

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

**FACT SHEET AND STATEMENT OF BASIS
FOR PROPOSED PERMITTING ACTION
UNDER 20 DCMR 300 (TITLE V-OPERATING PERMIT PROGRAM)**

This “Fact Sheet and Statement of Basis” has been prepared pursuant to 20 DCMR 303.1(c) and 40 CFR 70.7(a)(5).

PERMIT NO. 043-A1

APPLICANT AND PERMITTEE:

Virginia Electric and Power Co. dba Dominion Virginia Power
5000 Dominion Blvd.
Glen Allen, VA 23060

FACILITY LOCATION:

Joint Base Myer-Henderson Hall/Fort Lesley J. McNair
4th and P Streets SW
Washington, DC 20319

FACILITY AND PERMIT ACTION DESCRIPTION:

Joint Base Myer-Henderson Hall (formerly Fort Lesley J. McNair) is a military base (under U.S. Army jurisdiction) located in the District of Columbia (as well as partially in the Commonwealth of Virginia). As part of base operations, the Army has contracted with Virginia Electric and Power Co. dba Dominion Virginia Power (the applicant) to maintain and operate a number of emergency generator sets at the District of Columbia portion of the site to support base operations. On September 23, 2014, Final Title V Permit No. 043 was issued to the applicant to cover 12 such emergency generator sets.

On November 9, 2015, the Air Quality Division (AQD) of the Department of Energy and Environment (the Department) received a Chapter 2 permit application from the applicant to install a new 400 kWe diesel-fired emergency generator set at the facility. On February 16, 2016, Chapter 2 Permit No. 7065 was issued to the applicant to install the unit. Condition I(g) of this permit required, pursuant to 20 DCMR 301.1, that the applicant apply for a modification to the Title V permit within 12 months of issuance of the Chapter 2 permit.

On February 10, 2017, AQD received an application for a significant permit modification to Title V Permit No. 043 to include in it the requirements of Chapter 2 Permit No. 7065. This permitting action is being taken to address this significant permit modification application.

The following information describes the generator set to be included in the Title V permit:

Equipment Location	Emission Unit ID	Model Number	Model Year	Installed	Chapter 2 Permit No.	Generator Size (kWe)	Engine Size (hp)
Building 18	BLDG 18	C15/DM8151	2015	2017	7065	400	619

Fact Sheet and Statement of Basis

Permit No. 043-A1

Virginia Electric and Power Co. dba Dominion Virginia Power

September 25, 2017

Page 2

It should be noted that this significant permit modification action only opens Condition III(a) of the permit. All other conditions of the permit remain unchanged from those included in the September 23, 2014 version of the permit. As such, there will be no extension to the previously existing permit expiration date (September 22, 2019). The applicant will still need to apply for a renewal of the Title V permit at least six months before that expiration date.

It should also be noted that, in addition to adding the generator set to Condition III(a) of the permit (which covers all similar diesel-fired emergency generator sets subject to 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, at the facility), all of Condition III(a) was revised and updated to reflect current permit standards. The main reason for changes to the language of this section since issuance of Title V Permit 043 on September 23, 2014 was to address the partial RICE vacatur resulting from the outcome of Delaware Department of Natural Resources and Environmental Control v. Environmental Protection Agency (see <https://www.epa.gov/stationary-engines/technical-documents-neshap-reciprocating-internal-combustion-engines-0>).

EMISSIONS SUMMARY:

The following table shows the impact of the addition of the new generator set to the facility's potential to emit. The facility reported the following emissions in the Title V permit application (as revised by the submittal dated June 18, 2014):

FACILITY WIDE EMISSIONS SUMMARY [TONS PER YEAR]			
Criteria Pollutants	Potential Emissions Before Additional Generator Set	Potential Emissions of Additional Generator Set	Total New Potential Emissions of the Facility
Sulfur Dioxide (SO ₂)	0.03	0.001	0.031
Oxides of Nitrogen (NO _x)	51.77	0.64	52.41
Total Particulate Matter (PM Total)	0.44	0.02	0.46
Volatile Organic Compounds (VOC)	0.84	0.03	0.87
Carbon Monoxide (CO)	5.21	0.45	5.66

Note that these emissions cover only the equipment under the control of the applicant. Joint Base Myer-Henderson Hall is also a major source of air pollutants. Virginia Electric and Power Company's operations are considered a support facility for Joint Base Myer-Henderson Hall, so for purposes of determining the source classification, both would need to be considered. Similarly, in any new source review netting evaluation, equipment associated with both entities would need to be considered.

Fact Sheet and Statement of Basis

Permit No. 043-A1

Virginia Electric and Power Co. dba Dominion Virginia Power

September 25, 2017

Page 3

BASIS OF 20 DCMR CHAPTER 3 (TITLE V) APPLICABILITY:

The Virginia Electric and Power Co. operations at Joint Base Myer-Henderson Hall have the potential to emit approximately 52.41 tons per year of NO_x. These potential emissions exceed the major source threshold in the District of 25 tons per year of NO_x. As a result, the applicant is subject to the requirement to obtain a Chapter 3 permit. Additionally, even if the applicant's operations alone did not exceed the major source threshold, because the applicant's equipment at the site is in place to support operations of the Joint Base Myer-Henderson Hall facility, which is a permitted major source itself, the applicant would be subject to the requirement to obtain a Chapter 3 permit.

LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The conditions contained in the Title V Operating Permit are based on underlying requirements of 20 DCMR as well as various federal regulations promulgated pursuant to the federal Clean Air Act. The regulations that are the basis of each condition are cited in the permit, except that conditions added to make another condition, with a direct underlying regulation, enforceable as a practical matter may, in some cases, not have a specific citation. These latter, un-cited conditions generally consist of monitoring, record keeping, and reporting requirements authorized under 20 DCMR 500.1.

The permit has been developed to incorporate the requirements of all applicable requirements as defined in 20 DCMR 399.1 along with additional conditions necessary to make all such requirements enforceable as a practical matter.

Any condition of the draft Title V Operating Permit that is enforceable by the District but is not federally-enforceable is identified in the Title V permit as such with an asterisk.

It should also be noted that this permit is being issued pursuant to the District's authority under 20 DCMR Chapter 2 as well as Chapter 3. When the permit is issued for public review, the public notice will reflect this fact.

REGULATORY REVIEW:

This facility has been found to be subject to the requirements of the following regulations (except as specified in the discussion of specific regulations below):

Federal and District Enforceable:

20 DCMR Chapter 1 - General Rules

20 DCMR Chapter 2 - General and Non-Attainment Area Permits

20 DCMR Chapter 3 - Operating Permits and Acid Rain Programs

20 DCMR 500 - Records and Reports

20 DCMR 502 - Sampling, Tests, and Measurements

20 DCMR 600 - Fuel-Burning Particulate Emission

20 DCMR 604 - Open Burning

20 DCMR 605 - Control of Fugitive Dust

Fact Sheet and Statement of Basis

Permit No. 043-A1

Virginia Electric and Power Co. dba Dominion Virginia Power

September 25, 2017

Page 4

- 20 DCMR 606 - Visible Emissions
- 20 DCMR 700 - Miscellaneous Volatile Organic Compounds (VOCs)
- 20 DCMR 774 - Architectural and Industrial Maintenance Coatings
- 20 DCMR 800 - Control of Asbestos
- 20 DCMR 801 - Sulfur Contents of Fuel Oils
- 20 DCMR 805 - Reasonably Available Control Technology for Major Stationary Sources of the Oxides of Nitrogen
- 40 CFR 82, Subpart G - Protection of Stratospheric Ozone (Federally enforceable only except through Title V) *(Note: AQD did not make a positive determination that this regulation was applicable to the facility, but included it as a standard requirement in the permit.)*
- 40 CFR 82, Subpart H - Halon Emissions Reduction (Federally enforceable only except through Title V) *(Note: AQD did not make a positive determination that this regulation was applicable to the facility, but included it as a standard requirement in the permit.)*
- 40 CFR 60.11 and 40 CFR 61.12 - Credible Evidence
- 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

District Enforceable Only:

- 20 DCMR 402 – Chemical Accident Prevention *(Note: AQD did not make a positive determination that this regulation was applicable to the facility, but included it as a standard requirement in the permit.)*
- 20 DCMR 900 - Engine idling
- 20 DCMR 901 - Vehicular exhaust emissions
- 20 DCMR 902 - Lead Content of Gasoline
- 20 DCMR 903 - Odorous or other nuisance air pollutants

20 DCMR Chapter 2 – General and Non-Attainment Area Permits and Chapter 3 – Operating Permits and Acid Rain Programs

The equipment covered by the permit application (13 emergency generator sets) are all stationary sources with the potential to emit air pollutants. Thus, they are subject to Chapter 2 permitting pursuant to 20 DCMR 200.1 and 200.2.

It should also be noted that 20 DCMR 204 (Permit Requirements for Sources Affecting Non-Attainment Areas), the District's non-attainment New Source Review (NSR) rule was applied to seven of the generators (DOM-EG-6-1 through DOM-EG-6-7), prior to the November 2012 rule revisions, in the course of issuing permits 6563, 6564, and 6478 through 6482. As a result of the application of this rule to these permits, the applicant was required to obtain a total of 7 tons of NO_x emission reduction credits (ERCs). The existing Title V permit requires that they maintain records of this action in Condition III(a)(4)(E). This requirement is unchanged in the updated draft permit.

Fact Sheet and Statement of Basis

Permit No. 043-A1

Virginia Electric and Power Co. dba Dominion Virginia Power

September 25, 2017

Page 5

Also of note is the fact that eight of the generators have taken operational limits of 250 hours per 12 month rolling period to minimize potential emissions. The remaining units, including the new Building 18 generator have 500 hour per 12 month rolling period limits.

This permit action is adding the requirements of previously issued Chapter 2 Permit 7065 to the Title V permit. It adds these conditions to Section III(a) of the permit, which covers all of the generator sets under the control of the applicant. All of these units are subject to 40 CFR 60, Subpart IIII as discussed below. Primarily as a result of revised standard emergency engine permit language resulting from the partial vacatur of 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ (discussed above), it was necessary to update the language covering all of the generator sets controlled by the applicant while Condition III(a) of the permit was open as a result of this significant permit modification. This was done to ensure that the most recent regulatory requirements are included in the permit for these generator sets.

20 DCMR 805 - Reasonably Available Control Technology for Major Stationary Sources of the Oxides of Nitrogen

This regulation is not applicable to the applicant's generators as all generators covered by this permit, including the newly added Building 18 generator, are classified as emergency generators and are limited to operation less than 500 hours per year. As such, they are exempt pursuant to 20 DCMR 805.1(c)(2).

40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

NSPS Subpart IIII is applicable to all 13 of the generators covered by this Chapter 3 permit based on model years and installation dates. As such, the relevant requirements of this regulation have been incorporated throughout Condition III(a) of the permit. As noted above, language was revised to reflect the partial vacatur of this standard. The main effect of this partial vacatur on the language in this permit was to reclassify operations during low voltage or frequency situations as non-emergency operation rather than emergency operation. Demand response activities for profit were already prohibited under the previous permit language.

40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (NESHAP for RICE) located in an Area Source of HAPS

Subpart ZZZZ of 40 CFR 63 regulates/monitors Hazardous Air Pollutants (HAPs) such as acetaldehyde, acrolein, benzene, toluene, xylene, cadmium, chromium, lead, etc, through surrogate compounds such as formaldehyde, CO and/or VOC.

A facility that emits or has the potential to emit 10 tons/year of any single HAP or 25 tons/year of any combination of HAPs, is consider a major source. Any source that is not a major source is an area source. Because this facility does not have the potential to emit more than 10 tons/year of a single HAP or an aggregate of more than 25 tons of total HAPs, it is not a major source. It is rather an area source.

Fact Sheet and Statement of Basis

Permit No. 043-A1

Virginia Electric and Power Co. dba Dominion Virginia Power

September 25, 2017

Page 6

Subpart ZZZZ is applicable to the generator engines operated by the applicant. However, pursuant to 40 CFR 63.6590(c), the only requirement is that the units comply with the requirements of (in the case of these compression ignition engines) 40 CFR 60, Subpart III, previously discussed.

Compliance Assurance Monitoring (CAM) [40 CFR 64]:

The Compliance Assurance Monitoring (CAM) rule does not apply to this facility because none of the units in this facility rely on control devices for compliance. There is no need for this facility to install control devices as defined by 40 CFR 64. Therefore, CAM does not apply.

Greenhouse Gas Program Applicability

20 DCMR, Chapter 3 (Title V) applicability was triggered by other pollutants, thus a Chapter 3 permit is required whether or not emissions of GHGs meet Title V applicability thresholds. No modifications have been made to the source that would trigger PSD applicability under the GHG Tailoring Rule (which has been overturned by the U.S. Supreme Court in any case). Other than this requirement, there are no other applicable requirements related to GHGs at this time, therefore none were included in the permit.

ENFORCEMENT HISTORY:

Although some permits were obtained belatedly after transfer of equipment from the Army to the applicant, all known Chapter 2 permitting issues were resolved before issuance of the 2014 Title V Permit No. 043. The applicant has been subject to no enforcement actions by AQD in the past three years and, according to EPA's Enforcement and Compliance History Online (ECHO) database, no enforcement actions have been taken against the facility in that time.

COMMENT PERIOD:

Beginning Date: October 6, 2017

Ending Date: November 6, 2017

All written comments should be addressed to the following individual and office:

Stephen S. Ours, P.E.
Chief, Permitting Branch
Department of Energy and Environment
Air Quality Division
1200 First Street NE, 5th Floor
Washington, DC 20002

PROCEDURE FOR REQUESTING PUBLIC HEARING:

During public comment period any interested person may submit written comments on the draft

Fact Sheet and Statement of Basis

Permit No. 043-A1

Virginia Electric and Power Co. dba Dominion Virginia Power

September 25, 2017

Page 7

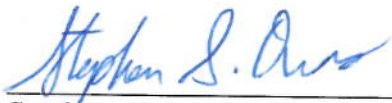
permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The District shall grant such a request if it is deemed appropriate. The venue, date, and time for any public hearing shall be announced in the District Register and a daily newspaper.

POINT OF CONTACT FOR INQUIRIES:

Stephen S. Ours, P.E.
Chief, Permitting Branch
Department of Energy and Environment
Air Quality Division
1200 First Street NE, 5th Floor
Washington, DC 20002
(202) 535-1747

PREPARATION:

Prepared by:



Stephen S. Ours, P.E.
Chief, Permitting Branch

SSO

