COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR DIVISION

INTRA AGENCY MEMORANDUM

TO: File

- FROM: Mary E. Major Environmental Program Manager
- **SUBJECT:** Meeting Minutes Technical Advisory Committee Concerning Peak Shaving Generators General Permit (Rev. Dg)
- **DATE:** July 19, 2010

INTRODUCTION

A meeting of the technical advisory committee concerning peak shaving generator general permit was held in the 2nd Floor Conference Room C, Department of Environmental Quality, 629 E. Main Street, Richmond, Virginia. A record of meeting attendees is attached.

Start: 9:40 a.m. **End:** 12:30 p.m.

Subcommittee Members Present:

Jerome A. Brooks Terry Darton Trisha R. Eyler Mary E. Major Rebekah Remick William Scarpinato Susan Stewart Joe Suchecki (via conference call)

Subcommittee Members Absent:

Walid M. Daniel, PE, CEM Michael W. Kendall, R.S.

Public Attendees:

None

SUMMARY OF DISCUSSION

Ms. Major reviewed the regulation adoption schedule, group agreed to reconvene on August 24, 2010.

Group reviewed the draft regulation by section. Consensus was achieved for the following:

Definitions:

Diesel fuel will include fuel derived from means other than petroleum based products and meet specifications for ultra low-sulfur fuel.

"Routine testing and maintenance" was deleted.

Applicability:

Group had concurrence regarding the new values for the horsepower (hp) to kW conversion figures; however, there was an extensive discussion of the need for the hp numbers and the use of them in the regulation. Mr. Suchecki reviewed manufacturers' concerns as outlined in a letter (attachment 2) dated July 15, 2010 and forwarded to the group via email July 17, 2010. The primary concerns are:

1. The capacity and output of the generator unit limits and controls the output of the unit's engine and, therefore, the emissions from the unit.

2. Although it is true that the rated horsepower of the engine paired with the generator is generally higher than the rated generator capacity, the engine will never actually run at its full potential and can never exceed the maximum rated output of the generator.

3. Since the generator limits the engine's ability to produce power, using the kW rating of the generator in the gp provides a more accurate calculation of emissions.

Mr. Darton emphasized that units are not always operated according to manufactures recommendations and that the emissions come from the engine not the generator. The engine is the pollution-causing equipment that is being permitted, not the generator. He also stressed the ease of calculating emissions in the field using horsepower; use of kW doesn't provide a specific assessment of the <u>actual</u> emissions from the unit. In addition, the systems have two modes of operation; standby and "in operation". Emissions vary depending upon the operating parameters regardless of the kW rating.

Mr. Scarpinato also stressed that there is an efficiency conversion for the mechanical engine horse power to electrical kW power output which is similar to the heat/rate of a steam utility boiler in the process of power generation. He indicated that the operators are used to working in horsepower and suggested that if in the permitting process the user can't meet the potential to emit requirements to fit within the constraints of the gp

then one can always use Article 6 permitting.

The group agreed to keep the hp numbers in the proposed reg. The issue may be specifically addressed at the Board meeting and during the public comment period.

General:

The requirement for "spare parts" will pertain only to pollution control equipment.

Monitoring Requirements:

References to fugitive dust and odor were determined unnecessary

Operating limits

Clarity was provided for the titles of tables containing the emissions limits for various sized generators. It was also determined that values would be added for a generator below 500 hp. At this time the cost of applying air pollution control equipment on such a small unit would be cost prohibitive; however, in the future such costs may be economically viable and it would not be a hardship to include the values in the gp.

Testing Requirements:

Clarity was provided for restricting the time-period for preventative maintenance operations during the ozone season for sources located in nonattainment areas.

Recordkeeping requirements:

Sources will have no more than three business days to submit any records of emission or operating data once requested by DEQ.

NEXT MEETING DATE

The next meeting is scheduled for Tuesday, August 24, 2010, 2nd Floor Conference Room A, Department of Environmental Quality, 629 E. Main Street, Richmond, Virginia.

DOCUMENT DISTRIBUTION

The following documents were distributed to the committee prior to or at the meeting:

1. Copy of Meeting attendees

2. Copy letter from Joe Suchecki, Director, Public Affairs, Engine Manufacturers Association to Mary E. Major.

3. Peak Shaving Generator General Permit Draft # 5

TEMPLATES\GEN-PERMIT\GP08 REG\GEN-DEV\Dg-GP08-5 Attachments

COMMONWEALTH OF VIRGINIA STATE AIR POLLUTION CONTROL BOARD

TECHNICAL ADVISORY COMMITTEE MEETING ATTENDANCE RECORD

July 19, 2010

SUBJECT: Peak Shaving/Emergency Generator GP (Revision DG/EG)

LOCATION: 11th Floor Conference Room, Department of Environmental Quality, 629 East Main Street, Richmond, Virginia

PRINTED NAME	SIGNATURE
Rebekah Remick	Reveleah Kemide
Bill Scurpinato	Darty Man
Susan Stevant	Susan Stevert
Joseph Suchecki	- VIA Conference CA/
MARI E. MAJUG	- via conference CA// M. 9. Mar / DEQ -
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TEMPLATES\GEN-PERMIT\TAC\TC05c REG\GP-DEV\CG-Tac-05c-5



VIA EMAIL

July 15, 2010

Ms. Mary E. Major Office of Regulatory Affairs Virginia Department of Environmental Quality Richmond, VA 23219

RE: Classification of Stationary Engines using Generator kW Rating vs. Engine HP Rating in Peak Shaving and Emergency General Permits

Dear Ms. Major:

At the last meeting of the Technical Advisory Committee formed to help develop the General Permits for Peak Shaving and Emergency Generators, the group held a discussion on whether to use the output rating of the generator in kW or the rating of the engine in HP to classify the size and emissions of the generator units. Mr. Darton of the DEQ Northern Virginia Regional Office recommended using the engine horsepower rating rather than the generator rating. The rationale for that recommendation was that the emissions depend on the size of the engine and its specific emissions rate and not on the rated electrical output of the generator.

I have received input from EMA members that manufacture the stationary engines and generators that will the subject to the General Permits. EMA believes that the appropriate size metric for stationary electrical generators is the generator rating in kWe, and we recommend that the generator rating be used in the general permits to distinguish cut-points, emissions standards, and as a basis for any emissions measurements in the field.

The rationale for using the generator rating is as follows:

- The capacity and output of the generator unit limits and controls the output of the unit's engine. The generator limits the ability of the engine to produce power, and the capacity of the generator in kWe provides a cap on the power produced by the engine and, therefore, the emissions from the unit.
- Although it is true that the rated horsepower of the engine paired with the generator is generally higher than the rated generator capacity, the engine will never actually run at its full potential. Manufacturers match a somewhat larger engine with the generator to assure that the engine can supply adequate power and that there is some margin of extra power to adequately handle transient conditions and assure a smooth power ramp-up.

The generator, however, controls the amount of power produced by the engine, which can never exceed the maximum rated output of the generator.

- Since the generator limits the engine's ability to produce power, using the kWe rating of the generator in the General Permits provides a more accurate calculation of emissions. If engine horsepower is used, an emissions calculation will always overestimate the amount of emissions that may be produced. In reality, the engine in an electrical generator configuration will never reach its "potential to emit" based on its horsepower rating.
- Finally, if the engine HP rating were to be used, then adjustments to the emissions standards and any source testing would need to be made to account for generator efficiency and package parasitic losses. Determining the applied engine power in terms of brake-horsepower-hour is very difficult in the field and would require specific evaluations of each genset package, or at a minimum, some measurement of generator inefficiency as well as parasitic losses in cooling fans, etc. It is far easier and more equitable to simple measure actual generator kWe output.

Based on the above, we recommend that DEQ use the kWe generator capacity as the basis for any cutpoints or emissions standards in the proposed General Permits.

Sincerely,

Joe Suchecki Director, Public Affairs

9VAC5 CHAPTER 530. NONEMERGENCY PEAK SHAVING GENERAL PERMIT

Part I Definitions.

9VAC5-530-10.	General.
9VAC5-530-20.	Terms defined.

Part II General Provisions.

9VAC5-530-30.	Purpose and basis.
9VAC5-530-40.	Applicability.
9VAC5-530-50.	General.
9VAC5-530-60.	Circumvention, Suspension or Revocation
9VAC5-530-70.	Compliance.
9VAC5-530-80.	Enforcement of a general permit.

Part III General Permit Administrative Procedures.

9VAC5-530-90.	Requirements for granting an authorization to operate under the general permit.
9VAC5-530-100.	Applications for coverage under the general permit.
9VAC5-530-110.	Required information for initial applications.
9VAC5-530-120.	Granting an authorization to operate under the general permit.
9VAC5-530-130.	Transfer of authorization to operate under the general permit.

Part IV General Permit Terms and Conditions for Electric Generating Units Using Fuel Thru-put for Compliance Demonstration.

9VAC5-530-140.	General permit.
9VAC5-530-150.	General terms and conditions.
9VAC5-530-160.	Monitoring requirements.
9VAC5-530-170.	Operating schedule.
9VAC5-530-180.	Emission limits.
9VAC5-530-190.	Testing requirements.
9VAC5-530-200.	Recordkeeping requirements.
9VAC5-530-210.	Reporting requirements.

Part V General Permit Terms and Conditions for Electric Generating Units Using Hours of Operation for Compliance Demonstration.

9VAC5-530-220. General permit.

9VAC5-530-230.	General terms and conditions.
9VAC5-530-240.	Monitoring requirements.
9VAC5-530-250.	Operating schedule.
9VAC5-530-260.	Emission limits.
9VAC5-530-270.	Testing requirements.
9VAC5-530-280.	Recordkeeping requirements.
9VAC5-530-290.	Reporting requirements.

PART I.

Definitions.

9VAC5-530-10. General.

A. Unless specifically defined in the Virginia Air Pollution Control Law or in this chapter, terms used shall have the meaning given them by 9VAC5-10-20 (general definitions, Regulations for the Control and Abatement of Air Pollution), 9VAC5-170-20 (definitions, Regulation for General Administration), or commonly ascribed to them by recognized authorities, in that order of priority.

9VAC5-530-20. Terms defined.

"Affected unit" means an electric generating unit subject to the provisions of this Chapter.

"Aggregate rated electrical power output" means the sum or total rated electrical power output for all engines involved in the initial application. It does not include all existing electric generating units at the facility.

"Bio-diesel <u>fuel</u>" means a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable or animal fats, designated B100, and meeting the requirements of ASTM D 6751.

"Biodiesel Blends" means a blend of biodiesel and petroleum diesel fuel meeting either the requirements of ASTM D975 (blends up to 5%) or ASTM D7467 (blends between 6 and 20% biodiesel) and designated Bxx where xx represents the biodiesel content of the blend, e.g., B20 for a blend of 20% biodiesel and 80% petroleum diesel fuel.

"Compression ignition engine" or "CI" means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

"Demand response" means measures aimed at shifting time of use of electricity from peak-use periods to times of lower demand by inducing retail customers to curtail electricity usage during periods of congestion and higher prices in the

electrical grid. Demand response actions are typically undertaken by the source owner in response to a request from a utility or electrical grid system operator or in response to market prices.

"Diesel fuel" means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius and that complies with the specifications for diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975. (combination of NSPS and BP)

"Distillate oil" means fuel oil that complies with the specifications for diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975.

"Electric generating unit" means a stationary internal combustion engine that participates in a nonemergency voluntary demand response program (i.e. load curtailment, demand response, peak shaving or like program.

Emergency means a condition that arises from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:

- a. A failure of the electrical grid,
- b. On-site disaster or equipment failure,

c. Public service emergencies such as flood, fire, natural disaster, or severe weather conditions,

d. An ISO-declared emergency, where an ISO emergency is:

1. An abnormal system condition requiring manual or automatic action to maintain system frequency, to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property.

2. Capacity deficiency or capacity excess conditions.

3. A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel.

4. Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state.

5. An abnormal event external to the ISO service territory that may

require ISO action.

"Identical electric generating units" mean electric generating units that have the same make, manufacturer, model, year, size, and fuel specifications.

"Independent system operator" or "ISO" means a person that may receive or has received, by transfer pursuant to §56-576, any ownership or control of, or any responsibility to operate, all or part of the transmission systems in the Commonwealth.

"Integration operational period" means that period of time beginning with the first time the electric generating unit is started on site and ending when the electric generating unit is fully integrated with the facility's electrical system. In no case shall this period exceed 30 days.

"Kilowatt (kW) to horsepower (hp)" means the conversion of 1 kW = 1.341 hp

"Load curtailment" means similar to demand response, but referring specifically to removal or reduction of electrical loads for a limited period of time from a utility grid system in response to a request from the utility or electrical grid system operator.

"Nonattainment area" means as defined in 9 VAC 5-20-204.

"Operation" means burning fuel regardless of whether electricity is generated.

"Peak shaving" means measures aimed solely at shifting time of use of electricity from peak-use periods to times of lower demand by inducing retail customers to curtail electricity usage during periods of congestion and higher prices in the electrical grid. Peak shaving is typically undertaken at a source owner's discretion in order to reduce maximum electrical usage and, therefore, cost of electrical service to the source owner.

"Routine testing and maintenance" means

"Spark ignition engine (SI)" means a natural gas or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

"Startup" means the date on which each electric generating unit completes the integration period, unless an extension is approved by the DEQ. An extension request must be submitted 7 days prior to the end of the 30 day integration operational period.

"Tier 4 engine or equivalent means a compression ignition electric generating unit that meets Tier 4 standards of 40 CFR Part 1039, or for engines greater than 10 liters per cylinder, 40 CFR Part 1042, whether by Tier 4 certification or by addon controls to meet the applicable emission standards for the model year and size of the engine.

PART II. GENERAL PROVISIONS.

9VAC5-530-30. Purpose and basis.

This general permit is being issued under the authority of 9VAC5-80-1250.

9VAC5-530-40. Applicability.

A. The affected units to which this chapter applies is each electric generating unit for which construction, installation, or operation is commenced after the date of this general permit and that meets the requirements stated below:

1. For compression ignition engines: Tier 4 engines (or equivalent) with an aggregate rated electrical power output greater than or equal to 2,959 kW (3,968 hp) and less than 73,610 kW (98,711 hp).

2. For spark ignition engines located in an attainment area and have an aggregate rated electrical power output greater than or equal to 3,091 kW (4,145 hp) and less than 76,200 kW (102,184 hp).

3. For spark ignition engines located in a nonattainment area and have an aggregate rated electrical power output greater than or equal to 3,091 kW (4,145 hp) and less than 47,200 kW(63,295 hp).

B. This chapter applies throughout the Commonwealth of Virginia.

C. Any electric generating unit that is a major source or is located at a major source, as defined in Articles 1, 7, 8, or 9 of Part II of 9 VAC 5-80 (Permits for Stationary Sources) shall not be eligible for this general permit.

D. Any electric generating unit that is an emergency generator and/or participates in an ISO Emergency Load Response Program (ELRP) is not eligible

for this general permit.

9VAC5-530-50. General.

A. Any owner requesting authority to operate an affected unit shall comply with the requirements of 9VAC5-80 (Permits for Stationary Sources) and register with the department as required under 9VAC5-20-160. Not all parts of the general permit will apply to every permittee. The determination of which parts apply will be based on where the unit is located and method of compliance determination. Parts I, II and III apply to all permittees. Part IV will apply to units using fuel throughput for compliance determination. Part V will apply to units using hours of operation for compliance determination.

B. The existence of a permit under this chapter shall not constitute a defense of a violation of the Virginia Air Pollution Control Law or the regulations of the board and shall not relieve any owner of the responsibility to comply with any applicable regulations, laws, ordinances and orders of the governmental entities having jurisdiction.

C. The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a unit, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

D. This general permit to construct, install, or operate each affected unit electric generating facility shall become invalid, unless an extension is granted by the DEQ, if:

1. A program of continuous construction is not commenced within the latest of the following:

a. Eighteen months from the date that this general permit is issued to the permittee;

b. Nine months from the date that the last permit or other authorization was issued from any other governmental entity;

c. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or

2. A program of construction is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.

E. At all times, including periods of start-up, shutdown, and malfunction,

the permittee shall, to the extent practicable, maintain and operate the affected source <u>unit</u>, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

F. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to process equipment which affect such emissions:

1. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

2. Maintain an inventory of spare parts.

G. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

H. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment.

1. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

2. Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

I. The permittee shall keep a copy of this permit on the premises of the facility to which it applies.

9VAC5-530-60. Circumvention, Suspension or Revocation.

A. No permittee shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air pollutants emitted, conceals or dilutes an emission of air pollutants which would otherwise violate this chapter.

B. This general permit may be suspended or revoked if the permittee:

1. Knowingly makes material misstatements in the permit application or any amendments to it.

2. Fails to comply with the conditions of this general permit.

3. Fails to comply with any emission standards applicable to a permitted emissions unit.

4. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard.

5. Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted

9VAC5-530-70. Compliance.

A. Whenever it is necessary for the purpose of the regulations of the board, the board or an agent authorized by the board may at reasonable times enter an establishment or upon property, public or private, for the purpose of obtaining information or conducting surveys or investigations as authorized by §10.1-1315 or § 46.2-1187.1 of the Code of Virginia.

B. The time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

C. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the department to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of this permit.

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

3. Inspect at reasonable times any facilities, equipment (including monitoring equipment), practices, or operations regulated or required under this permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.

9VAC5-530-80. Enforcement of a general permit.

A. The following general requirements apply:

1. Pursuant to § 10.1-1322, failure to comply with any term or condition of the general permit shall be considered a violation of the Virginia Air Pollution Control Law.

2. A permittee who violates or fails, neglects or refuses to obey any provision of this chapter or the Virginia Air Pollution Control Law, any applicable requirement, or any permit term or condition, knowingly makes any false statement, representation or certification in any form, in any notice or report required by a permit, or who knowingly renders inaccurate any required monitoring device or method shall be subject to the provisions of §§ 10.1-1307, 10.1-1309, 10.1-1316, 10.1-1318 and § 10.1-1320 of the Virginia Air Pollution Control Law.

B. Violation of this permit is subject to the enforcement provisions including, but not limited to, those contained in 9VAC5-170 (Regulation for General Administration) and §§ 10.1-1309, 10.1-1309.1, 10.1-1311 and 10.1-1316 of the Virginia Air Pollution Control Law.

C. If any condition, requirement or portion of this permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of this permit.

D. The permittee shall comply with all **applicable** conditions of this permit. Any noncompliance with this permit constitutes a violation of the Virginia Air Pollution Control Law and is grounds (i) for enforcement action, or (ii) for suspension or revocation of the authorization to operate under this permit.

E. 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.

F. The authorization to operate under this permit may be suspended or revoked for cause as specified in 9VAC5-530-80. The filing by a permittee of a (i) request for reauthorization to operate under this permit, or (ii) notification of termination, planned changes or anticipated noncompliance does not stay any condition of this permit.

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

I. The permittee shall furnish to the department, within 30 days of notification, any information that the department may request in writing to

determine whether cause exists for suspending or revoking the authorization to operate under this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by this permit and, for information claimed to be confidential, the permittee shall furnish such records to the department along with a claim of confidentiality meeting the requirements of 9VAC5-170-60 et.seq.

PART III.

GENERAL PERMIT ADMINISTRATIVE PROCEDURES.

9VAC5-530-90. Requirements for granting an authorization to operate under the general permit.

A. The department may grant an authorization to operate under the general permit for an affected unit that meets the applicability criteria in 9VAC5-530-40 and the operating limitations in 9VAC5-530-170 or 9VAC5-530-250.

B. The general permit will be issued in accordance with § 2.2-4006 A 9 of the Administrative Process Act.

9VAC5-530-100. Applications for coverage under the general permit.

A. The application for an affected unit shall meet the requirements of this chapter and include all information necessary to determine qualification for and to assure compliance with the general permit.

B. Any application form, report, compliance certification, or other document required to be submitted to the department under this chapter shall meet the requirements of 9VAC5-30-230.

C. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in an application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

9VAC5-530-110. Required information for initial applications.

A. The department will make application forms available to applicants. The information required by this section shall be determined and submitted according to procedures and methods acceptable to the department.

B. Each initial application for coverage under the general permit shall include, but not be limited to, the following:

1. Information specified in the appropriate air permit application

form for an electric generating unit as determined by the regional office

2. A document certification with all applicable requirements completed by a responsible official.

9VAC5-530-120. Granting an authorization to operate under the general permit.

A. The department may grant authorization to operate under the conditions and terms of the general permit to sources that meet the applicability criteria set forth in 9VAC5-530-40.

B. Granting an authorization to operate under the general permit to a unit covered by the general permit is not subject to the public participation procedures.

9VAC5-530-130. Transfer of authorizations to operate under the general permit.

A. No person shall transfer an authorization to operate under the general permit from one electric generating unit to another or from one piece of equipment to another.

B. In the case of a transfer of ownership of an electric generating unit, the new owner shall comply with any permit issued or authorization to operate under the general permit granted to the previous owner. The new owner shall notify the department of the change in ownership within 30 days of the transfer.

C. In the case of a name change of an electric generating unit, the owner shall comply with any permit issued or authorization to operate under the general permit granted under the previous source name. The owner shall notify the department of the change in source name within 30 days of the name change.

PART IV.

GENERAL PERMIT TERMS AND CONDITIONS FOR ELECTRIC GENERATING UNITS USING FUEL THROUPUT FOR COMPLIANCE DEMONSTRATION.

9VAC5-530-140. General permit.

A. Any owner whose application is approved by the director shall receive the following permit and shall comply with the requirements in it and be subject to all requirements of this chapter and the regulations of the board.

B. In compliance with the provisions of the Virginia Air Pollution Control Law and regulations adopted pursuant to it, owners of electric generating units are authorized to operate under the authority of this permit, except those where board regulations or policies prohibit such operation.

C. The authorization to operate under this permit shall be in accordance with the cover letter to this permit, 9VAC5-530-150 (General terms and conditions), 9VAC5-530-160 (Monitoring requirements) 9VAC5-530-170 (Operating limits), 9VAC5-530-180 (Emissions limits), 9VAC5-530-190 (Testing requirements), 9VAC5-530-200 (Recordkeeping requirements), 9VAC5-530-210 and (Reporting requirements), 9VAC5-530-220.

9VAC5-530-150. General terms and conditions.

A. The permittee is authorized to operate an affected unit located within the boundaries of the Commonwealth of Virginia, in accordance with the approved permit application and conditions of this permit except where board regulations or policies prohibit such activities.

B. The permittee shall comply with the terms and conditions of this permit prior to commencing any physical or operational change or activity that will result in making the facility subject to the new source review program.

9VAC5-530-160. Monitoring requirements

A. The permittee shall install and use a fuel flow meter to monitor the monthly and yearly fuel throughput for each **affected** unit, calculated monthly as the sum of each consecutive 12-month period. Each fuel flow meter shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.

B. The fuel flow meter used to continuously measure the monthly and yearly fuel throughput for each affected unit shall be observed by the permittee with a frequency of not less than once per month to ensure good performance. The permittee shall keep a log of the observations from the fuel flow meter.

C. Each affected unit shall comply with visible emissions and fugitive dust/emissions standards of Article 1 of Part II of 9VAC5-50 (New and Modified Stationary Sources). No owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Is this section necessary?

D. Each affected unit shall comply with the odor standards Article 2 of Part II of 9VAC5-50 (New and Modified Stationary Sources). Under no circumstances shall the affected unit operate in such a manner as to cause an odor objectionable to individuals of ordinary sensibility.

9VAC5-530-170. Operating limits.

A. The approved fuels for each compression ignition electric generating affected unit are diesel fuel, biodiesel fuel and biodiesel blends. These fuels shall meet the following specifications:

1. Diesel fuel which meets the ASTM D975 specification for numbers 1 or 2 fuel oil; maximum sulfur content per shipment, 0.0015%.

2. Bio-diesel fuel which meets ASTM specification D6751; maximum sulfur content per shipmen, 0.0015%.

B. The approved fuels for each spark ignition electric generating affected unit are natural gas and liquid propane gas. These fuels shall meet the following specifications.

1. Natural gas with a minimum heat content of1,000 Btu/scf HHV as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method.

2. Liquid propane gas, including butane and propane, which meets ASTM specification D1835.

C. The compression ignition affected unit(s) located in either an attainment or nonattainment area, combined, shall consume no more than 628,478 gallons of diesel fuel or 692,811 gallons of bio-diesel fuel per year, calculated monthly as the sum of each consecutive 12-month period.

1. Compliance for the consecutive 12-month period shall be

demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

2. For units using any combination of the two fuels, the quantities of distillate oil and bio-diesel, calculated monthly as the sum of each consecutive 12 month period, shall not exceed values that will allow the following equation to hold true:

(A) * (140,000 Btu/gal) + (B) * (127,000 Btu/gal) ≤ 87,987 x 10⁶ Btu/yr

where:

A = Number of gallons of distillate oil burned during any 12 consecutive month period

B = Number of gallons of bio-diesel burned during any 12 consecutive month period.

D. The spark ignition affected unit(s) combined located in an attainment area shall consume no more than 968,966 gallons of LPG or 91.08×10^6 cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12-month period.

1. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

2. For units using any combination of the two fuels, the quantities of natural gas and propane, calculated monthly as the sum of each consecutive 12 month period, shall not exceed values that will allow the following equation to hold true:

(A) * (1,000 Btu/ft3) + (B) * (94,000 Btu/gal) \leq 91,083 x 10⁶ Btu/yr

where:

A = Number of cubic feet of natural gas burned during any 12 consecutive month period

B = Number of gallons of propane burned during any 12 consecutive month period.

E. The spark ignition affected unit(s) combined located in a nonattainment area shall consume no more than 60,200 gallons of LPG or 56.42×10^6 cubic feet of natural gas per year, calculated monthly as the sum of each consecutive

12-month period.

1. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

2. For units using any combination of the two fuels, the quantities of natural gas and propane, calculated monthly as the sum of each consecutive 12 month period, shall not exceed values that will allow the following equation to hold true:

(A) * (1,000 Btu/ft3) + (B) * (94,000 Btu/gal) \leq 56,419 x 10⁶ Btu/yr

where:

A = Number of cubic feet of natural gas burned during any 12 consecutive month period

B = Number of gallons of propane burned during any 12 consecutive month period.

F. For units using diesel fuel or bio-diesel fuel the permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel or bio-diesel fuel. Each fuel supplier certification shall include the following:

1. The name of the fuel supplier.

2. The date on which the distillate oil or bio-diesel was received.

3. The quantity of distillate oil or bio-diesel delivered in the

shipment.

4. A statement that the diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D975) for numbers 1 or 2 fuel oil.

5. A statement that the bio-diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D6751), and

6. The sulfur content of the diesel fuel or bio-diesel fuel.

9VAC5-530-180. Emissions limits.

A. Emissions from the operation of each compression ignition affected unit shall not exceed the limits specified in Table 1.

TABLE 1

Emissions Limits for CI Engines

Engine Year	Emission Limits g/kW-hr <mark>(g/hp-hr)</mark>						
	PM						
2011-2014 (g/kW-hr)	0.10	0.10	0.10	3.5	0.40	0.67	
2011-2014 (g/hp-hr)	<mark>(0.075)</mark>	<mark>(0.075)</mark>	(0.075)	<mark>(2.6)</mark>	(0.30)	<mark>(0.50)</mark>	
2015+ (g/kW-hr)	0.03	0.03	0.03	3.5	0.19	0.67	
2015 + (g/hp-hr)	(0.022)	(0.022)	(0.022)	<mark>(2.6)</mark>	<mark>(0.14)</mark>	(0.50)	

B. Emissions from the operation of each spark ignition affected unit shall not exceed the limits specified in Table 2.

TABLE 2

Emissions Limits for SI Engines

Engine Year	Emission Limits g/kW-hr <mark>(g/hp-hr)</mark>					
	РМ					
2011+(g/kW-hr) 2011 + (g/hp-hr)	0.015 (0.011)	0.015 (0.011)	0.015 (0.011)	2.68 (2.0)	0.94 (0.7)	1.34 (1.0)

C. Combined facility wide emissions from the operation of either CI or SI affected units shall not exceed the limits specified in Table 3.

TABLE 3

Combined Facility-wide Emissions Limits for Both CI or SI Engines

Pollutant	Nonattainment Areas Emissions (tons/yr)	Attainment Areas Emissions (tons/yr)
PM	2.8	2.8
PM-10	2.8	2.8
PM 2.5	<mark>2.8</mark>	<mark>2.8</mark>
NO _X	<mark>24.4</mark>	<mark>39.4</mark>
CO	<mark>99.4</mark>	<mark>99.4</mark>
VOC	<u>17.1</u>	27.6

*SO₂ has been deleted

D. Visible emissions from each affected unit shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

9VAC5-530-190. Testing requirements.

A. Each affected unit shall be constructed and installed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

B. No affected unit shall be used for the purposes of preventative maintenance purposes before 5 pm any day during the ozone season of May 1 – September 30. (Is this only in nonattainment areas or statewide?)

C. Initial performance tests shall be conducted for NOx, CO, PM-10, and PM 2.5 from the affected unit using EPA approved reference methods to determine compliance with the emission limits contained in 9VAC5-530-180.

1. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility.

2. Test shall be conducted in accordance with EPA methods or an alternative method approved by DEQ.

3. The details of the tests are to be arranged with the regional office and the permittee shall submit a test protocol at least 30 days prior to testing.

4. One copy of the test results shall be submitted to the DEQ regional office within 45 days after test completion and shall conform to the test report format in 9VAC5-530-210.

5. Testing for multiple identical affected units located at the facility shall be conducted as follows:

a. 50% of CI affected units shall be tested.

b. 100% of SI affected units over 500 hp shall be tested. (What about under 500 hp?)

6. The permittee shall conduct additional performance testing every 3 years for NOx, CO, PM-10, and PM 2.5 to demonstrate compliance with the

emission limits contained in 9VAC5-530-180. The details of the tests shall be arranged with the regional office. Additional performance testing for multiple identical affected units located at the facility shall be conducted as follows:

a. 20% of CI affected units shall be tested.

b. 100% of SI affected units over 500 hp shall be tested. (What about under 500 hp?)

D. Initial Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted on each electric generating unit.

1. The evaluation shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility.

2. Should conditions prevent concurrent opacity observations, the Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days.

3. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests.

4. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average.

5. The details of the tests are to be arranged with the regional office and the permittee shall submit a test protocol at least 30 days prior to initial testing.

6. One copy of the test results shall be submitted to the DEQ Regional Office within 45 days after test completion and shall conform to the test report format in 9VAC5-530-210.

7. Initial VEE testing for multiple identical electric generating units located at the facility shall be conducted as follows:

a. 50% of CI affected units shall be tested.

b. 100% of SI affected units over 500 hp shall be tested. (What about under 500 hp or don't they exist?)

8. The permittee shall conduct additional VEE testing every 3 years

for NOx, CO, PM-10, and PM 2.5 to demonstrate compliance with the opacity limit contained in 9VAC5-530-180 D. The details of the tests shall be arranged with the regional office. Additional VEE testing for multiple identical affected units located at the facility shall be conducted as follows:

a. 20% of CI affected units shall be tested.

b. 100% of SI affected units over 500 hp shall be tested. (What about under 500 hp?)

9VAC5-530-200. Recordkeeping requirements.

A. The permittee shall maintain **on site** records of emission data and operating parameters as necessary to demonstrate compliance with this general permit.

B. The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the following: (i). date, (ii) time, iii duration, (iv) description (emission unit, pollutant affected, cause), (v) corrective action, (vi) preventive measures taken and (vii) name of person generating the record.

C. The content and format of such records shall be arranged with the Regional Office. These records shall include, but are not limited to:

1. Total combined annual throughput of fuel **consumed** for the affected unit or units, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

2. Total annual heat input values to show compliance with subsections C, D, and E of 9VAC5-530-170.

3. All fuel supplier certifications.

4. Engine information including make, model, serial number, model year, maximum engine power, and engine displacement for each affected unit.

5. Written manufacturer specifications or written standard operating procedures prepared by the permittee for each electric generating facility. The written standard operating procedures prepared by the permittee cannot be less stringent than the written manufacturer specifications.

6. Results of all stack tests, visible emission evaluations and performance evaluations.

7. Operation and control device monitoring records for the fuel flow meter.

8. Scheduled and unscheduled maintenance/testing and operator

training.

D. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

9VAC5-530-210. Reporting requirements.

A. The permittee shall furnish written notification to the Regional Office of the following:

1.The actual date on which construction of each affected unit commenced within 30 days after such date.

2. If necessary, the actual date on which the integration operational period of each affected unit commenced within 15 days after such date

3. The anticipated start-up date of each affected unit postmarked not more than 60 days nor less than 30 days prior to such date.

4. The actual start-up date of each affected unit within 15 days after such date.

5. The anticipated date of performance tests of each affected unit postmarked at least 30 days prior to such date.

B. The permittee shall furnish notification to the regional office of malfunctions of the affected unit or related air pollution control equipment that may cause excess emissions for more than one hour.

1. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered.

2. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction.

3. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the

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regional office.

PART V. GENERAL PERMIT TERMS AND CONDITIONS FOR ELECTRIC GENERATING UNITS USING HOURS OF OPERATION FOR COMPLIANCE DEMONSTRATION.

9VAC5-530-220. General permit.

A. Any owner whose application is approved by the director shall receive the following permit and shall comply with the requirements in it and be subject to all requirements of this chapter and the regulations of the board.

A. Any owner whose application is approved by the director shall receive the following permit and shall comply with the requirements in it and be subject to all requirements of this chapter and the regulations of the board.

B. In compliance with the provisions of the Virginia Air Pollution Control Law and regulations adopted pursuant to it, owners of electric generating units are authorized to operate under the authority of this permit, except those where board regulations or policies prohibit such operation.

C. The authorization to operate under this permit shall be in accordance with the cover letter to this permit, 9VAC5-530-2300 (General terms and conditions), 9VAC5-530-240 (Monitoring requirements) 9VAC5-530-250 (Operating limits), 9VAC5-530-260 (Emissions limits), 9VAC5-530-270 (Testing requirements), 9VAC5-530-280 (Recordkeeping requirements), and 9VAC5-530-290 (Reporting requirements).

9VAC5-530-230. General terms and conditions.

A. The permittee is authorized to operate an affected unit located within the boundaries of the Commonwealth of Virginia, in accordance with the approved permit application and conditions of this permit except where board regulations or policies prohibit such activities.

B. The permittee shall comply with the terms and conditions of this permit prior to commencing any physical or operational change or activity that will result in making the facility subject to the new source review program.

9VAC5-530-240. Monitoring requirements

A. The permittee shall install and use a non-resettable hour metering device to monitor the monthly and yearly operating hours for each affected unit, calculated monthly as the sum of each consecutive 12-month period. Each fuel

flow meter shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.

B. The hour meter used to continuously measure the monthly and yearly fuel throughput for each electric generating unit shall be observed by the permittee with a frequency of not less than once per month to ensure good performance. The permittee shall keep a log of the observations from the hour meter.

C. Each affected unit shall comply with visible emissions and fugitive dust emissions standards of Article 1 of Part II of 9VAC5-50 (New and Modified Stationary Sources). No owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Is this section necessary or desirable?

D. Each affected unit shall comply with the odor standards Article 2 of Part II of 9VAC5-50 (New and Modified Stationary Sources). Under no circumstances shall the unit operate in such a manner as to cause an odor objectionable to individuals of ordinary sensibility.

9VAC5-530-250. Operating limits.

A. The approved fuels for each compression ignition affected unit are diesel fuel, biodiesel fuel and biodiesel blends. These fuels shall meet the following specifications:

1. Diesel fuel which meets the ASTM D975 specification for numbers 1 or 2 fuel oil; maximum sulfur content per shipment, 0.0015%.

2. Bio-diesel fuel which meets ASTM specification D6751; maximum sulfur content per shipmen, 0.0015%.

B. The approved fuels for each spark ignition affected unit are natural gas and liquid propane gas. These fuels shall meet the following specifications.

1. Natural gas with a minimum heat content of1,000 Btu/scf HHV as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method.

2. Liquid propane gas, including butane and propane, which meets ASTM specification D1835.

C. Each affected unit shall not operate more than 350 hours per year,

calculated monthly as the sum of each consecutive 12-month period.

1. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

2. Total emissions for any twelve month period, calculated as the sum of all emissions from operations under this condition, shall not exceed the limits stated in subsection C of 9VAC5-530 260.

D. For units using diesel fuel or bio-diesel fuel the permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel or bio-diesel fuel. Each fuel supplier certification shall include the following:

1. The name of the fuel supplier.

2. The date on which the distillate oil or bio-diesel was received.

3. The quantity of distillate oil or bio-diesel delivered in the

shipment.

4. A statement that the diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D975) for numbers 1 or 2 fuel oil.

5. A statement that the bio-diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D6751), and

6. The sulfur content of the diesel fuel or bio-diesel fuel.

9VAC5-530-260. Emissions limits.

A. Emissions from the operation of each compression ignition affected unit shall not exceed the limits specified in Table 4 below:

TABLE 4

Emissions Limits for CI Engines

Engine Year	Emission Limits g/kW-hr <mark>(g/hp-hr)</mark>							
	PM							
2011-2014 (g/kW-hr)	0.10	0.10	0.10	3.5	0.40	0.67		

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2011-2014 (g/hp-hr)	<mark>(0.075)</mark>	<mark>(0.075)</mark>	<mark>(0.075)</mark>	<mark>(2.6)</mark>	<mark>(0.30)</mark>	<mark>(0.50)</mark>
2015+ (g/kW-hr)	0.03	0.03	0.03	3.5	0.19	0.67
2015 + (g/hp-hr)	(0.022)	(0.022)	(0.022)	<mark>(2.6)</mark>	<mark>(0.14)</mark>	(0.50)

B. Emissions from the operation of each spark ignition affected unit shall not exceed the limits specified in Table 2.

TABLE 5

Emissions Limits for SI Engines

Engine Year	Emission Limits g/kW-hr <mark>(g/hp-hr)</mark>					
	PM					
2011+(g/kW-hr) 2011 + (g/hp-hr)	0.015 (0.011)	0.015 (0.011)	0.015 (0.011)	2.68 (2.0)	0.94 (0.7)	1.34 (1.0)

C. Combined facility wide emissions from the operation of either CI or SI affected units shall not exceed the limits specified in Table 3.

TABLE 6

Combined Facility-wide Emissions Limits for Both CI or SI Engines

Pollutant	Nonattainment Areas Emissions (tons/yr)	Attainment Areas Emissions (tons/yr)
PM	2.8	2.8
PM-10	<mark>2.8</mark>	<mark>2.8</mark>
PM 2.5	<mark>2.8</mark>	<mark>2.8</mark>
NO _X	24.4	<mark>39.4</mark>
\$0 2	<mark>39.4</mark>	<mark>39.4</mark>
CO	99.4	<mark>99.4</mark>
VOC	<u>17.1</u>	<mark>27.6</mark>

D. Visible emissions from each affected unit shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

9VAC5-530-270. Testing requirements.

A. Each affected unit shall be constructed and installed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

B. No affected unit shall be used for the purposes of preventative maintenance purposes before 5 pm any day during the ozone season of May 1 – September 30. (Only in nonattainment areas or statewide?)

C. Initial performance tests shall be conducted for NOx, CO, PM-10, and PM 2.5 from the electric generating unit using EPA approved reference methods to determine compliance with the emission limits contained in 9VAC5-530-260.

1. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility.

2. Test shall be conducted in accordance with EPA methods or an alternative method approved by DEQ.

3. The details of the tests are to be arranged with the regional office and the permittee shall submit a test protocol at least 30 days prior to testing.

4. One copy of the test results shall be submitted to the DEQ regional office within 45 days after test completion and shall conform to the test report format in 9VAC5-530-210.

 Testing for multiple identical affected units located at the facility shall be conducted as follows:

a. 50% of CI affected units shall be tested.

b. 100% of SI affected units over 500 hp shall be tested. (What about under 500 hp?)

6. The permittee shall conduct additional performance testing every 3 years for NOx, CO, PM-10, and PM 2.5 to demonstrate compliance with the emission limits contained in 9VAC5-530-260. The details of the tests shall be arranged with the regional office. Additional performance testing for multiple identical affected units located at the facility shall be conducted as follows:

a. 20% of CI affected units shall be tested.

b. 100% of SI affected units over 500 hp shall be tested. (What about under 500 hp?)

F. Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted on each electric generating unit.

1. The evaluation shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility.

2. Should conditions prevent concurrent opacity observations, the Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days.

3. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests.

4. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average.

5. The details of the tests are to be arranged with the regional office and the permittee shall submit a test protocol at least 30 days prior to testing.

6. One copy of the test results shall be submitted to the DEQ regional office within 45 days after test completion and shall conform to the test report format in 9VAC5-530-210.

7. Initial VEE testing for multiple identical electric generating units located at the facility shall be conducted as follows:

a. 50% of CI affected units shall be tested.

b. 100% of SI affected units over 500 hp shall be tested. (What about under 500 hp or don't they exist?)

8. The permittee shall conduct additional VEE testing every 3 years for NOx, CO, PM-10, and PM 2.5 to demonstrate compliance with the opacity limit contained in 9VAC5-530-180 D. The details of the tests shall be arranged with the regional office. Additional VEE testing for multiple identical affected units located at the facility shall be conducted as follows:

a. 20% of CI affected units shall be tested.

b. 100% of SI affected units over 500 hp shall be tested.

(What about under 500 hp?)

9VAC5-530-280. Recordkeeping requirements.

A. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this general permit.

B. The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.

C. The content and format of such records shall be arranged with the Regional Office. These records shall include, but are not limited to:

1. Total combined annual hours of operation for the electric generating units, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

2. All fuel supplier certifications.

3. Engine information including make, model, serial number, model year, maximum engine power, and engine displacement for each electric generating facility.

5. Written manufacturer specifications or written standard operating procedures prepared by the permittee for each electric generating facility. The written standard operating procedures prepared by the permittee cannot be less stringent than the written manufacturer specifications.

6.Results of all stack tests, visible emission evaluations and performance evaluations.

7.Operation and control device monitoring records for the fuel flow meter.

8. Scheduled and unscheduled maintenance/testing and operator training.

D. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

9VAC5-530-290. Reporting requirements.

A. The permittee shall furnish written notification to the Regional Office of the following:

1. The actual date on which construction of each electric generating facility commenced within 30 days after such date.

2. The anticipated start-up date of each electric generating facility postmarked not more than 60 days nor less than 30 days prior to such date.

3. The actual start-up date of each electric generating facility within 15 days after such date.

4. The anticipated date of performance tests of each electric generating facility postmarked at least 30 days prior to such date.

B. The permittee shall furnish notification to the Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour.

1. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered.

2. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction.

3. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Regional Office.