West Virginia Department of Environmental Protection

Austin Caperton Cabinet Secretary

Title V Operating Permit Revision



For Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Action Number:	SM01 SIC: 4922	
Name of Permittee:	Columbia Gas Transmission, LLC	
Facility Name/Location:	Adaline Compressor Station	
County:	Marshall	
Facility Address:	1700 MacCorkle Avenue, SE, Charleston, WV 25314	
Description of Permit Revision	This significant modification (SM01) covers changes included in the pre-construction permit modification R13-2149D: a replacement of the existing glycol dehydration units' (GDU) 2.5 mmBtu/hr flare (FLLP1) with a larger 6.0 mmBtu/hr enclosed flare (FLLP2).	
Title V Permit Information:		
Permit Number:	R30-05100100-2017	
Issued Date:	March 14, 2017	
Effective Date:	March 28, 2017	
Expiration Date:	March 14, 2022	
Directions To Facility:	Located in Liberty District, Marshall County and south of Cameron, which is 25 miles south of Wheeling on US Rt. 250. From intersection in Cameron, travel west a short distance to a "Y" intersection. Go left, cross bridge, then up a hill on a brick road. Proceed south along this road (Cameron Ridge Road) for approximately 7 miles to station that is on left side of road and partially visible.	

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

William F. Durham Director, Division of Air Quality

July 10, 2018 Date Issued

Permit Number: **R30-05100100-2017** Permittee: **Columbia Gas Transmission, LLC** Facility Name: **Adaline Compressor Station** Permittee Mailing Address: **1700 MacCorkle Avenue SE, Charleston, WV 25314**

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:	Cameron, Marshall County, West Virginia		
Facility Mailing Address:	18123 Fish Creek Rd., Cameron, WV 26033		
Telephone Number:	304-357-2047		
Type of Business Entity:	LLC		
Facility Description:	Natural Gas Transmission Facility		
SIC Codes:	4922		
UTM Coordinates:	530.456 km Easting • 4,401.860 km Northing • Zone 17		

Permit Writer: Denton B. McDerment

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
BLR4	BL4	Heating System Boiler; American Standard Model #1-B-J-3	1961	3.48 MMBtu/hr	None
HTR2	H2	Natural Gas Heater; BS&B Model #70S-2	1956	1.0 MMBtu/hr	None
BLR5	BL5	DEG Dehydrator Reboiler	2010	0.55 MMBtu/hr	None
BLR6	BL6	DEG Dehydrator Reboiler	2010	0.55 MMBtu/hr	None
BLR7	BL7	DEG Dehydrator Reboiler	2010	0.55 MMBtu/hr	None
08101	E01	Reciprocating Engine/Integral Compressor; Clark HRA-8; 2-cycle, lean burn	1954	880 hp	None
08102	E02	Reciprocating Engine/Integral Compressor; Clark HRA-8; 2-cycle, lean burn	1954	880 hp	None
08103	E03	Reciprocating Engine/Integral Compressor; Clark HRA-8; 2-cycle, lean burn	1956	880 hp	None
08104	E04	Reciprocating Engine/Integral Compressor; Clark TLA-6, 2-cycle, Lean Burn	1961	2,000 hp	None
08105	E05	Reciprocating Engine/Integral Compressor; Clark TLA-6, 2-cycle, Lean Burn	1961	2,000 hp	None
081G3	G3	Reciprocating Engine/Generator; Waukesha VGF18GL; 4-cycle, lean burn; Emergency	1998	440 hp	None
08107	E07	Turbine Engine/Centrifugal Compressor; Solar Saturn T-1001	1966	1,080 hp	None
A07	A07	Mercaptan Odorant, Double Wall, Horiz., Above Ground Tank	1966	2,000 gal	Vapor Balance Loading
A11	E11	Pipeline Liquids Tank	1956	5014 gal	None
A12	E12	Pipeline Liquids Tank	1956	5014 gal	None
A08	E08	Pipeline Liquids Tank	1954	2000 gal	None
A09	E09	Pipeline Liquids Tank	1954	2000 gal	None
A10	E10	Pipeline Liquids Tank	1954	2000 gal	None
DEG- DEHY1	FL1	DEG Dehydrator; BS&B Contact Tower, 6- bubble cap trays	1985	117 MM scf/d	FLLP2 FLLP1
					NATCO Model SHV-4.0
					2.5 MMBtu/hr

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
DEG- DEHY2	FL1	DEG Dehydrator; BS&B Contact Tower, 6- bubble cap trays	1984	117 MM scf/d	FLLP2 FLLP1 NATCO Model SHV 4.0 2.5 MMBtu/hr
DEG- DEHY3	FL1	DEG Dehydrator; BS&B Contact Tower, 6- bubble cap trays	1984	117 MM scf/d	FLLP2 FLLP1 NATCO Model SHV 4.0 2.5 MMBtu/hr
		Control Devices	-		<u> </u>
FLLP2	<u>FL2</u>	Dehydrator Flare; ETI	<u>2018</u>	<u>6 MMBtu/hr</u>	<u>N/A</u>

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	
R13-2149 <u>D</u> C	<u>May 21, 2018</u> January 13, 2010	

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
CBI	Confidential Business Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM_{10}	Particulate Matter less than
C.F.R. or CFR	Code of Federal Regulations		10µm in diameter
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant
DEP	Department of Environmental		Deterioration
	Protection	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	SIC	Standard Industrial
HAP	Hazardous Air Pollutant		Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO ₂	Sulfur Dioxide
lbs/hr <i>or</i> lb/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
m	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control	TSP	Total Suspended Particulate
	Technology	USEPA	United States
mm	Million		Environmental Protection
mmBtu/hr	Million British Thermal Units per		Agency
	Hour	UTM	Universal Transverse
mmft ³ /hr <i>or</i>	Million Cubic Feet Burned per		Mercator
mmcf/hr	Hour	VEE	Visual Emissions
NA or N/A	Not Applicable		Evaluation
NAAQS	National Ambient Air Quality	VOC	Volatile Organic
	Standards		Compounds
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 provide 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 "Federallyenforceable" 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.**

- 3.1.4.1. 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.]
- 3.1.4.2. Accidental and other infrequent discharges which cause or contribute to objectionable odors will be considered on an individual basis and shall be reported by the person responsible therefore to the Director in the manner to be prescribed by the Director.
 [45CSR§4-4.1 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. Facilities using Mercaptan Tanks shall use proper odor control methods to comply with 45CSR4. [45CSR§30-12.7 State-Enforceable only]
- 3.1.10. Emergency Operating Condition/Unit Replacement:

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) business days;
- e. The permittee must provide written notification to the Director within five (5) business 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]

3.1.11. 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. Reserved.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
 - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
 - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
 - 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, R13-2149, 4.1.1.] (081G3, DEG-DEHY1, DEG-DEHY2, DEG-DEHY3, FLLP²¹, BLR5, BLR6, BLR7)

- 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 certification to the USEPA as required in 3.5.5 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:

US EPA:

Director	Associate Director
WVDEP	Office of Air Enforcement and Compliance
Division of Air Quality	Assistance (3AP20)
601 57 th Street SE	U. S. Environmental Protection Agency
Charleston, WV 25304	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 submitted of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

US EPA:

DEPAirQualityReports@wv.gov

00 11 11.

[45CSR§30-5.3.e.]

R3_APD_Permits@epa.gov

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.]

3.5.10. During compliance certification, the facility shall certify that the facility burns natural gas in all stationary equipment regulated under this permit except, when applicable, for emergency equipment (i.e. diesel generators).
 [45CSR§30-5.1.c.3.C.]

3.6. Compliance Plan

3.6.1. Reserved.

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.
 - a. **45CSR10** *To Prevent and Control Air Pollution from the Emission of Sulfur Oxides* This rule is not applicable to the facility's boiler (BLR4) and heater (HTR2) because their maximum design heat input (DHI) is less than 10 MMBtu/hr.
 - b. 45CSR21- To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds

 All storage tanks at the station, which are listed as insignificant sources, are below 40,000 gallons in capacity which exempts the facility from 45CSR§21-28. The compressor station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45CSR§21-29.
 - c. 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.
 - d. **40** C.F.R. 60 Subpart Dc *Standards of Performance for Steam Generating Units* The heating system boiler (BLR4) and line heater (HTR2) at this facility are both less than 10 mmBtu/hr; Hence Subpart Dc is not applicable in accordance with §60.40c(a).
 - e. **40** C.F.R. 60 Subpart K, Ka *Standards of Performance for Storage Vessels for Petroleum Liquids* – All tanks at the facility are below 40,000 gallons in capacity as specified in §60.110a(a).
 - f. **40 C.F.R. 60 Subpart Kb** *Standards of Performance for Volatile Organic Liquid Storage Vessels* All tanks at the facility are below 75m³ (19,813 gallons) in capacity as specified in §60.110b(a).
 - g. **40** C.F.R. **60** Subpart GG *Standards of Performance for Stationary Gas Turbines* The Solar Turbine was installed in 1966 which predates this NSPS's applicability trigger date of October 3, 1977 as defined in §60.330(b).

- h. **40 C.F.R. 60 Subpart KKK** *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* – This compressor station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
- i. 40 C.F.R. 60 Subpart IIII *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* – There are no compression ignition engines at this facility.
- j. 40 C.F.R. 60 Subpart JJJJ *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines:* All engines at the facility were constructed, reconstructed, or modified prior to the June 12, 2006 applicability date listed in §60.4230(a)(4).
- k. 40 C.F.R. 60 Subpart KKKK Standards of Performance for Stationary Combustion Turbines The Solar Turbine was installed in 1966, which predates this NSPS's applicability date of February 18, 2005 as specified in §60.4305(a).
- 1. **40 C.F.R. 60 Subpart OOOO** *Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution* – This subpart does not apply to the facility since the facility is a transmission facility. So it is exempt from the requirements for gas wells, centrifugal compressors, reciprocating compressors, and/or pneumatic controllers. Although this applies to storage vessels located at transmission facilities, there have been no storage vessels constructed, modified, or reconstructed after August 23, 2011 in accordance with §60.5365(e).
- m. 40 C.F.R. 60 Subpart YYYY *Turbine MACT* The Solar Turbine which was installed in 1966 was constructed prior to the January 14, 2003 compliance date, and is therefore considered an exempt existing source in accordance with §63.6090(b)(4).
- n. 40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM) There are no add-on controls at this facility, with the exception of the DEG dehys, which are subject to 40 C.F.R. 63, Subpart HHH; therefore, in accordance with 40 C.F.R. §64.2(b)(1)(i), CAM is not applicable to HAPs emitted from these sources. Moreover, the DEG Dehys are not subject to any other non-exempt pollutant limitation (such as VOC or PM), thereby not meeting the applicability criterion in §64.2(a)(1). Based upon these facts, CAM does not apply to any source at the facility.

4.0 Miscellaneous Indirect Natural Gas Heaters and Boilers less than 10 MMBtu/hr [emission point ID(s): BLR5, BLR6, BLR7, BLR4, HTR2]

4.1. Limitations and Standards

- 4.1.1. 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, R13-2149, 6.1.1.] (BLR5, BLR6, BLR7)
- 4.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
 [45CSR§2-3.2.]
 [45CSR13, R13-2149, 6.1.2.] (BLR5, BLR6, BLR7)
- 4.1.3. Maximum Design Heat Input. The maximum design heat input for each of the DEG Dehydrator Reboilers (BLR5, BLR6, BLR7) shall not exceed 0.55 MMBtu/hr.
 [45CSR13, R13-2149, 6.1.3.]
- 4.1.4. Maximum emissions from each of the 0.55 MMBtu/hr NATCO DEG Dehydrator Reboilers (BLR5, BLR6, BLR7) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.07	0.29
Carbon Monoxide	0.06	0.24

[45CSR13, R13-2149, 6.1.4.]

4.2. Monitoring Requirements

4.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Section 4.1.1. Method 9 shall be conducted in accordance with 40 CFR 60 Appendix A.
 [45CSR13, R13-2149, 6.2.1.; 45CSR§30-5.1.c.]

4.3. Testing Requirements

4.3.1. Reserved.

4.4. Recordkeeping Requirements

4.4.1. Reserved.

4.5. **Reporting Requirements**

4.5.1. Reserved.

4.6. Compliance Plan

4.6.1. Reserved.

5.1. Limitations and Standards

5.1.1. As stated in 63.6602, you must comply with the following requirements for existing spark ignition stationary RICE \leq 500 HP located at a major source of HAP emissions:

For each	The permittee must meet the following requirements, except during periods of startup	During periods of startup you must
	Change oil and filter every 500 hours of operation or annually, whichever comes first; ²	Minimize the engine's time spent at idle and minimize the engine's
Emergency stationary SI RICE and black start stationary SI	Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as	startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
	Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	

 2 Sources have the option to utilize an oil analysis program as described in 40 C.F.R. 63.6625(j) (permit condition 5.2.4.) in order to extend the specified oil change requirement in Table 2c of this subpart.

³ Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. §63.6(g) for alternative work practices.

[40 C.F.R. §63.6602, Table 2c, Item 6; 45CSR34]

- 5.1.2. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.
 [40 C.F.R. §63.6595(a); 45CSR34]
- 5.1.3. The permittee shall comply with the following general requirements:
 - a. The permittee must be in compliance with the operating limitations, and other requirements in 40 C.F.R.
 63 Subpart ZZZZ that apply to the permittee at all times.
 - b. At all times the permittee 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 the permittee to make any further efforts to reduce emissions if required levels 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(a) and (b); 45CSR34]

- 5.1.4. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (1) through (3) of this condition. In order for the engine to be considered an emergency stationary RICE under 40 C.F.R. 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this condition, is prohibited. If you do not operate the engine according to the requirements in paragraphs (1) through (3) of this condition, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
 - (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (2).
 - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
 - (3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§ 63.6640(f), (f)(1), (f)(2), and (f)(3); 45CSR34]

5.1.5. The permittee shall comply with all General Provisions which apply according to Table 8 to 40 C.F.R., Part 63, Subpart ZZZZ.
 [40 C.F.R. §63.6665; 45CSR34]

5.2. Monitoring Requirements

5.2.1. If you own or operate an existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions, you must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop 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.

You must demonstrate continuous compliance with each work or management practice in Item 6 of Table 2c to 40 C.F.R. 63 Subpart ZZZZ by complying with the paragraph above according to Item 9 in Table 6 to this subpart.

[40 C.F.R. §§63.6625(e) and (e)(2); 40 C.F.R. §63.6640(a), Table 6, Item 9; 45CSR34]

- 5.2.2. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. [40 C.F.R. §63.6625(f); 45CSR34]
- 5.2.3. If you operate a new, reconstructed, or existing stationary engine, you 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.
 [40 C.F.R. §63.6625(h); 45CSR34]
- 5.2.4. If you own or operate a stationary SI engine that is subject to the work, operation, or management practices in item 6 of Table 2c to 40 C.F.R. 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2c to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c to this subpart. 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]

5.3. Testing Requirements

5.3.1. Reserved.

5.4. Recordkeeping Requirements

- 5.4.1. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary emergency RICE.
 [40 C.F.R. §§63.6655(e) and (e)(2); 45CSR34]
- 5.4.2. If you own or operate existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) (permit condition 5.1.4.(2)(ii) or (iii)), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 C.F.R. §§63.6655(f) and (f)(1); 45CSR34]

5.4.3. Format and Retention of 40 C.F.R. 63 Subpart ZZZZ Records.

- (a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[40 C.F.R. §63.6660; 45CSR34]

5.5. Reporting Requirements

- 5.5.1. You must also report each instance in which you did not meet the requirements in Table 8 to 40 C.F.R. 63 Subpart ZZZZ that apply to you.
 [40 C.F.R. §63.6640(e); 45CSR34]
- 5.5.2. The permittee must report all deviations as defined in 40 C.F.R. 63 Subpart ZZZZ in the semiannual monitoring report required by permit condition 3.5.6.
 [40 C.F.R. §63.6650(f); 45CSR34]

5.6. Compliance Plan

5.6.1. Reserved.

6.0 40 C.F.R. 63, Subpart DDDDD MACT Requirements [emission unit IDs: BLR4, HTR2]

6.1. Limitations and Standards

- 6.1.1. Compliance Date. If you have an existing boiler or process heater, you must comply with 40 C.F.R. 63 Subpart DDDDD no later than January 31, 2016, except as provided in §63.6(i).
 [40 C.F.R. §63.7495(b); 45CSR34]
- 6.1.2. **Initial and Periodic Tune-ups.** If your unit is a new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour in the unit designed to burn gas 1 subcategory, you must conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540.
 - (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
 - (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
 - (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject;
 - (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
 - (vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (vi)(A) and (B) of this condition.
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - (B) A description of any corrective actions taken as a part of the tune-up.
 - Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up.
 - If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[40 C.F.R. §§ 63.7500(a), Table 3 – Work Practice Standards, Item #1; 40 C.F.R. §63.7500(e); 40 C.F.R. §§ 63.7540(a)(12), 63.7540(a)(10)(i) through (vi), 63.7515(d), 63.7540(a)(13), 63.7515(g), 63.7505(a); 45CSR34]

6.1.3. At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that 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. §63.7500(a)(3); 45CSR34]

6.2. Monitoring Requirements

6.2.1. Reserved.

6.3. Testing Requirements

6.3.1. Reserved.

6.4. Recordkeeping Requirements

- 6.4.1. You must keep records according to paragraphs (1) and (2) of this condition.
 - (1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual* compliance report that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).
 - * Note Compliance reports are required once every 5 years for BLR4, and HTR2 pursuant to 40 C.F.R. §63.7550(b) in permit condition 6.5.2.
 - (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).

[40 C.F.R. §63.7555(a); 45CSR34]

- 6.4.2. Format and Retention of Records for 40 C.F.R. 63 Subpart DDDDD.
 - (a) Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.§(b)(1).
 - (b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
 - (c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[40 C.F.R. §§63.7560(a), (b), and (c); 45CSR34]

6.5. Reporting Requirements

6.5.1. You must report each instance in which you did not meet the work practice standard in Table 3 to Subpart DDDDD (permit condition 6.1.2.). These instances are deviations from the work practice standards, in this subpart. These deviations must be reported according to the requirements in §63.7550 (permit condition 6.5.2.).

[40 C.F.R. §63.7540(b); 45CSR34]

- 6.5.2. You must submit a Compliance report for 40 C.F.R. 63 Subpart DDDDD containing:
 - a. The information in §63.7550(c)(5)(i) through (iii), (xiv), and (xvii) which is:
 - (i) Company and Facility name and address.
 - (ii) Process unit information, emissions limitations, and operating parameter limitations.
 - (iii) Date of report and beginning and ending dates of the reporting period.
 - (xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to 40 C.F.R. §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
 - (xvii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - b. If there are no deviations from the requirements for work practice standards in Table 3 to 40 C.F.R.
 63 Subpart DDDDD that apply to you (condition 5.1.1.), a statement that there were no deviations from the work practice standards during the reporting period.

You must submit the report every 5 years according to the requirements in 40 C.F.R. §63.7550(b), which are:

- (1) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 C.F.R. §63.7495 and ending on December 31 within 5 years after the compliance date that is specified for your source in 40 C.F.R. §63.7495.
- (2) The first 5-year compliance report must be postmarked or submitted no later than January 31.
- (3) Each subsequent 5-year compliance report must cover the 5-year periods from January 1 to December 31.
- (4) Each subsequent 5-year compliance report must be postmarked or submitted no later than January 31.
- (5) You may submit the first and subsequent compliance reports according to the dates established in permit condition 3.5.6. instead of according to the dates in paragraphs (1) through (4) of this condition.

You must submit all reports required by Table 9 of 40 C.F.R. 63 Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

[40 C.F.R. §63.7550(a), Table 9, Items # 1.a. and # 1.b.; 40 C.F.R. §§63.7550(b), (c)(1), and (c)(5)(i) through (iii), (xiv), and (xvii); 40 C.F.R. §63.7550(h)(3); 45CSR34]

6.6. Compliance Plan

6.6.1. Reserved.

7.0 40 C.F.R. 63, Subpart HHH MACT Requirements [emission unit IDs: DEG-DEHY1, DEG-DEHY2, DEG-DEHY3, FLLP24]

7.1. Limitations and Standards

7.1.1. **Compliance Date.** The owner or operator of each affected source shall achieve compliance with the provisions of this subpart by the following dates:

(1) Except as specified in paragraphs (d)(3) through (4) of this section, the owner or operator of an affected source, the construction or reconstruction of which commenced before February 6, 1998, shall achieve compliance with this provisions of the subpart no later than June 17, 2002 except as provided for in §63.6(i).

[40 C.F.R. §63.1270(d)(1); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.1.2. Affirmative Defense. In response to an action to enforce the standards set forth in this subpart, you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at §63.2. Appropriate penalties may be assessed; however, if you fail to meet your burden of proving all of the requirements in the affirmative defense, the affirmative defense shall not be available for claims for injunctive relief.
 [40 C.F.R. §63.1272(d); 45CSR34 and 45CSR13, R13-2149, 7.1.3]
- 7.1.3. Repair of Leaks. In all cases where the provisions of this subpart require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of this standard to fail to take action to repair the leak(s) within the specified time. If action is taken to repair the leak(s) within the specified time, failure of that action to successfully repair the leak(s) is not a violation of this standard. However, if the repairs are unsuccessful, and a leak is detected, the owner or operator shall take further action as required by the applicable provisions of this subpart.

[40 C.F.R. §63.1274(g); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.1.4. Good Air Pollution Control Practices. At all times the owner or operator 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. 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 records, and inspection of the source. [40 C.F.R. §63.1274(h); 45CSR34 and 45CSR13, R13-2149, 7.1.3]
- 7.1.5. The owner or operator of a large glycol dehydration unit shall connect the process vent to a control device or a combination of control devices through a closed-vent system and the outlet benzene emissions from the control device(s) shall be less than 0.90 megagrams per year. The closed-vent system shall be designed and operated in accordance with the requirements of §63.1281(c). The control device(s) shall be designed and operated in accordance with the requirements of §63.1281(d), except that the performance requirements specified in §63.1281(d)(1)(i) and (ii) do not apply.
 [40 C.F.R. §§ 63.1275(b)(1)(ii) and 63.1274(c)(1); 45CSR34 and 45CSR13, R13-2149, 7.1.3]
- 7.1.6. One or more safety devices that vent directly to the atmosphere may be used on the air emission control equipment installed to comply with paragraph (b)(1) of §63.1275 (permit condition 7.1.5.).
 [40 C.F.R. §§ 63.1275(b)(2) and 63.1274(c)(1); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.1.7. As an alternative to the requirements of paragraph (b) of §63.1275, the owner or operator may comply with one of the following:
 - (3) Control of HAP emissions from a GCG separator (flash tank) vent is not required if the owner or operator demonstrates, to the Administrator's satisfaction, that total emissions to the atmosphere from the glycol dehydration unit process vent are reduced by one of the levels specified in paragraph (c)(3)(i) through (iv) through the installation and operation of controls as specified in paragraph (b)(1) of this section.
 - (ii) For any large glycol dehydration unit, benzene emissions are reduced to a level less than
 0.90 megagrams per year.

[40 C.F.R. §§ 63.1275(c), (c)(3), (c)(3)(ii), and 63.1274(c)(1); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.1.8. Closed-vent system requirements.

- (1) The closed-vent system shall route all gases, vapors, and fumes emitted from the material in an emissions unit to a control device that meets the requirements specified in paragraph (d) of §63.1281 (permit condition 7.1.9.).
- (2) The closed-vent system shall be designed and operated with no detectable emissions.
- (3) If the closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device, the owner or operator shall meet the requirements specified in paragraphs (3)(i) and (3)(ii) of this condition.
 - (i) For each bypass device, except as provided for in paragraph (3)(ii) of this section, the owner or operator shall either:
 - (A) At the inlet to the bypass device that could divert the stream away from the control device to the atmosphere, properly install, calibrate, maintain, and operate a flow indicator that is capable of taking periodic readings and sounding an alarm when the bypass device is open such that the stream is being, or could be, diverted away from the control device to the atmosphere; or
 - (B) Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.
 - (ii) Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of paragraph (3)(i) of this condition.

[40 C.F.R. §63.1281(c); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.1.9. The control device used to reduce HAP emissions in accordance with the standards of this 40 C.F.R. 63 Subpart HHH shall be the control device specified in paragraph (iii) of this condition.
 - (iii) A flare, as defined in §63.1271, that is designed and operated in accordance with the requirements of §63.11(b).

[40 C.F.R. §§ 63.1281(d), (d)(1), and (d)(1)(iii); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.1.10. Each control device used to comply with 40 C.F.R. 63 Subpart HHH shall be operating at all times when gases, vapors, and fumes are vented from the emissions unit or units through the closed vent system to the control device as required under §63.1275. An owner or operator may vent more than one unit to a control device used to comply with this subpart.
[40 C.F.R. §§ 63.1281(d)(4) and (d)(4)(i); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.2. Monitoring Requirements

- 7.2.1. The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either paragraph (i) or (ii) of this condition. Emissions shall be determined either uncontrolled or with federally enforceable controls in place.
 - (i) The owner or operator shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalcTM, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1); or
 - (ii) The owner or operator shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement by performing three runs of Method 18 in 40 CFR part 60, appendix A; or ASTM D6420-99 (Reapproved 2004) (incorporated by reference as specified in §63.14), as specified in §63.772(a)(1)(ii); or an equivalent method; and averaging the results of the three runs. Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

[40 C.F.R. §63.1282(a)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.2.2. (c) *Closed-vent system inspection and monitoring requirements.*
 - (1) For each closed-vent system required to comply with this section, the owner or operator shall comply with the requirements of paragraphs (c)(2) through (7) of this section.
 - (2) Except as provided in paragraphs (c)(5) and (6) of this section, each closed-vent system shall be inspected according to the procedures and schedule specified in paragraphs (c)(2)(i) and (ii) of this section and each bypass device shall be inspected according to the procedures of (c)(2)(iii) of this section.
 - (i) For each closed-vent system joints, seams, or other connections that are permanently or semipermanently sealed (e.g., a welded joint between two sections of hard piping or a bolted or gasketed ducting flange), the owner or operator shall:
 - (A) Conduct an initial inspection according to the procedures specified in §63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions. Inspection results shall be submitted with the Notification of Compliance Status Report as specified in §63.1285(d)(1) or (2).
 - (B) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices. The owner or operator shall monitor a component or

connection using the procedures specified in §63.1282(b) to demonstrate that it operates with no detectable emissions following any time the component or connection is repaired or replaced or the connection is unsealed. Inspection results shall be submitted in the Periodic Report as specified in §63.1285(e)(2)(iii).

- (ii) For closed-vent system components other than those specified in paragraph (c)(2)(i) of this section, the owner or operator shall:
 - (A) Conduct an initial inspection according to the procedures specified in §63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions. Inspection results shall be submitted with the Notification of Compliance Status Report as specified in §63.1285(d)(1) or (2).
 - (B) Conduct annual inspections according to the procedures specified in §63.1282(b) to demonstrate that the components or connections operate with no detectable emissions. Inspection results shall be submitted in the Periodic Report as specified in §63.1285(e)(2)(iii).
 - (C) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices. Inspection results shall be submitted in the Periodic Report as specified in §63.1285(e)(2)(iii).
- (iii) For each bypass device, except as provided for in §63.1281(c)(3)(ii), the owner or operator shall either:
 - (A) At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes; or
 - (B) If the bypass device valve installed at the inlet to the bypass device is secured in the nondiverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.
- (3) In the event that a leak or defect is detected, the owner or operator shall repair the leak or defect as soon as practicable, except as provided in paragraph (c)(4) of this section.
 - (i) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - (ii) Repair shall be completed no later than 15 calendar days after the leak is detected.
- (4) 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, as defined in §63.1271, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next shutdown.
- (5) Any parts of the closed-vent system or cover that are designated, as described in paragraphs (c)(5) (i) and (ii) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (c)(2) (i) and (ii) of this section if:
- (i) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraph (c)(2) (i) or (ii) of this section; and
- (ii) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- (6) Any parts of the closed-vent system or cover that are designated, as described in paragraphs (c)(6) (i) and (ii) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (c)(2) (i) and (ii) of this section if:
 - (i) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
 - (ii) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years.
- (7) Records shall be maintained as specified in §63.1284(b)(5) through (8).

[40 C.F.R. §§63.1283(c) and 63.1274(c)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.2.3. Control device monitoring requirements.
 - (1) For each control device except as provided for in paragraph (d)(2) of §63.1283, the owner or operator shall install and operate a continuous parameter monitoring system in accordance with the requirements of paragraphs (3), (6), and (7) of this condition. Owners or operators that install and operate a flare in accordance with §63.1281(d)(1)(iii) or (f)(1)(iii) are exempt from the requirements of paragraphs (d)(4) and (5) of §63.1283. The continuous monitoring system shall be designed and operated so that a determination can be made on whether the control device is achieving the applicable performance requirements of §63.1281(d). Each continuous parameter monitoring system shall meet the following specifications and requirements:
 - (i) Each continuous parameter monitoring system shall measure data values at least once every hour and record either:
 - (A) Each measured data value; or
 - (B) Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.
 - (ii) A site-specific monitoring plan must be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraph (d) of this section and in §63.8(d). Each CPMS must be installed, calibrated, operated, and maintained in accordance with the procedures in your approved site-specific monitoring plan. Using the process described in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (1)(ii)(A) through (E) of this condition in your site-specific monitoring plan.

- (A) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
- (B) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
- (C) Equipment performance checks, system accuracy audits, or other audit procedures;
- (D) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3); and
- (E) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).
- (iii) The owner or operator must conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least once every 12 months.
- (iv) The owner or operator must conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.

[40 C.F.R. §§ 63.1283(d), (d)(1), and 63.1274(c)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.2.4. The owner or operator shall install, calibrate, operate, and maintain a device equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device as specified in either paragraph (i) of this condition.
 - (i) A continuous monitoring system that measures the following operating parameters as applicable:
 - (C) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

[40 C.F.R. §§63.1283(d)(3)(i)(C) and 63.1274(c)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.2.5. An excursion for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (6)(i) through (6)(iv) of this condition being met. When multiple operating parameters are monitored for the same control device and during the same operating day, and more than one of these operating parameters meets an excursion criterion specified in paragraphs (6)(i) through (6)(iv) of this condition, then a single excursion is determined to have occurred for the control device for that operating day.
 - (iii) An excursion occurs when the monitoring data are not available for at least 75 percent of the operating hours in a day.
 - (iv) If the closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device, an excursion occurs when:

- (A) For each bypass line subject to §63.1281(c)(3)(i)(A) (permit condition 7.1.8.) the flow indicator indicates that flow has been detected and that the stream has been diverted away from the control device to the atmosphere.
- (B) For each bypass line subject to §63.1281(c)(3)(i)(B) (permit condition 7.1.8.), if the seal or closure mechanism has been broken, the bypass line valve position has changed, the key for the lock-and-key type lock has been checked out, or the car-seal has broken.

For each excursion, the owner or operator shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard.

[40 C.F.R. §§ 63.1283(d)(6), (d)(6)(iii), (d)(6)(iv), 63.1283(d)(7), and 63.1274(c)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.3. Testing Requirements

- 7.3.1. *Control device performance test procedures.* This paragraph applies to the performance testing of control devices. Flares shall meet the provisions in paragraph (d)(2) of §63.1282:
 - (2) An owner or operator shall design and operate each flare, as defined in §63.1271, in accordance with the requirements specified in §63.11(b) and the compliance determination shall be conducted using Method 22 of 40 CFR part 60, appendix A, to determine visible emissions.

[40 C.F.R. §§ 63.1282(d), 63.1282(d)(2), 63.1281(d)(3), and 63.1283(a); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.4. Recordkeeping Requirements

- 7.4.1. Except as specified in paragraphs (c) and (d) of §63.1284, each owner or operator of a facility subject to this subpart shall maintain the records specified in paragraphs (1) through (3) of this condition:
 - (1) The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart HHH shall maintain files of all information (including all reports and notifications) required by this subpart. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or period.
 - (i) All applicable records shall be maintained in such a manner that they can be readily accessed.
 - (ii) The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request.
 - (iii) The remaining 4 years of records may be retained offsite.
 - (iv) Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

- (2) Records specified in §63.10(b)(2);
- (3) Records specified in §63.10(c) for each monitoring system operated by the owner or operator in accordance with the requirements of §63.1283(d). Notwithstanding the previous sentence, monitoring data recorded during periods identified in paragraphs (b)(3)(i) through (iv) of this section shall not be included in any average or percent leak rate computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating or failed to collect required data.
 - (i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
 - (ii) [Reserved]
 - (iii) Periods of non-operation resulting in cessation of the emissions to which the monitoring applies; and
 - (iv) Excursions due to invalid data as defined in §63.1283(d)(6)(iii).

[40 C.F.R. §§ 63.1284(b), (b)(1), (b)(2), and (b)(3); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.4.2. Each owner or operator using a control device to comply with \$63.1274 shall keep the following records upto-date and readily accessible:
 - (i) Continuous records of the equipment operating parameters specified to be monitored under \$63.1283(d) or specified by the Administrator in accordance with \$63.1283(d)(3)(iii). For flares, the hourly records and records of pilot flame outages specified in paragraph (e) of this section shall be maintained in place of continuous records.
 - (ii) Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in §63.1283(d)(4) of this subpart, except as specified in paragraph (ii)(A) of this condition.
 - (A) For flares, the records required in paragraph (e) of §63.1284 (permit condition 7.4.5.).
 - (iii) Hourly records of the times and durations of all periods when the vent stream is diverted from the control device or the device is not operating.
 - (iv) Where a seal or closure mechanism is used to comply with §63.1281(c)(3)(i)(B), hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken.

[40 C.F.R. §63.1284(b)(4); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.4.3. Except as specified in paragraphs (c) and (d) of this section, each owner or operator of a facility subject to this subpart shall maintain the records specified in paragraphs (5) through (8) of this section:

- (5) Records identifying all parts of the closed-vent system that are designated as unsafe to inspect in accordance with §63.1283(c)(5), an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
- (6) Records identifying all parts of the closed-vent system that are designated as difficult to inspect in accordance with §63.1283(c)(6), an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
- (7) For each inspection conducted in accordance with §63.1283(c), during which a leak or defect is detected, a record of the information specified in paragraphs (7)(i) through (7)(viii) of this section.
 - (i) The instrument identification numbers, operator name or initials, and identification of the equipment.
 - (ii) The date the leak or defect was detected and the date of the first attempt to repair the leak or defect.
 - (iii) Maximum instrument reading measured by the method specified in §63.1282(b) after the leak or defect is successfully repaired or determined to be nonrepairable.
 - (iv) "Repair delayed" and the reason for the delay if a leak or defect is not repaired within 15 calendar days after discovery of the leak or defect.
 - (v) The name, initials, or other form of identification of the owner or operator (or designee) whose decision it was that repair could not be effected without a shutdown.
 - (vi) The expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days.
 - (vii) Dates of shutdowns that occur while the equipment is unrepaired.
 - (viii) The date of successful repair of the leak or defect.
- (8) For each inspection conducted in accordance with §63.1283(c) during which no leaks or defects are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected.

[40 C.F.R. §§ 63.1284(b)(5) through (b)(8); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.4.4. An owner or operator that elects to comply with the benzene emission limit specified in §63.1275(b)(1)(ii) (permit condition 7.1.5.) shall document, to the Administrator's satisfaction, the following items:
 - (1) The method used for achieving compliance and the basis for using this compliance method; and
 - (2) The method used for demonstrating compliance with 0.90 megagrams per year of benzene.

(3) Any information necessary to demonstrate compliance as required in the methods specified in paragraphs (1) and (2) of this condition.

[40 C.F.R. §§ 63.1284(c), and (c)(1) through (c)(3); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.4.5. Record the following when using a flare to comply with §63.1281(d):
 - (1) Flare design (i.e., steam-assisted, air-assisted, or non-assisted);
 - (2) All visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations made during the compliance determination required by §63.1282(d)(2); and
 - (3) All hourly records and other recorded periods when the pilot flame is absent.

[40 C.F.R. §§ 63.1284(e), and (e)(1) through (e)(3); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.4.6. The owner or operator of an affected source subject to this subpart shall maintain records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control equipment and monitoring equipment. The owner or operator shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1274(h), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 C.F.R. §63.1284(f); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.5. Reporting Requirements

- 7.5.1. All reports required under 40 C.F.R. 63 Subpart HHH shall be sent to the Administrator at the appropriate address listed in §63.13. Reports may be submitted on electronic media.
 [40 C.F.R. §63.1274(b); 45CSR34 and 45CSR13, R13-2149, 7.1.3]
- 7.5.2. If there was a malfunction during the reporting period, the Periodic Report specified in paragraph (e) of §63.1285 (permit condition 7.5.3.) shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.1274(h), including actions taken to correct a malfunction.

[40 C.F.R. §63.1285(b)(6); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.5.3. *Periodic Reports.* An owner or operator shall prepare Periodic Reports in accordance with paragraphs (e)(1) and (2) of this section and submit them to the Administrator.
 - (1) An owner or operator shall submit Periodic Reports semiannually beginning 60 calendar days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status Report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status Report is due.

- (2) The owner or operator shall include the information specified in paragraphs (e)(2)(i) through (xiii) of this section, as applicable.
 - (i) The information required under (3.10(e))(3). For the purposes of this subpart and the information required under (3.10(e))(3), excursions (as defined in (3.1283(d))(6)) shall be considered excess emissions.
 - (ii) A description of all excursions as defined in §63.1283(d)(6) of this subpart that have occurred during the 6-month reporting period.
 - (C) For each excursion caused by lack of monitoring data, as specified in §63.1283(d)(6)(iii), the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.
 - (iii) For each inspection conducted in accordance with §63.1283(c) during which a leak or defect is detected, the records specified in §63.1284(b)(7) must be included in the next Periodic Report.
 - (iv) For each closed-vent system with a bypass line subject to §63.1281(c)(3)(i)(A), records required under §63.1284(b)(4)(iii) of all periods when the vent stream is diverted from the control device through a bypass line. For each closed-vent system with a bypass line subject to §63.1281(c)(3)(i)(B), records required under §63.1284(b)(4)(iv) of all periods in which the seal or closure mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out.
 - (v) If an owner or operator elects to comply with §63.1275(b)(1)(ii), the records required under §63.1284(c)(3).
 - (vi) The information in paragraphs (e)(2)(vi)(A) and (B) of this section shall be stated in the Periodic Report, when applicable.
 - (A) No excursions.
 - (B) No continuous monitoring system has been inoperative, out of control, repaired, or adjusted.
 - (vii) Any change in compliance methods as specified in §63.1282(e).
 - (viii) If the owner or operator elects to comply with §63.1275(c)(2), the records required under §63.1284(b)(10).
 - (ix) For flares, the records specified in §63.1284(e).
 - (x) The results of any periodic test as required in §63.1282(d)(3) conducted during the reporting period.
 - (xii) For combustion control device inspections conducted in accordance with §63.1283(b) the records specified in §63.1284(h).

(xiii) Certification by a responsible 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.

[40 C.F.R. §§ 63.1285(e), (e)(1), (e)(2), (e)(2)(i) through (x), (e)(2)(xii) and (e)(2)(xiii); 40 C.F.R. §63.1285(b)(5); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

- 7.5.4. *Notification of process change.* Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the owner or operator shall submit a report within 180 days after the process change is made or as a part of the next Periodic Report as required under paragraph (e) of §63.1285 (permit condition 7.5.3.), whichever is sooner. The report shall include:
 - (1) A brief description of the process change;
 - (2) A description of any modification to standard procedures or quality assurance procedures;
 - (3) Revisions to any of the information reported in the original Notification of Compliance Status Report under paragraph (d) of §63.1285; and
 - (4) Information required by the Notification of Compliance Status Report under paragraph (d) of §63.1285 for changes involving the addition of processes or equipment.

[40 C.F.R. §63.1285(f); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.6. Compliance Plan

7.6.1. Reserved.

8.0 45CSR13, Permit No. R13-2149 Requirements [emission unit IDs: 081G3, DEG-DEHY1, DEG-DEHY2, DEG-DEHY3, FLLP²¹]

8.1. Limitations and Standards

- 8.1.1. The quantity of natural gas that shall be consumed in the 440 hp Waukesha VGF18GL, 4 cycle lean burn natural gas fired reciprocating engine (081G3) shall not exceed 3,972 cubic feet per hour or 34.79 x 10⁶ cubic feet per year.
 [45CSR13, R13-2149, 5.1.1.]
- 8.1.2. Maximum emissions from the 440 hp Waukesha VGF18GL, 4 cycle lean burn natural gas fired reciprocating engine (081G3) shall not exceed the following limits:

Emission Unit ID	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
081G3	Nitrogen Oxides	2.52	11.05
	Carbon Monoxide	1.70	7.44
	Volatile Organic Compounds	0.73	3.19

[45CSR13, R13-2149, 5.1.2.]

- 8.1.3. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.1 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, R13-2149, 4.1.2.] (FLLP₂₄)
- 8.1.4. Maximum Throughput Limitation. The maximum wet natural gas throughput to each of the glycol dehydration units / still columns (DEG-DEHY1, DEG-DEHY2, DEG-DEHY3) shall not exceed 4.875 MMscf/hr or 117 MMscf/day. Compliance with the Maximum Throughput Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the monthly throughput at any given time during the previous twelve consecutive calendar months. [45CSR13, R13-2149, 7.1.1]

8.1.5. Flare

The enclosed Dehydrator Flare, identified as FLLP2, shall operate according to the following requirements:

- a. The flare shall be non-assisted and the maximum capacity of the flare shall not exceed a maximum design heat input of 6.0 mmBtu/hr;
- b. The maximum combustion exhaust emissions from the enclosed flare shall not exceed the limits given in the following table:

Pollutant	<u>Maximum Hourly</u> Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	<u>0.41</u>	<u>1.79</u>

Pollutant	<u>Maximum Hourly</u> <u>Emissions (lb/hr)</u>	Maximum Annual Emissions (ton/year)
Carbon Monoxide	<u>1.86</u>	<u>8.15</u>

c. The flare shall be designed, operated, and maintained according to good engineering practices or manufacturing recommendations so as to achieve, at a minimum, a hydrocarbon combustion rate of <u>98.0%</u>;

d. 45CSR6

The flare is subject to 45CSR6. The requirements of 45CSR6 include but are not limited to the following:

i. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (*lb/hr*) = *F* x *Incinerator Capacity* (*tons/hr*)

Where, the factor, F, is either 5.43 for an incinerator with a capacity of less than 15,000 lbs/hr or 2.72 for an incinerator with a capacity of 15,000 lbs/hr or greater. [45CSR6 §4.1]

- ii. 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. [45CSR6 §4.3]
- iii. The provisions of paragraph (ii) 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 startup.
 [45CSR6 §4.4]
- iv. 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. [45CSR6 §4.5]
- v. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
 [45CSR6 §4.6]
- vi. At such reasonable times as the Secretary may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5 or other equivalent U.S. EPA approved method approved by the Secretary, in exhaust gases. Such tests shall be conducted in such manner as the Secretary may specify and be filed on forms and in a manner acceptable to the Secretary. The Secretary may, at the Secretary's option, witness or conduct such stack tests. Should the Secretary exercise his or her option to conduct such tests, the operator will provide all the 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.
- vii. The Secretary may conduct such other tests as the Secretary may deem necessary to evaluate air pollution emissions other than those noted above. [45CSR6 §7.2]

viii. 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. [45CSR6 §8.2]

The Dehydrator Flare, NATCO Model SHV 4.0 (FLLP1) subject to this section shall be designed and operated in accordance with the following:

- a. Flares shall be steam assisted, air assisted, or non assisted.
- b. Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. This streamlined limit of no visible emissions will ensure compliance with 45CSR§6 4.3. During the exception period when visible emissions are allowed, the visible emissions shall not exceed 20% opacity except for periods of start up as outlined in 45CSR§6 4.4. (i.e., less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start up).
- c. Flares shall be operated, with a flame present at all times whenever emissions may be vented to them, except during SSM (Startup, Shutdown, Malfunctions) events.
- d. A flare shall be used only where the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam assisted or air assisted; or where the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

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

Where:

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

K = Constant =

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

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

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

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

n = Number of sample components.

- e. <u>Steam assisted and nonassisted flares</u> shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided by 8.1.5.f and 8.1.5.g of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), by the unobstructed (free) cross sectional area of the flare tip, which may be determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, but is not required to be determined using these Methods (unless designated by the Director).
- f. <u>Steam assisted and nonassisted flares</u> designed for and operated with an exit velocity, as determined by the method specified in 8.1.5.e. of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/sem (1,000 Btu/sef).
- g. <u>Steam-assisted and nonassisted flares</u> designed for and operated with an exit velocity, as determined by the method specified in 8.1.5.e. of this section, less than the velocity V_{max}, as determined by the calculation specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max}, for flares complying with this paragraph shall be determined by the following equation:

Log₁₀(V_{max})=(H_T+28.8)/31.7 Where: V_{max}=Maximum permitted velocity, m/sec. 28.8=Constant. 31.7=Constant. H_T=The net heating value as determined in 8.1.5.d of this section

h. <u>Air assisted flares</u> shall be designed and operated with an exit velocity less than the velocity V_{max}. The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation:

 $V_{max}=8.71 + 0.708(H_{T})$ Where: $V_{max}=Maximum permitted velocity, m/sec.$ 8.71=Constant.
0.708=Constant.
H_{T}=The net heating value as determined in 8.1.5.d of this section.

[45CSR13, R13-2149, 7.1.2.]

8.1.6. The permittee is not required to conduct a flare compliance assessment for concentration of sample (i.e. Method 18) and tip velocity (i.e. Method 2) until such time as the Director requests a flare compliance assessment to be conducted in accordance with section 8.3.2, but the permittee is required to conduct a flare design evaluation in accordance with section 8.4.4. Alternatively, the permittee may elect to demonstrate compliance with the flare design criteria requirements of section 8.1.5 by complying with the compliance assessment testing requirements of section 8.3.2.
[45CSR13, R13-2149, 7.1.3]

8.1.7. No person shall cause or allow particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F × Incinerator Capacity (tons/hr)

Emissions (lb/hr) = $(5.43) \times (115.2 \text{ lb/hr}) \times (1 \text{ ton } / 2,000 \text{ lb})$

Emissions (lb/hr) = 0.313 lb/hr

[45CSR§6-4.1.] (FLLP1)

8.2. Monitoring Requirements

- 8.2.1. In order to demonstrate compliance with the requirements of 8.1.5.c, the permittee shall monitor the presence or absence of a flare pilot flame using a thermocouple or any other equivalent device, except during SSM events. [45CSR13, R13-2149, 7.2.1.]
- 8.2.2. The permittee shall monitor the throughput of wet natural gas fed to the dehydration system on a monthly basis for each glycol dehydration unit (DEG DEHY-1, DEG-DEHY2, DEG-DEHY3).
 [45CSR13, R13-2149, 7.2.21]

8.3. Testing Requirements

- 8.3.1. In order to demonstrate compliance with the flare opacity requirements of <u>45CSR6</u><u>8.1.5.b</u>, the permittee shall conduct a Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40CFR60 Appendix A Method 22. The permittee shall conduct this test within one (1) year of permit issuance or initial startup whichever is later. The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR part 60, appendix A, Method 22 or from the lecture portion of 40 CFR part 60, appendix A, Method 9 certification course. [45CSR13, R13-2149, 7.3.1.]
- 8.3.2. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with section 8.1.5. This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, or other equivalent testing approved in writing by the Director. Also, Test Method 18 may require the permittee to conduct Test Method 4 in conjunction with Test Method 18.
 [45CSR13, R13-2149, 7.3.2.]

8.4. Recordkeeping Requirements

8.4.1. To demonstrate compliance with conditions 8.1.1. and 8.1.2., the permittee shall maintain records of the quantity of natural gas consumed in the engine and the hours of operation of the engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13, R13-2149, 5.4.1.] (081G3)

- 8.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.1, 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, R13-2149, 4.1.3.] (FLLP²¹)

- 8.4.3. For the purpose of demonstrating compliance with section 8.1.5.c and 8.2.1, the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.
 [45CSR13, R13-2149, 7.4.1.]
- 8.4.4. For the purpose of demonstrating compliance with section 8.1.5 and 8.3.2, the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations and other related information requested by the Director.
 [45CSR13, R13-2149, 7.4.2.]
- 8.4.5. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of 8.2.1. and 8.2.2., and testing requirements of 8.3.1. and 8.3.2.
 [45CSR13, R13-2149, 7.4.3.]
- 8.4.<u>36</u>. For the purpose of demonstrating compliance with <u>the flare opacity requirements of 45CSR6 section 8.1.5.b</u>, the permittee shall maintain records of the visible emission opacity tests conducted per Section 8.3.1.
 [45CSR13, R13-2149, 7.4.1 7.4.4.]
- 8.4.<u>47</u>. The permittee shall maintain a record of the wet natural gas throughput through the dehydration system to demonstrate compliance with the natural gas throughput limit set forth in 8.1.4.
 [45CSR13, R13-2149, <u>7.4.2</u> 7.4.5.]
- 8.4.58. All records required under conditions 8.4.3. through 8.4.47. shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official. [45CSR13, R13-2149, 7.4.3 7.4.6.]

8.5. Reporting Requirements

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

[45CSR13, R13-2149, 7.5.1.]

8.5.2. Any deviation(s) from the flare design and operation criteria in Section 8.1.5 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case, within ten (10) calendar days of discovery of such deviation.
 [45CSR13, R13-2149, 7.5.2.]

8.6. Compliance Plan

8.6.1. Reserved.

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