West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Dominion Transmission

Sardis Station

R30-03300013-2011

John A. Benedict

Director

Issued: September 15, 2011 • Effective: September 29, 2011
Expiration: September 15, 2016 • Renewal Application Due: March 15, 2016

Permit Number: **R30-03300013-2011**
Permittee: **Dominion Transmission, Inc.**
Facility Name: **Sardis Station**
Permittee Mailing Address: **445 West Main Street, Clarksburg, WV 26301**

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:	Sardis, Harrison County, West Virginia
Facility Mailing Address:	Route 4, Sardis, WV 26330
Telephone Number:	(304) 627-3225
Type of Business Entity:	Corporation
Facility Description:	Natural Gas Transmission Facility
SIC Codes:	4922
UTM Coordinates:	552.89 km Easting • 4355.61 km Northing • Zone 17

Permit Writer: Wayne Green

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

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

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

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EN01	EN01	Reciprocating Engine/Integral Compressor; Ingersoll Rand 36KVS-ET (4SLB)	1961	1000 HP	CC02
EN02	EN02	Reciprocating Engine/Integral Compressor; Ajax DPC-800 (2SLB)	1987	800 HP	N/A
EN03	EN03	Reciprocating Engine/Integral Compressor; Ajax DPC-2804LE (SI LB)	2012	750 HP	CC01
EG01	EG01	Emergency Generators	2011	192.5 BHP	NSCR1
EG02	EG02	Emergency Generators	2011	192.5 BHP	NSCR2
TK01	TK01	Vertical, aboveground tank containing engine oil	1961	2730 gallons	N/A
TK02	TK02	Vertical, aboveground tank containing engine oil	1984	2730 gallons	N/A
TK03	TK03	Horizontal, above ground tank containing ethylene glycol	1991	2500 gallons	N/A
TK04	TK04	Horizontal, above ground tank containing Wastewater	2003	230 gallons	N/A
TK05	TK05	Horizontal, above ground tank containing produced fluids	2003	5000 gallons	N/A
TK06	TK06	Vertical, above ground tank containing wastewater	2003	500 gallons	N/A
TK07	TK07	Horizontal, above ground tank containing triethylene glycol	1992	520 gallons	N/A
DEHY02	DEHY02	Glycol Dehydration Unit Still; Cameron	2012	22 mmscfd	FL02
RBR02	RBR02	Glycol Dehydration Unit Reboiler; Cameron	2012	1.437 MMBtu/hr	N/A
Control Devices					
FL02	FL02	Dehydration Unit Still Flare; Cameron	2012	4.0 MMBtu/hr	N/A
CC01	CC01	Oxidation Catalyst	2012	N/A	N/A
CC02	EN01	Oxidation Catalyst	2013	N/A	N/A

*** Equipment burns or combusts pipeline quality natural gas only.**

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
G60-C026	January 4, 2011
R13-2915	April 30, 2012

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
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10µm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

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

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

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

2.7. Minor Permit Modifications

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

2.8. Significant Permit Modification

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

2.9. Emissions Trading

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

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

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

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

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

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

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

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

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

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

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

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

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

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

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

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

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

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

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

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

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

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

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

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

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

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

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

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

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

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

3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.
[45CSR§17-3.1; State Enforceable Only]

3.1.10. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2915 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-2915, 2.5.1.]

3.1.11. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate the control devices 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, R13-2915, 4.1.2. (FL02 and CC01)]

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, R13-2915, 4.1.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. **Record of Malfunctions of Air Pollution Control Equipment**. For the control devices 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, R13-2915, 4.1.3. (FL02 and CC01)]

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, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:	**If to the US EPA:**
Director WVDEP Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone: 304/926-0475 FAX: 304/926-0478	Associate Director Office of Air Enforcement and Compliance Assistance (3AP20) U. S. Environmental Protection Agency Region III 1650 Arch Street Philadelphia, PA 19103-2029

3.5.4. **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 annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

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

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

40 C.F.R. Part 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The 800 HP and 1000 HP reciprocating engines with integral compressors were manufactured before July 11, 2005 and they are not compression ignition engines. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart IIII. The 750 HP reciprocating engine with integral compressor (EN03) is not a compression ignition engine as defined in 40 C.F.R. § 60.4219. EN03 is also not subject to 40 C.F.R. Part 60 Subpart IIII.
40 C.F.R. Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The 800 HP and 1000 HP reciprocating engines with integral compressors were manufactured before July 12, 2006. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart JJJJ.
40 C.F.R. Part 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Sardis Station is not subject to Subpart HHH since the station transport production gas to Hastings Extraction Plant. Sardis Station is a minor (area) source of HAPs.

3.8. Emergency Operating Scenario

For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;

b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;

c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;

d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;

e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:

   i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;

   ii. Identification of the engine(s) being temporarily replaced;

iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;

iv. Projected duration of the replacement engine(s); and

v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

4.0 Dehydration Unit Reboiler [emission unit ID(s) RBR02; emission point ID(s): RBR02]

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, R13-2915, 6.1.1.]

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 (Section 4.1.1.). Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR§2-3.2., 45CSR13, R13-2915, 6.1.2.]

4.1.3. Maximum Design Heat Input. The maximum design heat input for the glycol dehydration unit reboiler (RBR02) is 1.437 MMBTU/hr.
[45CSR13, R13-2915, 6.1.3.]

4.1.4. To demonstrate compliance with Section 4.1.5, the quantity of natural gas that shall be consumed in the 1.437 MMBTU/hr glycol dehydration unit reboiler shall not exceed 1,201 cubic feet per hour and 10.52 x 10^6 cubic feet per year.
[45CSR13, R13-2915, 6.1.4. (RBR02)]

4.1.5. Maximum emissions from the 1.437 MMBTU/hr glycol dehydration unit reboiler shall not exceed the following emission limits:

Pollutant	Maximum Hourly Emissions	Maximum Annual Emissions
	LB/hour	TPY
Nitrogen Oxides	0.13	0.57
Carbon Monoxide	0.10	0.44
Volatile Organic Compounds	0.06	0.26

[45CSR13, R13-2915, 6.1.5.]

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 C.F.R. Part 60 Appendix A.
[45CSR13, R13-2915, 6.2.1.]

4.3. Testing Requirements

4.3.1. Reserved

4.4. Recordkeeping Requirements

4.4.1. To demonstrate compliance with Sections 4.1.4 and 4.1.5, the permittee shall maintain monthly records of the amount of natural gas consumed in the reboiler and the hours of operation of the reboiler. 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, R13-2915, 6.3.1. (RBR02)]

4.5. Reporting Requirements

4.5.1. Reserved

4.6. Compliance Plan

4.6.1. Reserved

5.0 Dehydration Unit Still and Dehydration Unit Flare [emission unit ID(s) DEHY02 and FL02; emission point ID(s): DEHY02 and FL02]

5.1. Limitations and Standards

5.1.1 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 for Determining Maximum Allowable Particulate Emissions:

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

Calculation for PM Emissions:

$$(5.43) \times [(4 \times 10^6 \text{ Btu/hour}) \times (\text{ft}^3/1197 \text{ BTU})] \times (0.0504 \text{ LB/ft}^3) \times (\text{ton}/2000 \text{ lb}) = 0.457 \text{ lb/hr}$$

[45CSR§6-4.1., FL02]

5.1.2. Emission of Visible Particulate Matter --No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR§6-4.3., FL02]

5.1.3. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5., FL02]

5.1.4. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6., FL02]

5.1.5. The permittee has defined the facility as a minor source of HAPs for existing source MACT applicability purposes. As a result, the subject facility shall conduct monitoring, testing, and reporting as specified below in order to provide adequate justification for maintaining minor source status. This requirement shall in no way restrict the permittee from conducting more frequent testing to quantify emissions increases.
[40 C.F.R. § 63.10 (b) (3), 40 C.F.R. Part 63 Subpart HH, FL02]

5.1.6. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§10-4.1.a through 45CSR§10-4.1.e.
[45CSR§10-4.1., DEHY02, FL02]

5.1.7. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.
[45CSR§10-5.1., DEHY02, FL02]

5.1.8. If the annual emissions for 2010 or any year thereafter reaches or exceeds 1 tpy of benzene for the dehydration unit, the permittee shall comply with the following:

Each owner or operator of an area source not located in a UA plus offset and UC boundary (as defined in 40 C.F.R. § 63.761) shall comply with the following:

a. Determine the optimum glycol circulation rate using the following equation:

$$\mathbf{L_{OPT} = 1.15 * 3.0\ (gal\ TEG / lb\ H_2O) * [F * (I - O) / (24\ hr/day)]}$$

Where:

L_{OPT} = Optimal circulation rate, gal/hr.
F = Gas flowrate (MMSCF/D).
I = Inlet water content (lb/MMSCF).
O = Outlet water content (lb/MMSCF).
3.0 = The industry accepted rule of thumb for a TEG-to water ratio (gal TEG/lb H_2O).
1.15 = Adjustment factor included for a margin of safety.

b. Operate the TEG dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with 40 C.F.R. § 63.764 (d) (2) (i). If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with 40 C.F.R. § 63.764 (d) (2) (i), the owner or operator must calculate an alternate circulation rate using GRI–GLYCalc™ , Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with 40 C.F.R. § 63.775 (c) (7).

c. Maintain a record of the determination specified in 40 C.F.R. § 63.764 (d) (2) (ii) in accordance with the requirements in 40 C.F.R. § 63.774 (f) and submit the Initial Notification in accordance with the requirements in 40 C.F.R. § 63.775 (c) (7). If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with 40 C.F.R. §§ 63.764 (d) (2) (i) or (ii) and submit the information specified under 40 C.F.R. § 63.775 (c) (7) (ii) through (v).

[40 C.F.R. §§ 63.764 (d) (2) and (e) (1) (ii)]

5.1.9. Maximum Throughput Limitation.

The maximum wet natural gas throughput to the glycol dehydration unit / still column (DEHY02) shall not exceed 22 mmscfd. Compliance with the Maximum Throughput Limitation shall be determined by measuring the daily wet natural gas throughput to the glycol dehydration unit.
[45CSR§30-5.1.c., 45CSR13, R13-2915, 7.1.1.]

5.1.10. Maximum emissions from the Cameron glycol dehydration unit flare (FL02) shall not exceed the following emission limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Volatile Organic Compounds	6.85	30.00
Benzene	0.10	0.45
Toluene	0.25	1.11
Xylene	0.53	2.34

[45CSR13, R13-2915, 7.1.2.]

5.1.11. For purposes of determining potential HAP emissions at production-related facilities, the methods specified in 40 C.F.R. Part 63 Subpart HH (i.e. excluding compressor engines from HAP PTE) shall be used.
[45CSR13, R13-2915, 7.1.3.]

5.1.12. The Cameron SHV-4 flare (FL02) subject to this section shall be designed and operated in accordance with the following:

a Flare (FL02) shall be non-assisted.

b. The flare (FL02) shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

c. The flare (FL02) 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:

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

Where:

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

K Constant = $K = 1.740 \times 10^{-7}$ (1/ppmv) (g mole/scm) (MJ/Kcal)
Where the standard temperature for (g-mole/scm) is 20 °C.

C_i = Concentration of sample component i in ppmv on a wet basis, which may be measured for organics by 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. Nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided by Sections 5.1.12.f and 5.1.12.g. 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 40 C.F.R. Part 60 Appendix A, as appropriate, but is not required to be determined using these Methods (unless designated by the Director).

f. Nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in Section 5.1.12.e, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

g. Nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in Section 5.1.12.e, 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:

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

Where:

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

28.8 = Constant.

31.7 = Constant.

H_T = The net heating value as determined in Section 5.1.12.d.

[45CSR13, R13-2915, 7.1.4.]

5.1.13. 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 5.3.3, but the permittee is required to conduct a flare design evaluation in accordance with Section 5.4.5. Alternatively, the permittee may elect to demonstrate compliance with the flare design criteria requirements of Section 5.1.12 by complying with the compliance assessment testing requirements of Section 5.3.3.
[45CSR13, R13-2915, 7.1.5.]

5.2. Monitoring Requirements

5.2.1. In order to demonstrate compliance with the minor source status claimed within Section 5.1.5 the permittee shall use GRI-GLYCalc V3 or higher to estimate emissions from the dehydration system. The dehydration system must be accurately defined by monitoring and recording actual operating parameters associated with the dehydration system. These parameters shall be measured periodically in order to define annual average values or if monitoring is not practical some parameters may be assigned default values as listed below. Periodically, shall be interpreted as sufficient enough to reflect annual variation and therefore, this term is operating parameter and site dependant.

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

- Natural Gas Flowrate:
  - Number of days operated per year,
  - Annual daily average (MMscf/day), and
  - Maximum design capacity (MMscf/time)
- Absorber temperature and pressure
- Lean glycol circulation rate
- Glycol pump type
- Flash tank temperature and pressure
- Stripping Gas flow rate, if applicable
- Wet gas composition (upstream of the absorber – dehydration column) Sampled in accordance with GPA method 2166 and analyzed consistent with GPA extended method 2286 as well as the procedures presented in the GRI-GLYCalc Technical Reference User Manual and Handbook V4.

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

- Dry Gas water content at a point directly after exiting the dehydration column and before any additional separation points or assume pipeline quality at 7 lb H_2O / MMscf.
- Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI
- Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI.

[45CSR§30-5.1.c]

5.2.2. Visual emission checks of each emission point specified shall be conducted monthly. If during these checks or at any other time visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with Method 9 of 40 C.F.R. 60, Appendix A (July 1, 1994). Records shall be maintained on site stating the date and time of each visible emission check, whether visible emissions were observed, the opacity observed, and the corrective measures taken. Visible emission checks shall not be required during start-ups, shut-downs and malfunctions.
[45CSR§30-5.1.c., FL02]

5.2.3. At a minimum of once per year, sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of Sulfur. Proof of compliance with the 2000 ppm_V limit will be considered demonstrated if the gas chromatograph shows a total sulfur content of 2.143 grains/100ft^3 or less. Records shall be maintained on site or at a reasonable available location stating the date and time of analysis and the sulfur content of the gas sampled.
[45CSR§30-5.1.c., DEHY02, FL02]

5.2.4. At a minimum of once per year, sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of H_2S. Proof of compliance with the 50 grains/100ft^3 limit will be considered demonstrated if the gas chromatograph shows a total H_2S content of 0.216 grains/100ft^3 or less. Records shall be maintained on site or at a reasonably available location stating the date of analysis and the hydrogen sulfide content of the gas sampled.
[45CSR§30-5.1.c., DEHY02, FL02]

5.2.5. In order to demonstrate compliance with the requirements of Section 5.1.12.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.
[45CSR§30-5.1.c., 45CSR13, R13-2915, 7.2.1., 40 C.F.R. § 64.3 (a)]

5.2.6. The permittee shall monitor the throughput of wet natural gas fed to the dehydration system on a **daily and monthly** basis for the glycol dehydration unit (DEHY02).
[45CSR§30-5.1.c., 45CSR13, R13-2915, 7.2.2.]

5.2.7. Excursions

The dehydration unit is designed to "shutdown" if the absence of a flame is detected after automatic reignition is unsuccessful. Therefore an excursion will occur if the dehydration unit is not shutdown when the absence of a flame is detected after unsuccessful reignition.
[45CSR§30-5.1.c., 40 CFR § 64.6(c)(2)]

5.2.8. Proper maintenance.

At all times, the owner or operator shall maintain the monitoring specified in Section 5.2.5 , including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[45CSR§30-5.1.c; 40 C.F.R. § 64.7 (b)]

5.2.9. Continued operation.

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[45CSR§30-5.1.c., 40 C.F.R. § 64.7 (c)]

5.2.10. Response to excursions or exceedances.

a. Upon detecting an excursion or exceedance, the owner or operation shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

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

5.2.11. Documentation of need for improved monitoring.

After approval of monitoring under 40 C.F.R. 64, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[45CSR§30-5.1.c; 40 C.F.R. § 64.7 (e)]

5.2.12. Quality Improvement Plan (QIP)

Based on the results of a determination made under Section 5.2.10.b, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 C.F.R. §§ 64.8 (b) through (e). Refer to Section 5.5.2.b.iii for the reporting required when a QIP is implemented.
[45CSR§30-5.1.c.; 40 C.F.R. § 64.8]

5.3. Testing Requirements

5.3.1. At least once per calendar year upon issuance of permit, the permittee shall determine the contents of the wet natural gas stream by analyzing the sample using GPA Method 2286 extended analysis. As specified in the handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration contactor column, but after any type of separation device, in accordance with GPA method 2166. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date.
[45CSR§30-5.1.c. (DEHY02)]

5.3.2. In order to demonstrate compliance with the flare opacity requirements of 5.1.12.b 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 40 C.F.R. Part 60 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 C.F.R. Part 60 Appendix A, Method 22 or from the lecture portion of 40 C.F.R. Part 60 Appendix A, Method 9 certification course.
[45CSR13, R13-2915, 7.3.1.]

5.3.3. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with Section 5.1.12. 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 C.F.R. 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, R13-2915, 7.3.2.]

5.3.4. In order to demonstrate compliance with 5.1.11, upon request of the Director, the permittee shall demonstrate compliance with the HAP emissions thresholds using GLYCalc Version 3.0 or higher. The permittee shall sample in accordance with GPA Method 2166 and analyze the samples utilizing the extended GPA Method 2286 as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook.
[45CSR13, R13-2915, 7.3.3.]

5.4. Recordkeeping Requirements

5.4.1. For the purpose of demonstrating compliance with Sections 5.1.2 and 5.2.2, the permittee shall maintain records of all monitoring data documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, and the results of the check(s). The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note “out of service” (O/S) or equivalent.
[45CSR§30-5.1.c]

5.4.2. Records of all periodic testing/checks, calibration, and maintenance per manufacturer’s specifications and recommendations shall be maintained for the Flare (FL02) flame monitoring device.

All records shall be maintained in the manner specified in Condition 3.4.2.

[45CSR§30-5.1.c; 40 C.F.R. § 64.9 (b)]

5.4.3. General recordkeeping requirements for 40 C.F.R. Part 64 (CAM). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 (Condition 5.2.12) and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
[45CSR§30-5.1.c.; 40 C.F.R. § 64.9 (b)]

5.4.4. For the purpose of demonstrating compliance with Sections 5.1.12.c and 5.2.5, the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.
[45CSR13, R13-2915, 7.4.1.]

5.4.5 For the purpose of demonstrating compliance with Sections 5.1.12 and 5.3.3, 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, R13-2915, 7.4.2.]

5.4.6. For the purpose of demonstrating compliance with the requirements set forth in Section 5.1.12, the permittee shall maintain records of testing conducted in accordance with 5.3.4.
[45CSR13, R13-2915, 7.4.3.]

5.4.7. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of Sections 5.2.5 through 5.2.6 and testing requirements of Sections 5.3.2 through 5.3.4.
[45CSR13, R13-2915, 7.4.4.]

5.4.8. For the purpose of demonstrating compliance with Section 5.1.12.b, the permittee shall maintain records of the visible emission opacity tests conducted per Section 5.3.2.
[45CSR13, R13-2915, 7.4.5.]

5.4.9. For the purpose of demonstrating compliance with section 5.1.11, the permittee shall maintain a record of all potential to emit (PTE) HAP calculations for the entire affected facility. These records shall include the natural gas compressor engines and ancillary equipment.
[45CSR13, R13-2915, 7.4.6.]

5.4.10. 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 Section 5.1.9.
[45CSR13, R13-2915, 7.4.7.]

5.4.11. All records required under Sections 5.4.4 through 5.4.10 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, R13-2915, 7.4.8.]

5.5. Reporting Requirements

5.5.1. The permittee shall submit by March 31st of the following year, an emission summary for the dehydration unit, which incorporates the wet gas testing results required by 5.3.1. The permittee shall also supply a copy of the most recent report within the facility's subsequent Title V renewal application. These reports shall include an actual annual average emission estimate for the calendar year of the sample, modeled using GLYCalc V3 or higher software, which incorporates site specific parameters measured in accordance with 5.2.1. The permittee shall also supply all supporting documentation where site specific operating parameters are tabulated to define the annual average values. The report shall also incorporate a copy of the lab analysis obtained from the wet gas testing as well as a description of how and where the sample was taken. The report shall include a reference to all sampling and analytical methods utilized. Additionally, the permittee shall identify where the compressor station is located with respect to a custody transfer point, which is referenced within 40 C.F.R 63 Subpart HH as the point where the gas enters into a natural gas transmission and/or storage pipeline. This report shall be signed by a responsible official upon submittal.
[45CSR§30-5.1.c]

5.5.2. General reporting requirements for 40 C.F.R. Part 64 (CAM)

a. On and after the date specified in 40 C.F.R. § 64.7 (a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. Part 64, the permittee shall submit monitoring reports to the DAQ in accordance with Section 3.5.6.

b. A report for monitoring under 40 C.F.R. Part 64 shall include, at a minimum, the information required under Section 3.5.8 and the following information, as applicable:

i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c.; 40 C.F.R. § 64.9 (a)]

5.5.3. If permittee is required by the Director to demonstrate compliance with Section 5.3.3, then the permittee shall submit a testing protocol at least thirty (30) days prior to testing and shall submit a notification of the testing date at least fifteen (15) days prior to testing. The permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.
[45CSR13, R13-2915, 7.5.1.]

5.5.4. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40 C.F.R. Part 60 Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but 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, R13-2915, 7.5.2]

5.5.5. Any deviation(s) from the flare design and operation criteria in Section 5.1.12 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, R13-2915, 7.5.3]

5.6. Compliance Plan

5.6.1. None

6.0 Emergency Generators [emission unit ID(s) EG01 and EG02; emission point ID(s): EG01 and EG02]

6.1. Limitations and Standards

6.1.1. The permittee is authorized to operate the Emergency Generators (EG01 and EG02) with the following emission limits in accordance with all terms and conditions of the 45CSR13 G60-C Class II General Permit (See Appendix).

Emission Unit	Pollutant	Maximum Hourly Emissions	Maximum Annual Emissions
		lb/hr	tpy
EG01	Nitrogen Oxides	0.03	0.01
	Carbon Monoxide	0.39	0.10
	Volatile Organic Compounds	0.19	0.05
	Formaldehyde	0.03	0.01
EG02	Nitrogen Oxides	0.03	0.01
	Carbon Monoxide	0.39	0.10
	Volatile Organic Compounds	0.19	0.05
	Formaldehyde	0.03	0.01

Compliance with the streamlined emission limits will ensure compliance with the emission limits calculated from the emission standards for HP≥130 from Table 1of 40 C.F.R. § 60.4248.

[45CSR16, 45CSR13, G60-C026]

6.2. Monitoring Requirements

6.2.1. See Condition 5.2.1 from G60-C026 that is located in the Appendix of this permit.

6.3. Testing Requirements

6.3.1. See Section 3.3.1.

6.4. Recordkeeping Requirements

6.4.1. See Condition 5.4.1 from G60-C026 that is located in the Appendix of this permit.

6.5. Reporting Requirements

6.5.1. Reserved

6.6. Compliance Plan

6.6.1. Reserved

7.0. Reciprocating Internal Combustion Engines (emission unit ID(s) EN01, EN02, EN03; emission point ID(s): EN01, EN02, EN03)

7.1. Limitations and Standards

7.1.1. The Permittee shall comply with all applicable requirements of 40 C.F.R. Part 63 Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines by October 19, 2013 for the 800 HP and 1000 HP reciprocating engines with integral compressors.
[45CSR34, 40 C.F.R. § 63.6595 (a) (1) (EN01 and EN02)]

7.1.2. As stated in 40 C.F.R. § 63.6603, the permittee must comply with the following requirements from 40 C.F.R. Part 63 Subpart ZZZZ, Table 2d for existing stationary RICE located at area sources of HAP emissions:

Table 2d

For each . . .	The permittee must meet the following requirements, except during periods of startup . . .
~~Non-emergency, non-black start 4SLB stationary RICE >500 HP~~ Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year (EN01)	~~Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O_2; or~~
	~~Reduce CO emissions by 93 percent or more.~~ Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.
Non-emergency, non-black start 2SLB stationary RICE (EN02)	Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[1]
	Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and
	Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.

[1]Sources have the option to utilize an oil analysis program as described in 40 C.F.R. § 63.6625 (i) in order to extend the specified oil change requirement in Table 2d of 40 C.F.R. Part 63 Subpart ZZZZ.

~~Table 2b~~

~~For each . . .~~	~~You must meet the following operating limitation . . .~~
~~2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI~~	~~Comply with any operating limitations approved by the Administrator.~~

~~stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst (EN01)~~	

[45CSR34, 40 C.F.R. § 63.6603 (a), and Tables 2d (EN01 and EN02)] ~~and 2b (EN01)]~~

7.1.3. The permittee shall comply with the following requirements:

a. The permittee must be in compliance with the emission limitations and operating limitations in 40 C.F.R. Part 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.

[45CSR34, 40 C.F.R. § 63.6605 (EN01 and EN02)]

7.1.4. (a) You must demonstrate initial compliance with each emission, ~~and~~ operating limitation, and other requirement that applies to you according to Table 5 of 40 C.F.R. Part 63 Subpart ZZZZ.

Table 5

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if. . .
~~4.~~ 13… existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year (EN01)	~~a. Limit the concentration of CO, and not using oxidation catalyst~~ a. Install an oxidation catalyst	~~i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and~~ ~~ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in 40 C.F.R. § 63.6625 (b); and~~ ~~iii. You have recorded the approved operating parameters (if any) during the initial performance test.~~ i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O2;

		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.

~~(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of 40 C.F.R. Part 63 Subpart ZZZZ that applies to you.~~

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 C.F.R. § 63.6645.

[45CSR34, 40 C.F.R. § 63.6630 (a) and (c), Table 5 (EN01)]

7.1.5. ~~7.1.5. (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.~~

~~(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.~~

~~(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.~~

~~**[40 C.F.R. § 63.6635 (EN01)]**~~

~~7.2.1c~~ If you own or operate any of the following stationary RICE, ~~Y~~you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop 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:

~~1.1~~ An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;
[45CSR34, 40 C.F.R. § 63.6625(e)(5), (EN02)]

7.1.6. ~~7.1.6. The permittee shall demonstrate continuous compliance by doing the following:~~

~~a. The permittee must demonstrate continuous compliance with each emission limitation and operating limitation in Table 2d of 40 C.F.R. Part 63 Subpart ZZZZ that apply to the permittee according to methods specified in Table 6 of 40 C.F.R. Part 63 Subpart ZZZZ.~~

~~Table 6 states that for work or management practices, the permittee shall operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions; or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.~~

~~b. The permittee must report each instance in which you did not meet each emission limitation or operating limitation in and Table 2d of 40 C.F.R. Part 63 Subpart ZZZZ that apply. These instances are deviations from the emission and operating limitations. These deviations must be~~

~~reported according to the requirements in 40 C.F.R. § 63.6650.~~

~~c. The permittee must also report each instance in which the applicable requirements in Table 8 of 40 C.F.R. Part 63 Subpart ZZZZ were not met~~.

~~7.2.1e~~ If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d 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.
[45CSR34, 40 C.F.R. § 63.6625(j), (EN02)]

7.1.7. ~~7.1.7. To demonstrate compliance with Section 5.1.2, the quantity of natural gas that shall be consumed in the 750 HP Ajax DPC 2804LE natural gas fired reciprocating engine shall not exceed 4,925 cubic feet per hour and 43.14 x 10^6 cubic feet per year.~~
~~**[45CSR13, R13-2915, 5.1.1. (EN03)]**~~

~~7.2.1d~~ 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, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
[45CSR34, 40 C.F.R. § 63.6625(h), (EN01 and EN02)]

7.1.8. ~~7.1.6~~. The permittee shall demonstrate continuous compliance by doing the following:

a. The permittee must demonstrate continuous compliance with each emission limitation ~~and~~ operating limitation, and other requirements in Table 2d of 40 C.F.R. Part 63 Subpart ZZZZ that apply to the permittee according to methods specified in Table 6 of 40 C.F.R. Part 63 Subpart ZZZZ.

Table 6

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
11~~. … existing~~ Existing non-emergency 4SLB ~~and 4SRB~~ stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year ~~and are not limited use stationary RICE~~ (EN01)	a~~. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR~~ Install an oxidation catalyst	~~i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and~~ ~~ii. Collecting the approved operating parameter (if any) data according to 40 C.F.R. § 63.6625~~

		~~(b); and~~ ~~iii. Reducing these data to 4-hour rolling averages; and~~ ~~iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.~~ i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
9. …existing non-emergency 2SLB stationary RICE located at an area source of HAP … (EN02)	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

~~Table 6 states that for work or management practices, the permittee shall operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions; or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.~~

b. The permittee must report each instance in which you did not meet each emission limitation or operating limitation in ~~and~~ Table 2d of 40 C.F.R. Part 63 Subpart ZZZZ that apply. These instances are deviations from the emission and operating limitations. These deviations must be reported according to the requirements in 40 C.F.R. § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

~~c. The permittee must also report each instance in which the applicable requirements in Table 8 of 40 C.F.R. Part 63 Subpart ZZZZ were not met.~~

[45CSR34, 40 C.F.R. §§ 63.6640 (a)~~,~~ and (b) ~~and (e)~~ and Table 6 (EN01 and EN02)]

7.1.9.~~7~~ To demonstrate compliance with Section 5.1.2, the quantity of natural gas that shall be consumed in the 750 HP Ajax DPC-2804LE natural gas fired reciprocating engine shall not exceed 4,925 cubic feet per hour and 43.14 x 10^6 cubic feet per year.
[45CSR13, R13-2915, 5.1.1. (EN03)]

7.1.10.~~8~~ Maximum emissions from the 750 HP Ajax DPC-2804LE natural gas fired reciprocating engine shall not exceed the following emission limits:

Pollutant	Maximum Hourly Emissions LB/hour	Maximum Annual Emissions TPY
Nitrogen Oxides	1.66	7.20
Carbon Monoxide	1.24	5.40
Volatile Organic Compounds	0.50	2.20
Formaldehyde	0.33	1.43

Compliance with the streamlined emission limits for NO_X, CO, and VOC will ensure compliance with the emission limits calculated from the emission standards for EN03 from Table 1of 40 C.F.R. Part Subpart JJJJ (see Section 7.1.~~13.~~15).

[45CSR13, R13-2915, 5.1.2. (EN03)]

7.1.11.~~9~~ Requirements for Use of Catalytic Reduction Devices

No person shall knowingly:

1. Remove or render inoperative the Cameron Catalytic Converter (CC01);

2. Install any part or component when the principal effect of the part or component is to bypass, defeat or render inoperative the Cameron Catalytic Converter (CC01); or

3. Cause or allow engine exhaust gases to bypass the Cameron Catalytic Converter (CC01).

[45CSR13, R13-2915, 5.1.3. (EN03)]

7.1.12.~~10~~ The provisions of this subpart are applicable to owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified below. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

a. Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

ii. On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

[45CSR16, 40 C.F.R. § 60.4230 (a) (3) (ii), 45CSR13, R13-2915, 8.1.1. (EN03)]

7.1.13.~~11~~ If you are an owner or operator of an area source subject to 40 C.F.R. Part 60 Subpart JJJJ, you are exempt from the obligation to obtain a permit under 40 C.F.R. Part 70 or 40 C.F.R. Part 71, provided you are not required to obtain a permit under 40 C.F.R. § 70.3 (a) or 40 C.F.R. § 71. 3 (a) for a reason other than your status as an area source under 40 C.F.R. Part 60 Subpart JJJJ. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

[45CSR16, 40 C.F.R. § 60.4230 (c), 45CSR13, R13-2915, 8.1.2. (EN03)]

7.1.14.~~12~~ Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 C.F.R. Part 1068 Subpart C (or the exemptions described in 40 C.F.R. Parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.
[45CSR16, 40 C.F.R. § 60.4230 (e), 45CSR13, R13-2915, 8.1.3. (EN03)]

7.1.15.~~13~~ Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to 40 C.F.R. Part 60 Subpart JJJJ for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 C.F.R. Part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to 40 C.F.R. Part 60 Subpart JJJJ, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

Table 1

Engine Type and Fuel	Maximum Engine Power	Manufacture Date	Emission Standards[a]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC[d]	NO_X	CO	VOC[d]
Non-Emergency SI Lean Burn Natural Gas and LPG	500≤HP<1,350	1/1/2008	2.0	4.0	1.0	160	540	86

[a] Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O2.

[d] For purposes of 40 C.F.R. Part 60 Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[45CSR16, 40 C.F.R. § 60.4233 (e) and Table 1, 45CSR13, R13-2915, 8.2.1. (EN03)]

7.1.16.~~14~~ Owners and operators of stationary SI ICE that are required to meet standards that reference 40 C.F.R. 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in 40 C.F.R. § 60.4233 (e).
[45CSR16, 40 C.F.R. § 60.4233 (h), 45CSR13, R13-2915, 8.2.2. (EN03)]

7.1.17.~~15~~ Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 C.F.R. § 60.4233 over the entire life of the engine.
[45CSR16, 40 C.F.R. § 60.4234, 45CSR13, R13-2915, 8.2.3. (EN03)]

7.1.18.~~16~~ After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in 40 C.F.R. § 60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in 40 C.F.R. § 60.4233 may not be installed after January 1, 2010.
[45CSR16, 40 C.F.R. § 60.4236 (b) 45CSR13, R13-2915, 8.3.1. (EN03)]

7.1.19.~~17~~ The requirements of 40 C.F.R. § 60.4236 do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

[45CSR16, 40 C.F.R.§ 60.4236 (e), 45CSR13, R13-2915, 8.3.2. (EN03)]

7.1.20.~~18~~ If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 C.F.R. § 60.4233 (d) or (e), you must demonstrate compliance according to one of the methods specified in 40 C.F.R. §§ 60.4243 (b) (1) and (2).

1. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in 40 C.F.R. § 60.4243 (a).

2. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 C.F.R. § 60.4233 (d) or (e) and according to the requirements specified in 40 C.F.R. § 60.4244, as applicable, and according to 40 C.F.R. §§ 60.4243 (b) (2) (i) and (ii).

   i. If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

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

[45CSR16, 40 C.F.R. § 60.4243 (b), 45CSR13, R13-2915, 8.4.1. (EN03)]

7.1.21.~~19~~ Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 C.F.R. § 60.4233.
[45CSR16, 40 C.F.R. § 60.4243 (e), 45CSR13, R13-2915, 8.4.2. (EN03)]

7.1.22.~~20~~. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
[45CSR16, 40 C.F.R. § 60.4243 (g), 45CSR13, R13-2915, 8.4.3. (EN03)]

7.2. Monitoring Requirements

7.2.1. ~~This facility is subject to the following requirements:~~

~~a. If you elect to install a CEMS as specified in Table 5 of 40 C.F.R. Part 63 Subpart ZZZZ, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO_2 at both the inlet and the outlet of the control device according to the requirements in 40 C.F.R. §§ 63.6625 (a) (1) through (4).~~

~~1. Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 C.F.R. Part 60 Appendix B.~~

~~2. You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in 40 C.F.R. § 63.8 and according to the applicable performance specifications of 40 C.F.R. Part 60 Appendix B as well as daily and periodic data quality checks in accordance with 40 C.F.R. Part 60 Appendix F, procedure 1.~~

~~3. As specified in 40 C.F.R. § 63.8 (c) (4) (ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.~~

~~4. The CEMS data must be reduced as specified in 40 C.F.R. § 63.8 (g) (2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2 concentration.~~

~~**[40 C.F.R. § 63.6625 (a) (EN01)]**~~

~~b.~~ If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 C.F.R. Part 63 Subpart ZZZZ, you must install, operate, and maintain each CPMS according to the requirements in 40 C.F.R. §§ 63.6625 (b) (1) through (~~5~~ 6). ~~For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in 40 C.F.R. § 63.6625 (b) are applicable September 6, 2011.~~

1. You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in 40 C.F.R. §§ 63.6625 (b) (1) (i) through (v) and in 40 C.F.R. § 63.8 (d). As specified in 40 C.F.R. § 63.8 (f) (4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 C.F.R. §§ 63.6625 (b) (1) through (5) in your site-specific monitoring plan.

   i. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

   ii. Sampling interface (*e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;

   iii. Equipment performance evaluations, system accuracy audits, or other audit procedures;

   iv. Ongoing operation and maintenance procedures in accordance with provisions in 40 C.F.R. §§ 63.8 (c) (1)(ii) and (c) (3); and

   v. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 C.F.R. §§ 63.10 (c), (e) (1), and (e) (2) (i).

2. You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

3. The CPMS must collect data at least once every 15 minutes (see also 40 C.F.R. § 63.6635).

4. For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

5. You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

6. You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

[45CSR34, 40 C.F.R. § 63.6625 (b) (EN01)]

~~c. You must operate and maintain the stationary RICE and after treatment control device (if any) according to the manufacturer's emission-related written instructions or develop 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:~~

~~1.1 An existing non emergency, non black start 2SLB stationary RICE located at an area source of HAP emissions;~~

~~**[40 C.F.R. § 63.6625 (e) (5) (EN02)]**~~

~~d. 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, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 C.F.R. 63 Subpart ZZZZ apply.~~
~~**[40 C.F.R. § 63.6625 (h) (EN01 and EN02)]**~~

~~e. If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to of 40 C.F.R. 63 Subpart ZZZZ or in items 5, 6, 7, 9, or 11 of Table 2d to of 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 Tables 2c and 2d to of 40 C.F.R. 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to of 40 C.F.R. 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 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 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) (EN02)]**~~

7.2.2. ~~7.1.5.~~ (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, ~~(including, as applicable, calibration checks and required zero and span adjustments),~~ you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[45CSR34, 40 C.F.R. § 63.6635 (EN01)]

7.2.3.~~2.~~ Catalytic Oxidizer Control Devices

The permittee shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The permittee shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:

1. Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.

2. Following operating and maintenance recommendations of the catalyst element manufacturer.

[45CSR13, R13-2915, 5.2.1. (EN03)]

7.3. Testing Requirements

~~7.3.1. If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of 40 C.F.R. Part 63 Subpart ZZZZ.~~

~~Table 3~~

~~For each . . .~~	~~Complying with the requirement to . . .~~	~~You must . . .~~
~~4. … existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE (EN01)~~	~~Limit or reduce CO or formaldehyde emissions~~	~~Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.~~

~~**[40 C.F.R. § 63.6615 and Table 3 (EN01)]**~~

~~7.3.2. a. You must conduct each performance test in Tables 3 and 4 of 40 C.F.R. Part 63 Subpart ZZZZ that applies to you.~~

~~b. Each performance test must be conducted according to the requirements that 40 C.F.R. Part 63 Subpart ZZZZ specifies in Table 4. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.~~

~~c. [Reserved]~~

~~d. You must conduct three separate test runs for each performance test required in this section, as specified in 40 C.F.R. § 63.7 (e) (3). Each test run must last at least 1 hour.~~

~~e. 1. You must use Equation 1 of this section to determine compliance with the percent reduction requirement:~~

$$\cancel{[(C_i - C_o) / C_i] \times 100 = R \qquad (Eq.\ 1)}$$

~~Where:~~

~~C_i = concentration of CO or formaldehyde at the control device inlet,~~

~~C_o = concentration of CO or formaldehyde at the control device outlet, and~~

~~R = percent reduction of CO or formaldehyde emissions.~~

~~2. You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in 40 C.F.R. §§ 63.6620 (e) (2) (i) through (iii).~~

~~i. Calculate the fuel specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:~~

$$\cancel{F_o = (0.209\, F_d / F_c) \qquad (Eq.\ 2)}$$

~~Where:~~

~~F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.~~

~~0.209 = Fraction of air that is oxygen, percent/100.~~

~~F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).~~

~~F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).~~

~~ii. Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:~~

$$\cancel{X_{CO2} = [\,5.9 / F_o\,]} \qquad \cancel{(Eq.\ 3)}$$

~~Where:~~

~~X_{CO2} = CO_2 correction factor, percent.~~
~~5.9 = 20.9 percent O_2 – 15 percent O_2, the defined O_2 correction value, percent.~~

~~iii. Calculate the NO_x and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:~~

$$\cancel{C_{adj} = [\,C_d\,(X_{CO2} / \%CO_2)\,]} \qquad \cancel{(Eq.\ 4)}$$

~~Where:~~

~~$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.~~

~~f. If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.~~

~~g. If you petition the Administrator for approval of operating limitations, your petition must include the information described in 40 C.F.R. §§ 63.6620 (g) (1) through (5).~~

~~1. Identification of the specific parameters you propose to use as operating limitations;~~

~~2. A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;~~

~~3. A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;~~

~~4. A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and~~

~~5. A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.~~

~~h. If you petition the Administrator for approval of no operating limitations, your petition must include the information described in 40 C.F.R. §§ 63.6620 (h) (1) through (7).~~

~~1. Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment,~~

~~automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time;~~

~~2. A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;~~

~~3. For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;~~

~~4. For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;~~

~~(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;~~

~~6. For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and~~

~~7. A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.~~

~~i. The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.~~

~~**[40 C.F.R. § 63.6620 (EN01)]**~~

7.3.1.~~3~~ If you own or operate an existing 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 stationary RICE located at an area source of HAP emissions you are subject to the requirements of 40 C.F.R. § 63.6612.

a. You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to 40 C.F.R. Part 63 Subpart ZZZZ that apply to you within 180 days after the compliance date that is specified for your stationary RICE in 40 C.F.R. § 63.6595 and according to the provisions in 40 C.F.R. § 63.7 (a) (2).

b. An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in 40 C.F.R. §§ 63.6612 (b) (1) through (4).

1. The test must have been conducted using the same methods specified in 40 C.F.R. Part 63 Subpart ZZZZ, and these methods must have been followed correctly.

2. The test must not be older than 2 years.

3. The test must be reviewed and accepted by the Administrator.

4. Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[45CSR34, 40 C.F.R. § 63.6612 (EN01)]

7.3.2. The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

[45CSR34, 40 C.F.R. § 63.6630(e) (EN01)]

7.3.3. The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods

specified in Table 4 of 40 C.F.R. 63, Subpart ZZZZ, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of 40 C.F.R. 63, Subpart ZZZZ, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of 40 C.F.R. 63, Subpart ZZZZ. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of 40 C.F.R. 63, Subpart ZZZZ.

[45CSR34, 40 C.F.R. § 63.6640(c) (EN01)]

7.3.4. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in 40 C.F.R. §§ 60.4244 (a) through (f).

a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 C.F.R. § 60.8 and under the specific conditions that are specified by Table 2 to 40 C.F.R. Part 60 Subpart JJJJ.

b. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 C.F.R. § 60.8 (c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

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

d. To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of 40 C.F.R. § 60.4244:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 1)}$$

Where:

ER = Emission rate of NO_X in g/HP-hr.

C_d = Measured NO_X concentration in parts per million by volume (ppmv).

1.912×10^{-3}	=	Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.
Q	=	Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.
T	=	Time of test run, in hours.
HP-hr	=	Brake work of the engine, horsepower-hour (HP-hr).

e. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of 40 C.F.R. § 60.4244:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 2)}$$

Where:

ER	=	Emission rate of CO in g/HP-hr.
C_d	=	Measured CO concentration in ppmv.
1.164×10^{-3}	=	Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.
Q	=	Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T	=	Time of test run, in hours.
HP-hr	=	Brake work of the engine, in HP-hr.

f. For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of 40 C.F.R. § 60.4244:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:

ER	=	Emission rate of VOC in g/HP-hr.
C_d	=	VOC concentration measured as propane in ppmv.
1.833×10^{-3}	=	Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.
Q	=	Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T	=	Time of test run, in hours.
HP-hr	=	Brake work of the engine, in HP-hr.

g. If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 C.F.R. Part 60 Appendix A, or Method 320 of 40 C.F.R. Part 63 Appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of 40 C.F.R. § 60.4244.

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

Where:

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

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

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

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

Where:

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

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

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

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

[45CSR16, 40 C.F.R. § 60.4244, 45CSR13, R13-2915, 8.5.1. (EN03)]

7.4. Recordkeeping Requirements

7.4.1. If the permittee must comply with the emission and operating limitations, the permittee must keep the following records:

a. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 C.F.R. § 63.10 (b) (2) (xiv).

b. Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

c. Records of performance tests and performance evaluations as required in 40 C.F.R. § 63.10 (b) (2) (viii).

d. Records of all required maintenance performed on the air pollution control and monitoring equipment.

e. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.6605 (b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[45CSR34, 40 C.F.R. § 63.6655 (a) (EN01 ~~and EN02~~)]

7.4.2. For each CEMS or CPMS, you must keep the records listed in 40 C.F.R. §§ 63.6655 (b) (1) through (3).

1. Records described in 40 C.F.R. § 63.10 (b) (2) (vi) through (xi).

2. Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 C.F.R. § 63.8 (d) (3).

3. Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 C.F.R. § 63.8 (f) (6) (i), if applicable.

[45CSR34, 40 C.F.R. § 63.6655 (b) (EN01 ~~and EN02~~)]

7.4.3. The permittee shall keep the records required in Table 6 of 40 C.F.R. Part 63 Subpart ZZZZ to show compliance with each emission or operating limitation that applies
[45CSR34, 40 C.F.R. § 63.6655 (d) (EN01 and EN02)]

7.4.4. The permittee must keep records of the maintenance conducted on each stationary RICE in order to demonstrate that the permittee operated and maintained each stationary RICE and after-treatment control device (if any) according to the permittee's own maintenance plan.
[45CSR34, 40 C.F.R. § 63.6655 (e) (EN02)]

7.4.5. To demonstrate compliance with Sections 7.1.~~7~~ 9 and 7.1.~~8~~10, the permittee shall maintain monthly records of the amount of natural gas consumed in the engine (EN03) and the hours of operation of each 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, R13-2915, 5.3.1. (EN03)]

7.4.6. Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

a. Owners and operators of all stationary SI ICE must keep records of the information in 40 C.F.R. §§ 60.4245 (a) (1) through (4).

1. All notifications submitted to comply with this subpart and all documentation supporting any notification.

2. Maintenance conducted on the engine.

3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 C.F.R. Parts 90 and 1048.

4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 C.F.R. § 60.4243 (a) (2), documentation that the engine meets the emission standards.

b. For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of 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.

c. Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 C.F.R. § 60.4231 must submit an initial notification as required in 40 C.F.R. § 60.7 (a) (1). The notification must include the information in 40 C.F.R. § 60.4245 (c) (1) through (5).

1. Name and address of the owner or operator;

2. The address of the affected source;

3. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

4. Emission control equipment; and

5. Fuel used.

d. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 C.F.R. § 60.4244 within 60 days after the test has been completed.

[45CSR16, 40 C.F.R. § 60.4245, 45CSR13, R13-2915, 8.6.1. (EN03)]

7.5. Reporting Requirements

7.5.1. You must submit each report in Table 7 of 40 C.F.R. Part 63 Subpart ZZZZ that applies to you.
[45CSR34, 40 C.F.R. § 63.6650 (a) (EN01)]

7.5.2. Unless the Administrator has approved a different schedule for submission of reports under 40 C.F.R. § 63.10 (a), you must submit each report by the date in Table 7 of 40 C.F.R. Part 63 Subpart ZZZZ and according to the requirements in 40 C.F.R. §§ 63.6650 (b) (1) through (b) (9).

1. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 C.F.R. § 63.6595.

2. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 C.F.R. § 63.6595.

3. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

4. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

5. For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6 (a) (3) (iii) (A) or 40 CFR 71.6 (a) (3) (iii) (A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in 40 C.F.R. §§ 63.6650 (b) (1) through (b) (4).

6. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. § 63.6595 and ending on December 31.

7. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 C.F.R. § 63.6595.

8. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

9. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

[45CSR34, 40 C.F.R. § 63.6650 (b) (EN01)]

7.5.3. The Compliance report must contain the information in 40 C.F.R. §§ 63.6650 (c) (1) through (6).

1. Company name and address.

2. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

3. Date of report and beginning and ending dates of the reporting period.

4. If you had a malfunction during the reporting period, the compliance report must 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 40 C.F.R. § 63.6605 (b), including actions taken to correct a malfunction.

5. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

6. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 C.F.R. § 63.8 (c) (7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

[45CSR34, 40 C.F.R. § 63.6650 (c) (EN01)]

7.5.4. For each deviation from an emission or operating limitation that occurs for a stationary RICE not using a CMS to comply with the emission or operating limitations in 40 C.F.R. 63, Subpart ZZZZ, the Compliance report must contain the information specified in 40 C.F.R. §§ 63.6650 (c) (1) through (4) in addition to the following information:

a. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

[45CSR34, 40 C.F.R. § 63.6650 (d) (EN01)]

7.5.5. For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in 40 C.F.R. §§ 63.6650 (c) (1) through (4) and (e) (1) through (12).

1. The date and time that each malfunction started and stopped.

2. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

3. The date, time, and duration that each CMS was out-of-control, including the information in 40 C.F.R. § 63.8 (c) (8).

4. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

5. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

6. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

7. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

8. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

9. A brief description of the stationary RICE.

10. A brief description of the CMS.

11. The date of the latest CMS certification or audit.

12. A description of any changes in CMS, processes, or controls since the last reporting period.

[45CSR34, 40 C.F.R. § 63.6650 (e) (EN01)]

7.5.6. Each affected source that has obtained a title V operating permit pursuant to 40 C.F.R. Part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 C.F.R. § 70.6 (a) (3) (iii) (A) or 40 C.F.R. § 71.6 (a) (3) (iii) (A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 C.F.R. § 70.6 (a) (3) (iii) (A) or 40 C.F.R. § 71.6 (a) (3) (iii) (A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.
[45CSR34, 40 C.F.R. § 63.6650 (f) (EN01)]

7.5.7. You must submit all of the notifications in 40 C.F.R. §§ 63.7 (b) and (c), 63.8 (e), (f) (4) and (f) (6), 63.9 (b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

An existing stationary RICE located at an area source of HAP emissions.

[45CSR34, 40 C.F.R. § 63.6645 (a) (2) (EN01)]

7.5.8. If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 C.F.R. § 63.7 (b) (1).
[45CSR34, 40 C.F.R. § 63.6645 (~~f~~ g) (EN01)]

7.5.9. If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to 40 C.F.R. Part 63 Subpart ZZZZ, you must submit a Notification of Compliance Status according to 40 C.F.R. § 63.9 (h) (2) (ii).

1. For each initial compliance demonstration required in Table 5 to 40 C.F.R. Part 63 Subpart ZZZZ that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

2. For each initial compliance demonstration required in Table 5 to 40 C.F.R. Part 63 Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to 40 C.F.R. Part 63 Subpart ZZZZ, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 C.F.R. § 63.10 (d) (2).

[45CSR34, 40 C.F.R. § 63.6645 (h) (EN01)]

7.5.10. (e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or

an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.
[45CSR34, 40 C.F.R. § 63.6640 (e) (EN01)]

7.6. Compliance Plan

7.6.1. None

Appendix

Dominion Transmission, Inc.
Sardis Compressor Station
Plant ID – 03-54-03300013

45CSR13 G60-C Class II General Permit

West Virginia Department of Environmental Protection

Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Class II General Permit
G60-C Registration to Construct

for the
Prevention and Control of Air Pollution in regard to the
Construction, Modification, Relocation, Administrative Update and
Operation of Emergency Generators

The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of General Permit G60-C.

G60-C026

Issued to:
Dominion Transmission, Inc.
Sardis Compressor Station
033-00013

_____
John A. Benedict
Director

Issued: January 4, 2011 • *Effective: January 4, 2011*

Facility Location:	Sardis, Harrison County, West Virginia
Mailing Address:	445 West Main Street, Clarksburg, WV 26301
Facility Description:	Natural Gas Compressor Station
SIC Codes:	486210
UTM Coordinates:	552.890 km Easting • 4355.610 km Northing • Zone 17
Registration Type:	Construction
Description of Change:	Installation of two natural-gas-fired generators to be used in emergency situations.

Subject to 40CFR60 Subpart IIII? **No**
Subject to 40CFR60 Subpart JJJJ? **Yes,** Certified? **Yes**

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 or registration 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.

This permit does not affect 45CSR30 applicability, the source is a nonmajor source subject to 45CSR30.

All registered facilities under Class II General Permit G60-C are subject to Sections 1.0, 2.0, 3.0, and 4.0.

The following sections of Class II General Permit G60-C apply to the registrant:

Section 5	Reciprocating Internal Combustion Engines (R.I.C.E.)	☒
Section 6	Tanks	☐
Section 7	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart IIII)	☐
Section 8	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ)	☒

Emission Units

Emission Unit ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity (Bhp/rpm)
EG01	Cummins GM 8.1L	2011	192.5 bhp
EG02	Cummins GM 8.1L	2011	192.5 bhp

Reciprocating Internal Combustion Engines (R.I.C.E.) Information

Emission Unit ID	Subject to 40CFR60 Subpart IIII?	Subject to 40CFR60 Subpart JJJJ?	Subject to Sections 5.1.4/5.2.1 (Catalytic Reduction Device)
EG01	No	Yes	Yes
EG02	No	Yes	Yes

Emission Limitations

Emission Unit	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (tpy)
EG01 Cummins GM 8.1L	Nitrogen Oxides	0.03	0.01
	Carbon Monoxide	0.39	0.10
	Volatile Organic Compounds	0.19	0.05
	Formaldehyde	0.03	0.01
EG02 Cummins GM 8.1L	Nitrogen Oxides	0.03	0.01
	Carbon Monoxide	0.39	0.10
	Volatile Organic Compounds	0.19	0.05
	Formaldehyde	0.03	0.01

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West Virginia Department of Environmental Protection

Joe Manchin, III
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Class II General Permit G60-C

for the
Prevention and Control of Air Pollution in regard to the
Construction, Modification, Relocation, Administrative Update and
Operation of Emergency Generators

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation.

_____

John A. Benedict
Director

Issued: May 21, 2009

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.

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1.0. Emission Units

All emission units covered by this permit are listed on the issued G60-C Registration.

2.0. General Conditions

2.1. Purpose

The purpose of this Class II General Permit is to authorize the construction, modification, administrative update, relocation, and operation of eligible emergency generators through a Class II General Permit registration process. The requirements, provisions, standards and conditions of this Class II General Permit address the prevention and control of regulated pollutants from the operation of emergency generator(s).

2.2 Authority

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.2.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.3 Applicability

2.3.1. All emergency generators installed for the purpose of allowing key systems to continue to operate without interruption during times of utility power outages, including emergency generators installed at Title V(major) facilities and other facilities having additional point sources of emissions, are eligible for Class II General Permit registration except for:

a.. Any emergency generator which is a major source as defined in 45CSR14, 45CSR19 or 45CSR30;
b. Any emergency generator subject to the requirements of 45CSR14, 45CSR15, 45CSR19, 45CSR25, 45CSR27, 45CSR30, 45CSR34;
c. Any emergency generator whose estimated hours of operation exceeds 500 hours per year;
d. Any emergency generator located in or which may significantly impact an area which has been determined to be a nonattainment area. Unless otherwise approved by the Secretary.
e. Any emergency generator which will require an individual air quality permit review process and/or individual permit provisions to address the emission of a regulated pollutant or to incorporate regulatory requirements other than those established by General Permit G60-C.

2.3.2. For the purposes of General Permit G60-C, *emergency generator* means a generator whose purpose is to allow key systems to continue to operate without interruption during times of utility power outages.

2.3.3. The West Virginia Division of Air Quality reserves the right to reopen this permit or any authorization issued under this permit if the area in which the affected facility is located is federally designated as non-attainment for specified pollutants. If subsequently any proposed construction, modification and/or operation does not demonstrate eligibility and/or compliance with the requirements, provisions, standards and conditions of this General Permit, this General Permit registration shall be denied and an individual permit for the proposed activity shall be required.

2.3.4. Except for emergency diesel generators, all emission units covered by this permit, unless they are classified as De Minimis Sources in 45CSR13 Table 45-13B, must be fueled with pipeline-quality natural gas, field gas, propane gas, or equivalent with a maximum sulfur content of 20 grains of sulfur per 100 standard cubic feet and a maximum H_2S content of 0.25 grains per 100 cubic feet of gas (maximum allowed to have in natural gas sold for delivery through the interstate pipeline system).
[45CSR§13-5.11]

2.4. Definitions

2.4.1. 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.

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

2.4.3. "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.

2.5. Acronyms

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

NA	National Ambient Air Quality Standards	**VEE**	Volatile Organic Compounds
NAAQS	National Emissions Standards for Hazardous Air Pollutants	**VOC**	Volatile Organic Liquids
NESHAPS		**VOL**	

2.6. Permit Expiration and Renewal

2.6.1. This Class II General Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule.

2.6.2. General Permit registration granted by the Secretary shall remain valid, continuous and in effect unless it is suspended or revoked by the Secretary or this Class II General Permit is subject to action or change as set forth in Section 2.6.1 above. **[45CSR§13-10.2, 45CSR§13-10.3]**

2.6.3. The Secretary shall review and may renew, reissue or revise this Class II General Permit for cause. The Secretary shall define the terms and conditions under which existing General Permit registrations will be eligible for registration under a renewed, reissued, or revised General Permit and provide written notification to all General Permit registrants (or applicants). This notification shall also describe the registrant's (or applicant's) duty or required action and may include a request for additional information that may be required by any proposed general permit renewal, reissuance or revision.

2.7. Administrative Update to General Permit Registration

2.7.1. The registrant may request an administrative registration update to their General Permit registration as defined in and according to the procedures specified in 45CSR§13-4. **[45CSR§13-4.]**

2.8. Modification to General Permit Registration

2.8.1. The registrant may request a permit modification to their General Permit registration as defined in and according to the procedures specified in 45CSR§13-5. **[45CSR§13-5.]**

2.9. Duty to Comply

2.9.1. The registered affected facility shall be constructed and operated in accordance with the information filed in the General Permit Registration Application and any amendments thereto. The Secretary may suspend or revoke a General Permit registration if the plans and specifications upon which the approval was based are not adhered to.

2.9.2. The registrant must comply with all applicable conditions of this Class II General Permit. Any General Permit noncompliance constitutes a violation of the West Virginia Code, and/or the Clean Air Act, and is grounds for enforcement action by the Secretary or USEPA.

2.9.3. Violation of any of the applicable requirements, provisions, standards or conditions contained in this Class II General Permit, or incorporated herein by reference, may subject the registrant to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7.

2.9.4. Registration under this Class II General Permit does not relieve the registrant herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e. local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or affected facility herein permitted.

2.10. Inspection and Entry

2.10.1. The registrant 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 enter upon the registrant'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 Class II General Permit;

c. Inspect at reasonable times (including all times in which the affected facility is in operation) any affected facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under this Class II General 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.

2.11. Need to Halt or Reduce Activity not a Defense

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

2.12. Emergency

2.12.1. 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 this Class II General Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

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

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

b. The registered affected facility was at the time being properly operated;
c. During the period of the emergency the registrant took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this Class II General Permit; and
d. The registrant 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 C. S. R. § 45-30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

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

2.13. Duty to Provide Information

2.13.1. The registrant 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 this Class II General Permit Registration or to determine compliance with this General Permit. Upon request, the registrant shall also furnish to the Secretary copies of records required to be kept by the registrant. For information claimed to be confidential, the registrant 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 registrant shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.14. Duty to Supplement and Correct Information

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

2.15. Credible Evidence

2.15.1. Nothing in this Class II General 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 registrant including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

2.16. Severability

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

2.17. Property Rights

2.17.1. Registration under this Class II General Permit does not convey any property rights of any sort or any exclusive privilege.

2.18. Notification Requirements

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

2.19. Suspension of Activities

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

2.20. Transferability

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

3.0. Facility-Wide Requirements

3.1. Siting Criteria

3.1.1. All persons submitting a Class II General Permit Registration Application to construct, modify or relocate an emergency generator shall be subject to the following siting criteria:

a. No person shall construct, locate or relocate any affected facility or emission unit within three hundred (300) feet of any occupied dwelling, business, public building, school, church, community, institutional building or public park. An owner of an occupied dwelling or business may elect to waive the three hundred (300) feet siting criteria.

b. Any person proposing to construct, modify or relocate an emergency generator within three (300) feet of any occupied dwelling, business, public building, school, church, community, institutional building or public park may elect to obtain an individual permit pursuant to 45CSR13.

3.2. Limitations and Standards

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

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

3.2.3. **Asbestos.** The registrant is responsible for thoroughly inspecting the affected facility, or part of the affected 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 registrant, 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 registrant is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§15]

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

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

3.2.6. **Standby plan for reducing emissions.** When requested by the Secretary, the registrant 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.]

3.3. Monitoring Requirements

See Section 4.2.

3.4. Testing Requirements

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

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

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

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the registrant shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary. **[WV Code § 22-5-4(a)(15)]**

3.5. Recordkeeping Requirements

3.5.1. **Retention of records.** The registrant shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the registrant. 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. 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. Where appropriate, the registrant may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

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

3.6. Reporting Requirements

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

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

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

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

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

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

3.6.5. **Operating Fee.**

a. In accordance with 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites

comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the certificate has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

b. In accordance with 45CSR30 – Operating Permit Program, 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. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

4.0. Source-Specific Requirements (Units listed in General Permit Registration)

4.1. Limitations and Standards

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

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

4.2. Recordkeeping Requirements

4.2.1. *Monitoring information.* The registrant shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

4.2.2. *Record of Maintenance of Air Pollution Control Equipment.* For all pollution control equipment listed in the General Permit Registration, the registrant shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures specifically required in this permit.

4.2.3. *Record of Malfunctions of Air Pollution Control Equipment.* For all air pollution control equipment listed in the General Permit Registration, the registrant shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.
b. Steps taken to minimize emissions during the event.
c. The duration of the event.
d. The estimated increase in emissions during the event.

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

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

4.2.4. **Minor Source of Hazardous Air Pollutants (HAP).** The registrant shall maintain records of annual HAP emissions using AP-42 emission factors, GRI-GLYCalc model outputs, manufacturer guaranteed values, sample and/or test data, or other methods approved by DAQ demonstrating that facility-wide emissions are less than those specified in Section 4.1.2.

5.0 Source-Specific Requirements (Reciprocating Internal Combustion Engines)

5.1. Limitations and Standards

5.1.1. The reciprocating internal combustion engines listed in the General Permit Registration application shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices.

5.1.2. Regulated Pollutant Limitation. The registrant shall not cause, suffer, allow or permit emissions of PM, PM_{10}, VOC, SO_2, NO_X, CO, and formaldehyde, from any registered reciprocating internal combustion engine to exceed the potential to emit (pounds per hour and tons per year) listed in the General Permit Registration.

5.1.3. Maximum Fuel Consumption Limitation. The maximum fuel consumption for any registered reciprocating internal combustion engine listed in the General Permit Registration application shall not exceed the fuel consumption recorded with registrant's Class II General Permit Registration Application without effecting a modification or administrative update. Compliance with the Maximum Yearly Fuel Consumption Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the fuel consumption at any given time during the previous twelve consecutive calendar months.

5.1.4. Requirements for Use of Catalytic Reduction Devices

a. Rich-burn natural gas compressor engines equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the potential to emit for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to deliver additional fuel when required to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 0.5%. The automatic air/fuel ratio controller shall also incorporate dual-point exhaust gas temperature and oxygen sensors which provide temperature and exhaust oxygen content differential feedback. Such controls shall ensure proper and efficient operation of the engine and NSCR air pollution control device;

b. Lean-burn natural gas compressor engines equipped with selective catalytic reduction (SCR) air pollution control devices shall be fitted with a closed-loop automatic feedback controller to ensure emissions of regulated pollutants do not exceed the potential to emit for any engine/SCR combination under varying load. The closed-loop automatic feedback controller shall provide proper and efficient operation of the engine, ammonia injection and SCR device, monitor emission levels downstream of the catalyst element and limit ammonia slip to less than 10 ppm_v;

c. The automatic air/fuel ratio controller or closed-loop automatic feedback controller shall provide a warning or indication to the operator and/or be interlocked with the engine ignition system to cease engine operation in case of a masking, poisoning or overrich air/fuel ratio situation which results in performance degradation or failure of the catalyst element; and

d. No person shall knowingly:
   1. Remove or render inoperative any air pollution or auxiliary air pollution control device installed subject to the requirements of General Permit G35-A;
   2. Install any part or component when the principal effect of the part or component is to bypass, defeat or render inoperative any air pollution control device or auxiliary air pollution control device installed subject to the requirements of General Permit G35-A; or
   3. Cause or allow engine exhaust gases to bypass any catalytic reduction device.

5.2. Monitoring Requirements

5.2.1. Catalytic Oxidizer Control Devices

a. The registrant shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The registrant shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:

1. Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.

2. Following operating and maintenance recommendations of the catalyst element manufacturer.

5.3. Testing Requirements

5.3.1. See Facility-Wide Testing Requirements Section 3.4.

5.4. Recordkeeping Requirements

5.4.1. To demonstrate compliance with section 5.1.1, 5.1.2, and 5.1.3, the registrant shall maintain records of the amount and type of fuel consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the registrant 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.

5.5. Reporting Requirements

5.5.1. See Facility-Wide Reporting Requirements Section 3.6.

6.0. Source-Specific Requirements (Tanks)

6.1. Limitations and Standards

6.1.1. All tanks in the General Permit Registration application will be listed in Section 1.0 (the equipment table) of the issued registration. Tanks that are less than 20,000 gallons should not, as a general rule, have permitted emission limits. Section 1.0 of the issued registration will identify the size of the tank, any controls (such as a floating roof), and may include for tanks of 10,000 gallons or more the expected throughput or turnovers. Depending on the situation, setting a specific permit condition for maximum throughput, turnovers, or a vapor pressure for the tank is acceptable. Such situations would include tanks storing TAPs or HAPs, that are not subject to Rule 27 or a MACT but may be close to the thresholds for these rules. For a source subject to Rule 27 or a MACT storing the pollutant subject to the MACT or Rule 27 it may be appropriate to have emission limits for the regulated pollutant and the appropriate MRR to show compliance.

6.1.2. Maximum Tank Throughput Limitation. For tanks subject to the maximum tank throughput limits, the maximum tank throughput for these tanks shall not exceed the throughput recorded with registrant's Class II General Permit Registration without effecting a modification or administrative update. Compliance with the Maximum Yearly Tank Throughput Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the tank throughput at any given time during the previous twelve consecutive calendar months.

6.1.3. Regulated Pollutant Limitation. The registrant shall not cause, suffer, allow or permit emissions of VOC and aggregate emissions of hazardous air pollutants (HAPs), from any tank listed in the General Permit Registration to exceed the potential to emit (pounds per hour and tons per year) recorded with the registrant's Class II General Permit Registration Application.

6.2. Monitoring Requirements

6.2.1. See Facility-Wide Monitoring Requirements.

6.3. Testing Requirements

6.3.1. See Facility-Wide Testing Requirements.

6.4. Recordkeeping Requirements

6.4.1. The registrant shall maintain a record of the tank throughput for tanks with maximum throughput limits, to demonstrate compliance with section 6.1.2 of this permit. Said records shall be maintained on site or in a readily accessible off-site location maintained by the registrant 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.

6.5. Reporting Requirements

6.5.1. See Facility-Wide Reporting Requirements.

7.0 Source-Specific Requirements (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40CFR60 Subpart IIII))

7.1. Limitations and Standards

7.1.1. Maximum Yearly Operation Limitation. The maximum yearly hours of operation for any emergency generator listed in the General Permit Registration application shall not exceed 500 hours per year. Compliance with the Maximum Yearly Operation Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the hours of operation at any given time during the previous twelve consecutive calendar months.

7.1.2. **Regulated Pollutant Limitation**
The registrant shall not cause, suffer, allow or permit emissions of PM, PM_{10}, VOC, SO_2, NO_X, CO, and aggregate emissions of hazardous air pollutants (HAPs), from any emergency generator listed in the General Permit Registration to exceed the potential to emit (pounds per hour and tons per year) recorded with the registrant's Class II General Permit Registration Application.

7.1.3. **Recycled or Used Oil**

a. The registrant shall not receive, store, burn or fire any recycled or used oil in the emergency generator registered herein which is considered a hazardous waste or does not meet the used oil specifications below (40 C.F.R. 279.11, Table 1). The burning of used or recycled oil which does not meet these specifications shall constitute a violation of 45CSR25, 33CSR20 and the requirements, provisions, standards and conditions of this Class II General Permit.

Constituent or Property	Maximum Allowable Specification
Arsenic	5.0 ppm
Cadmium	2.0 ppm
Chromium	10.0 ppm
Lead	100.0 ppm
PCBs	2.0 ppm
Total Halogen	4000.0 ppm maximum
Mercury	0.20 ppm
Flash Point	100.0℉ minimum

b. Recycled or used oil with a Total Halogen content greater than 1000.0 ppm is presumed to be a hazardous waste under the rebuttable presumption provided in 40 C.F.R. 279.10(b)(1)(ii). Therefore, the registrant may receive, store and burn recycled or used oil exceeding 1000.0 ppm Total Halogen (but less than 4000.0 ppm maximum) only if the supplier or marketer has demonstrated that the recycled or used oil is not and does not contain hazardous waste.

7.1.4. **Storage Tanks**

a. The content, dimensions, and an analysis showing the capacity of all storage tanks shall be recorded on the Emergency generator Storage Tank Data Sheet in the registrant's Class II General Permit registration;

b. Petroleum liquid storage tank volume shall not exceed 151 m3 (or 39,889 gallons) capacity and maximum true vapor pressure shall not exceed 15.0 kPa (2.17 psia) for petroleum liquid storage tanks greater than 75 m3 (19,812 gallon) capacity; and

c. The registrant shall inform the Secretary of any change in the number of storage tanks or capacities. The registrant may exchange storage tanks of similar volume as required.

7.1.5. **Emission Standards**
Owners and operators of pre-2007 model year emergency stationary CI (compression ignition) ICE (internal combustion engines) with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in table 1 to this subpart. [40CFR§60.4205a]

7.1.6. **Emission Standards**
Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [40CFR§60.4205b]

7.1.7. **Emission Standards**
Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants. [40CFR§60.4205c]

7.1.8. **Emission Standards**
Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section. [40CFR§60.4205 d]

(1) Reduce NOX emissions by 90 percent or more, or limit the emissions of NOX in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour). [40CFR§60.4205d(1)]

(2) Reduce PM emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr). [40CFR§60.4205d(2)]

7.1.9. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4204 and §60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40CFR§60.4206]

7.1.10. **Fuel Requirements**
Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a). [40CFR§60.4207a]

7.1.11. **Fuel Requirements**
Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [40CFR§60.4207b]

7.1.12. **Fuel Requirements**
Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is

needed, the owner or operator is required to submit a new petition to the Administrator. [40CFR§60.4207c]

7.1.13. **Fuel Requirements**
Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section. [40CFR§60.4207e]

7.1.14. After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines. [40CFR§60.4208a]

7.1.15. After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines. [40CFR§60.4208b]

7.1.16. In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section. [40CFR§60.4208g]

7.1.17. The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location. [40CFR§60.4208h]

7.1.18. If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211. [40CFR§60.4209]

7.1.19. If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine. [40CFR§60.4209a]

7.1.20. If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40CFR§60.4209b]

7.1.21. If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40CFR§60.4211a]

7.1.22. If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section. [40CFR§60.4211b]

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [40CFR§60.4211b1]

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly. [40CFR§60.4211b2]

(3) Keeping records of engine manufacturer data indicating compliance with the standards.[40CFR§60.4211b3]

(4) Keeping records of control device vendor data indicating compliance with the standards.[40CFR§60.4211b4]

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable. [40CFR§60.4211b5]

7.1.23. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications. [40CFR§60.4211c]

7.1.24. If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section. [40CFR§60.4211d]

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213. [40CFR§60.4211d1]

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(I) through (v) of this section. [40CFR§60.4211d2]

(i) Identification of the specific parameters you propose to monitor continuously; [40CFR§60.4211d2(I)]

(ii) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions; [40CFR§60.4211d2(ii)]

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; [40CFR§60.4211d2(iii)]

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and [40CFR§60.4211d2(iv)]

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. [40CFR§60.4211d2(v)]

7.1.25. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone 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 ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited. [40CFR§60.4211e]

7.2. Testing Requirements

7.2.1. At the time a registered emergency generator is in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests as the Secretary may specify shall be conducted to determine such compliance. The registrant may also be required by the Secretary to collect, report and maintain additional data on the operation and compliance of any registered emergency generator.

7.2.1. **Stack Testing**

For cause, the Secretary may request the registrant to install such stack gas monitoring devices as the Secretary deems necessary to determine continuing compliance. The data from such devices shall be readily available for review on-site or such other reasonable location that the Secretary may specify. At the request of the Secretary, such data shall be made available for inspection or copying and the Secretary may require periodic submission of excess emission reports (45CSR13).

7.2.2. **Notification of Compliance Testing**

For any compliance test to be conducted by the registrant as set forth in this section, a test protocol shall be submitted to the Secretary at least thirty (30) calendar days prior to the scheduled date of the test. Such compliance test protocol shall be subject to approval by the Secretary. The registrant shall notify the Secretary at least fifteen (15) calendar days in advance of actual compliance test dates and times during which the test (or tests) will be conducted.

7.2.3. **Alternative Test Methods**

The Secretary may require a different test method or approve an alternative method in light of any technology advancements that may occur and may conduct such other tests as may be deem necessary to evaluate air pollution emissions.

7.2.4. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section. [40CFR§60.4212]

a. The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F. [40CFR§60.4212a]

b. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039. [40CFR§60.4212b]

c. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

NTE Requirement for each pollutant - (1.25) x (STD)

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate. [40CFR§60.4212c]

d. Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate. [40CFR§60.4212d]

7.2.5. Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (d) of this section. [40CFR§60.4213]

a. Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load. [40CFR§60.4213a]

b. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). [40CFR§60.4213b]

c. You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour. [40CFR§60.4213c]

d. To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section. [40CFR§60.4213d]

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

Ci = concentration of NOX or PM at the control device inlet,
Co = concentration of NOX or PM at the control device outlet, and
R = percent reduction of NOX or PM emissions.

(2) You must normalize the NOX or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \% O_2} \qquad \text{(Eq. 3)}$$

Where:

Cadj = Calculated NOX or PM concentration adjusted to 15 percent O2.
Cd = Measured concentration of NOX or PM, uncorrected.
5.9 = 20.9 percent O2−-15 percent O2, the defined O2 correction value, percent.
%O2 = Measured O2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O2 and CO2 concentration is measured in lieu of O2 concentration measurement, a CO2 correction factor is needed. Calculate the CO2 correction factor as described in paragraphs (d)(3)(I) through (iii) of this section.

(i) Calculate the fuel-specific Fo value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \qquad \text{(Eq. 4)}$$

Where:

Fo = Fuel factor based on the ratio of O2 volume to the ultimate CO2 volume produced by the fuel at zero percent excess air.
0.209 = Fraction of air that is O2, percent/100.
Fd = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm 3 /J (dscf/10 6 Btu).
Fc = Ratio of the volume of CO2 produced to the gross calorific value of the fuel from Method 19, dsm 3 /J (dscf/10 6 Btu).

(ii) Calculate the CO2 correction factor for correcting measurement data to 15 percent O2, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:
XCO2 = CO2 correction factor, percent.
5.9 = 20.9 percent O2−-15 percent O2, the defined O2 correction value, percent.

(iii) Calculate the NOX and PM gas concentrations adjusted to 15 percent O2 using CO2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

Cadj = Calculated NOX or PM concentration adjusted to 15 percent O2.
Cd = Measured concentration of NOX or PM, uncorrected.
%CO2 = Measured CO2 concentration, dry basis, percent.

7.2.6. To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 7 of this section: [40CFR§60.4213e]

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 7)}$$

Where:

ER = Emission rate in grams per KW-hour.
Cd = Measured NOX concentration in ppm.
1.912x10−-3 = Conversion constant for ppm NOX to grams per standard cubic meter at 25 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour.
T = Time of test run, in hours.
KW-hour = Brake work of the engine, in KW-hour.

7.2.7. To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 8)}$$

Where:

ER = Emission rate in grams per KW-hour.
Cadj = Calculated PM concentration in grams per standard cubic meter.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour.
T = Time of test run, in hours.
KW-hour = Energy output of the engine, in KW.

7.3. Recordkeeping and Reporting Requirements

7.3.1. Records, Operation and Compliance

a. For the purpose of determining compliance with the Maximum Yearly Operation Limitation, a person designated by a Responsible Official or Authorized Representative shall maintain records of hours of operation utilizing copies of Attachment A - Monthly Hours of Operation Record (or a similar form containing the same information);

b. For the purpose of determining compliance with the Fuel Type Limitation, a person designated by a Responsible Official or Authorized Representative shall maintain records of quantity and type of fuel burned.

a. For the purpose of determining compliance with the Regulated Pollutant Limitation for SO2, a person designated by a Responsible Official or Authorized Representative shall maintain records of the maximum sulfur content on a per-shipment basis for fuel oil, recycled or used oil or annual

certification of the sulfur content from the supplier for pipeline quality natural gas.

d. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the registrant. 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.

7.3.2. **Monitoring Information**

The registrant shall keep the following records of monitoring information:

a. The date, place as defined in this Class II General Permit and time of sampling 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.

7.3.3. **Equipment Maintenance Records**

a. The registrant shall maintain maintenance records relating to failure and/or repair of emergency generator equipment. In the event of equipment or system failure, these records shall document the registrant's effort to maintain proper and effective operation of such equipment and/or systems;

b. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the registrant. 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.

7.3.4. **Retention of Records**

Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the registrant. 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.

7.3.5. **Compliance Testing**

The owner or operator of any emergency generator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Section

7.3.6. **Certification of Information**

Any application form, report, or compliance certification required by this General Permit to be submitted to the Division of Air Quality 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.

7.3.7. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40CFR§60.4214b]

7.3.8. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40CFR§60.4214c]

8.0. Source-Specific Requirements (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ))

8.1. Limitations and Standards

8.1.1. The provisions of this subpart are applicable to owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified below. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

a. Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

1. On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

2. on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

3. on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

4. on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

b. Owners and operators of stationary SI ICE that commence modification or reconstruction after June 12, 2006.

[40CFR§60.4230(a)]

8.1.2. The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand. [40CFR§60.4230(b)]

8.1.3. If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable. [40CFR§60.4230(c)]

8.1.4. For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines. [40CFR§60.4230(d)]

8.1.5. Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security. [40CFR§60.4230(e)]

8.1.6. Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines. [40CFR§60.4230(f)]

8.2. Emission Standards for Owners and Operators

8.2.1. Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in §60.4231(a) for their stationary SI ICE. [40CFR§60.4233(a)]

8.2.2. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that use gasoline must comply with the emission standards in §60.4231(b) for their stationary SI ICE. [40CFR§60.4233(b)]

8.2.3. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that are rich burn engines that use LPG must comply with the emission standards in §60.4231(c) for their stationary SI ICE. [40CFR§60.4233(c)]

8.2.4. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards. [40CFR§60.4233(d)]

8.2.5. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified. [40CFR§60.4233(e)]

8.2.6. Owners and operators of any modified or reconstructed stationary SI ICE subject to this subpart must meet the requirements as specified in paragraphs (f)(1) through (5) of this section. [40CFR§60.4233(f)]

a. Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (a) of this section.

b. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that use gasoline engines, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (b) of this section.

c. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (c) of this section.

d. Owners and operators of stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (d) or (e) of this section, except that such owners and operators of non-emergency engines and emergency engines greater than or equal to 130 HP must meet a nitrogen oxides (NO_X) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than

100 HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO_X emission standard of 250 ppmvd at 15 percent oxygen (O_2), a CO emission standard 540 ppmvd at 15 percent O_2(675 ppmvd at 15 percent $O_2$for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O_2, where the date of manufacture of the engine is:

1. Prior to July 1, 2007, for non-emergency engines with a maximum engine power greater than or equal to 500 HP.
2. Prior to July 1, 2008, for non-emergency engines with a maximum engine power less than 500 HP.
3. Prior to January 1, 2009, for emergency engines.

e. Owners and operators of stationary SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (e) of this section for stationary landfill/digester gas engines.

[40CFR§60.4233f]

8.2.7. Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to this subpart. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of after treatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of after treatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel. [40CFR§60.4233(g)]

8.2.8. Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section. [40CFR§60.4233(h)]

8.2.9. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine. [40CFR§60.4234]

8.3. Other Requirements for Owners and Operators

8.3.1. Owners and operators of stationary SI ICE subject to this subpart that use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR 80.195. [40CFR§60.4235]

8.3.2. After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233. [40CFR§60.4236(a)]

8.3.3. After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010. [40CFR§60.4236(b)]

8.3.4. For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011. [40CFR§60.4236(c)]

8.3.5. In addition to the requirements specified in §§60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section. [40CFR§60.4236(d)]

8.3.6. The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location. [40CFR§60.4236(e)]

8.3.7. Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter. [40CFR§60.4237(a)]

8.3.8. Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter. [40CFR§60.4237(b)]

8.3.9. If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine. [40CFR§60.4237(c)]

8.4. Compliance Requirements for Owners and Operators

8.4.1. If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

a. If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator.

b. If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

1. If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

2. If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition,

you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

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

[40CFR§60.4243(a)]

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

a. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

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

1. If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

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

[40CFR§60.4243(b)]

8.4.3. If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in §60.4233(f). [40CFR§60.4243(c)]

8.4.4. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. 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 ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided

for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [40CFR§60.4243(d)]

8.4.5. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233. [40CFR§60.4243(e)]

8.4.6. If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). [40CFR§60.4243(f)]

8.4.7. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40CFR§60.4243(g)]

8.4.8. If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.

a. Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and configured according to the manufacturer's specifications.

b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

c. Keeping records of engine manufacturer data indicating compliance with the standards.

d. Keeping records of control device vendor data indicating compliance with the standards.

[40CFR§60.4243(h)]

8.5. Testing Requirements for Owners and Operators

8.5.1. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

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

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

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

d. To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 1)}$$

Where:

ER = Emission rate of NO_X in g/HP-hr.

C_d= Measured NO_X concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

[40CFR§60.4244(d)]

d. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 2)}$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d= Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.
[40CFR§60.4244(e)]

e. For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d= VOC concentration measured as propane in ppmv.

1.833×10−3 = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

[40CFR§60.4244(f)]

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

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

Where:

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

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

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

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

Where:

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

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

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

Where:

C_{Peq}= Concentration of compound i in mg of propane equivalent per DSCM.

[40CFR§60.4244(g)]

8.6. Notification, Reports, and Records for Owners and Operators

8.6.1. Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

a. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

1. All notifications submitted to comply with this subpart and all documentation supporting any notification.

2. Maintenance conducted on the engine.

3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048.

4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

[40CFR§60.4245(a)]

b. For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of 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. [40CFR§60.4245(b)]

c. Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

1. Name and address of the owner or operator;

2. The address of the affected source;

3. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

4. Emission control equipment; and

5. Fuel used.

[40CFR§60.4245(c)]

d. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. [40CFR§60.4245(d)]

CERTIFICATION OF DATA ACCURACY

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

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

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

Telephone No. _____ Fax No. _____

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

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

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

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

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

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

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