

GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment

Air Quality Division



**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 District of Columbia municipal District of Columbia Municipal Regulations (DCMR) 303.1(c) and 40 CFR 70.7(a)(5).

PERMIT NO. 043

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 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 twelve (12) emergency generators at the District of Columbia portion of the site to support base operations. Several of these units have been recently installed, whereas several were transferred to the control of the applicant from Joint Base Myer-Henderson Hall. This Title V permit covers all of these generator support operations.

The following is a list of the generators and their associated authorizing Chapter 2 permits, under the control of the applicant:

Equipment Location	Emission Unit ID	Model Number	Chapter 2 Permit No.	Generator Size (kW)	Engine Size (hp)
Building 64	Cat Gen 1	C32 DITA	6436-R1	1,000	1,502
Building 64	Cat Gen 2	C32 DITA	6437-R1	1,000	1,502



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Equipment Location	Emission Unit ID	Model Number	Chapter 2 Permit No.	Generator Size (kW)	Engine Size (hp)
Building 64	Cummins-1	2700DQLA	6908	2,700	3,740
Building 64	Cummins-2	2700DQLA	6909	2,700	3,740
Building 21	DOM-EG-6-7	D150-8	6564	150	230
Building 60	DOM-EG-6-1	C32 DITA	6478-A1	800	1,214
Building 47	DOM-EG-6-2	C15 DITA*	6479-A1	400	619
Building 58	DOM-EG-6-3	C15 DITA	6480-A1	350	546
Building 69	DOM-EG-6-4	C15 DITA*	6481-A1	400	619
Building 41	DOM-EG-6-5	C32 DITA	6482-A1	800	1,214
Building 36	BLDG 36	C15/DM8151	6813	400	619
Building 52	BLDG 52	C27/DM7696	6814	800	1,214

* Note that these units were listed as C32 DITA in the original Chapter 2 permits, but they were corrected to C15 DITA per a correction email from the applicant on July 18, 2014.

EMISSIONS SUMMARY:

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
Sulfur Dioxide (SO ₂)	0.03
Oxides of Nitrogen (NO _x)	51.77
Total Particulate Matter (PM Total)	0.44
Volatile Organic Compounds (VOC)	0.84
Carbon Monoxide (CO)	5.21
Carbon Dioxide (CO ₂)	3,734.82

Note that per an email from Andy Gates to Stephen Ours on July 3, 2014, Mr. Gates confirmed that emissions data from the spreadsheet attached to the application (later revised by a July 18, 2014 email, also from Andy Gates, due to inclusion of an overlooked unit at Building 58 and removal of an identically sized unit that was never constructed at Building 17) was more accurate than the Form V.19 included in the application. Thus, the spreadsheet emission calculations are reflected above. It should be noted that, while the emissions reported on the Form V.19 were generally slightly higher, none were significantly different from those in the spreadsheet and none of the differences resulted in the facility being classified differently with respect to the applicability of any regulation.

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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 51.77 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

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- 20 DCMR 604 - Open Burning
- 20 DCMR 605 - Control of Fugitive Dust
- 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 generators) 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

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NO_x emission reduction credits (ERCs). The draft permit requires that they maintain records of this action in Condition III(a)(4)(E).

Also of note is the fact that all but two of the generators (Cat Gen 1 and Cat Gen 2 at Building 64) have taken operational limits of 250 hours per 12 month rolling period to minimize potential emissions. The remaining two have 500 hour per 12 month rolling period limits (at least in part to avoid applicability of 20 DCMR 805).

Other requirements included in the Chapter 2 permits (and updated, where appropriate using Chapter 2 authority) have been included in the draft Chapter 3 permit.

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 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.

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.

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 IIII, previously discussed.

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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 GHC Tailoring Rule (which, it appears 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.

As noted above, the facility estimated that their potential emissions of CO₂ were 3,734.82 (short) tons. Based on this, it is unlikely that emissions from the equipment would approach any GHG regulatory trigger threshold.

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 preparation of this draft permit. The applicant has been subject to no enforcement actions by AQD in the past three years.

COMMENT PERIOD:

Beginning Date: August 1, 2014

Ending Date: September 2, 2014

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

Stephen S. Ours, P.E.
Chief, Permitting Branch
District Department of the 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 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

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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
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1200 First Street NE, 5th Floor
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PREPARATION:

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SSO

