1) for each month of operation and maintain a 12-month rolling total. Such records shall be maintained in accordance with Condition 3.4.1.

9.0. Specific Requirements for Storage Tanks and Unloading Operations

9.1. Limitations and Standards

9.1.1. Vapors from the storage tanks (EPTK-1 – EPTK-12) shall captured by a vapor recovery unit (VRU) system while the any of the respective vessels are service, which include vessels that are empty but not degassed, and recompress the vapors back into a pipeline segment. The operational availability of the vapor recovery unit (VRU) system shall be 98% on a calendar year basis. No component of the close vent system of the VRU system shall exhibit any detectable emissions. Detectable emissions are defined as a concentration of 500 ppm or greater when using U.S.EPA Method 21. If the permittee is use an optical gas imaging camera, detectable emissions is defined as any visible leaks detected in accordance with U.S.
EPA Alternative OGI work practices.

If any leak or detectable emissions is detected, the permittee shall repair the leak as soon as possible. The first attempt at repair must be made within five (5) calendar days of discovering the leak, and the final repair must be made within fifteen (15) calendar days of discovering the leak. The permittee shall record each leak detected and the associated repair. The leak will not be considered repaired until the same monitoring method or a more detailed instrument determines the leak is repaired.

Delay of repair of a closed vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, or if you determine that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. The permittee must complete repair of such equipment by the end of the next shutdown.

9.1.2. The vapor recovery system must be installed and operating prior to start-up of the storage tanks (EPTK-1 – EPTK-12).

9.1.3. During unloading operations of EPTK-1 through EPTK-12 into trucker trucks, the permittee shall operate the natural gas liquids truck loading (EP-LOAD) operations shall be in accordance with the following requirements:

a. The maximum amount of liquids unloaded from all vessels shall not exceed 13.8 million gallons on a 12-month rolling total.

b. All trucks shall be loaded using the submerged-fill method;

c. The permittee shall, at all times trucks are being loaded with VOC-containing liquids, utilize a system of activated carbon canisters (carbon adsorption) to control captured VOC emissions from the tanker truck;

d. The capture system directing VOC emissions to the activated carbon canisters shall be installed, designed, and maintained so as to achieve a minimum capture efficiency of 70.00%; and

e. The activated carbon canisters shall be installed, designed, and maintained so as to achieve a minimum VOC collection efficiency of 95.00%.

9.1.4. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

9.2. Monitoring Requirements

9.2.1. For the purposes of demonstrating compliance with the maximum throughput limitations set forth in Condition 11.1.3., the permittee shall monitor and record monthly and rolling twelve month total of liquid throughput during truck loading operations.

9.2.3. For the purposes of demonstrating compliance with under 9.1.3.e, the permittee shall monitor the saturation levels of the activated carbon canisters and, according to manufacturer's recommendations, replace the activated carbon when it reaches a saturation level that is unable to sustain the minimum control percentage requirement.

9.2.3. For the purposes of demonstrating the close vent system of the VRU system, the permittee shall conduct monitoring of the vent system to include the tanks (EPTK-1 – EPTK-12). Such monitoring shall be conducted once every calendar year thereafter to ensure the system shall be free of leaks. Any detected leak shall be repaired in accordance with timing as stipulated in Condition 9.1.1. Records of the monitoring shall be maintained in accordance with Condition 3.4.1. and include monitoring/detection method used, instrument (if used), operator, calibration of the instrument (if required for the instrument), identified leaking component, date detected, and date of repair.
[45 CSR §13-5.11.]

9.3. Recordkeeping Requirements

9.3.1. **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.

9.3.2. **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.

9.3.3. The permittee shall record the cumulative number of hours of operation of the VRU compressor and hours any of the permittee storage vessels of this section was in service for each calendar year. Such records shall be maintained in accordance with Condition 3.4.1.

9.3.4. The permittee shall maintain records of all times the activated carbon was replaced in the carbon canisters pursuant to Condition 9.2.3. Such records shall be maintained in accordance with Condition 3.4.1.

CERTIFICATION OF DATA ACCURACY

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

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

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

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.