

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: 001-R2

APPLICANT AND PERMITTEE:

Joint Base Myer-Henderson Hall
204 Lee Avenue
Fort Myer, VA 22211-1199

FACILITY LOCATION:

Joint Base Myer-Henderson Hall (Fort Lesley J. McNair)
103 3rd Street SW
Washington, DC 20319-5058

FACILITY DESCRIPTION:

Joint Base Myer-Henderson Hall (JBM-HH) (Fort Lesley J. McNair) covered by Standard Industrial Classification (SIC) code 97 is a joint base of the United States military which consists of Fort McNair (located in Washington, DC), and Fort Myer and Henderson Hall (located in Arlington, VA). This Title V Operating Permit (Permit No. 001-R2) applies to the Fort McNair portion of JBM-HH, located in Washington, DC. It is bounded by the Washington Channel to the west; P Street to the north; 2nd Street SW to the east; and the Anacostia River to the south.

Fort Lesley J. McNair has been the headquarters of the U.S. Army Military District of Washington since 1966. The facility has been recently made part of a larger joint services military base in the Washington DC metropolitan area, which is known as Joint Base Myer-Henderson Hall (JBM-HH). In addition, as part of base operations, the U.S. Army has contracted with Virginia Electric and Power Company (dba Dominion Virginia Power) to maintain and operate a number of emergency generators at the District of Columbia portion of Joint Base Myer-Henderson Hall to support joint base operations. Twelve (12) of these generators are currently being regulated under the Title V Operating Permit No. 043. One additional generator at Building 18 has been installed by Virginia Electric and Power Company under Chapter 2 Permit 7065 and is currently pending inclusion in Title V Permit No. 043.

Fort McNair was previously issued a Title V Operating Permit (Permit No. 001) on September 27, 2004. The permit reached its expiration date on September 27, 2009. The facility submitted a timely permit application on March 27, 2009 to renew their Title V operating permit. Since the issuance of the Title V Operating Permit in 2004, the facility was merged under the joint military base command of JBM-HH and a revised Title V operating permit renewal application for the Fort McNair portion of JBM-HH was submitted in March 2015.

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This Title V Operating Permit (Permit No. 001-R2) is for the Fort McNair (facility) portion of the JBM-HH. The facility includes emission units that are capable of operating twenty-four (24) hours per day, seven (7) days per week, and fifty-two (52) weeks per year. The facility consists of the following sources of air emissions (including identified miscellaneous/insignificant sources):

- Two (2) natural gas fired boilers;
- Three (3) diesel fired emergency generators;
- One (1) diesel fired pump engine;
- Several external combustion units with less than 5 million Btu/hour (MMBtu/hr) capacity;
- Three (3) 10,000-gallon underground storage tanks (UST) for gasoline
- Four (4) gasoline dispensing units;
- Seven (7) cooling towers; and
- Several other insignificant units listed in Section IV of the permit.

Thirteen (13) additional generators are located at the facility and are operated by Virginia Electric and Power Company (dba Dominion Virginia Power). These generators are currently being regulated under Title V operating permit No. 043 (except one which is pending inclusion into that permit, as discussed above). This permit was issued to Virginia Electric and Power Company on September 23, 2014 and will expire on September 22, 2019. Therefore, these twelve (12) generators are not regulated under the Title V Operating Permit No. 001-R2.

Because Virginia Electric and Power Company's operations at the site are in support of the Ft. McNair operations, they are considered a support facility and would need to be included into the overall facility for source classification purposes. However, since each facility is subject to 20 DCMR Chapter 3 independently, there is no need to do the full aggregation of equipment and emissions for source classification purposes. In the future, however, should either JBM-HH or Virginia Electric and Power Company wish to take action to move out of the Title V program, it should be noted that emissions from both facilities will need to be considered due to this support facility relationship. Similarly, for any Nonattainment New Source Review (NNSR) netting analysis need to be performed pursuant to 20 DCMR 204 at either of the facilities, contemporaneous increases and decreases of emissions at both facilities would need to be evaluated in that analysis.

The Title V Operating Permit renewal application submitted in March 2015 indicates that two (2) identical 20.992 MMBtu/hr dual fuel boilers (natural gas and No. 2 fuel oil), Cleaver Brooks boilers (Model No. CB400-500, Serial Nos. L-71505 and L-71506) with ID No. CU 34-1 and CU 34-2 located in building 34 ceased to operate after February 20, 2012. These two boilers were dismantled and physically removed in June 2012.

The Title V Operating Permit renewal application submitted in March 2015 and the letter dated August 22, 2016 from the facility to DOEE indicates that one (1) 8.37 MMBtu/hr natural gas

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fired boiler, Universal Energy Corp. Boiler (Model No. F200 and Serial No. 174-10) with ID No. CU 59-1 located in building 59 has been decommissioned and removed from the facility in spring of 2015. The boiler CU 59-1 was replaced with two identical 3.0 MMBtu/hr natural gas fired boilers (Manufacturer: Lochinvar, Model No. FBN3000, and Serial No. C15H00275549 and C15H00275550) and one 0.6 MMBtu/hr natural gas fired hot water heater (Manufacturer: Lochinvar, Model No. AWN601PM, and Serial No. A15H20330169). Therefore boiler CU 59-1 was not included within the Title V Operating Permit and not included to calculate the Potential to Emit (PTE) for the facility. The two boilers and one hot water heater were included in the PTE calculations for the facility.

It should be noted that the current Title V Application (2015) lists the following emission units that have been removed from operation:

- Five (5) natural gas hot water heaters and one (1) natural gas boiler with less than 5 MMBtu/Hour capacity;
- Ten (10) diesel fired emergency generators;
- Two (2) 15,000 gallon capacity #2 Fuel Oil USTs;
- Two (2) 15,000 gallon capacity diesel aboveground storage tanks (ASTs); and
- Two (2) 300 gallon capacity diesel ASTs.

Additionally, per an email from Gregory K. Olmsted of JBM-HH on March 28, 2017, two emergency generators at building 46 (EG-46-1 and EG-46-2), along with a generator at Quarters 8 (EG-Qtrs-8-1) have been taken offline and will no longer be operated. JBM-hh intends to electrically disconnect and remove fuel from all three units. The email requested that these units not be included in the permit. As such, they have not been included and their operation will no longer be authorized at the facility.

In the same March 28, 2017 email, Mr. Olmsted indicated that the facility no longer conducts woodworking operations, so this is not included as an insignificant source at the facility.

EMISSIONS SUMMARY:

Based on the aforementioned emission units (including various insignificant activities listed in Condition IV of the permit), the following is an estimate of overall potential emissions from the facility:

FACILITY-WIDE EMISSIONS SUMMARY [TONS PER YEAR]	
Pollutants	Potential Emissions
Sulfur Dioxide (SO ₂)	0.79
Oxides of Nitrogen (NO _x)	39.93
Total Particulate Matter (PM Total)	3.05
Volatile Organic Compounds (VOC)	4.69

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FACILITY-WIDE EMISSIONS SUMMARY [TONS PER YEAR]	
Pollutants	Potential Emissions
Carbon Monoxide (CO)	28.93
Total Hazardous Air Pollutants (HAP)	0.73

Note that these values were revised from those submitted in the March 2015 Title V permit application by JBM-HH in an email from Gregory K. Olmsted of JBM-HH to Younus Burhan of TetraTech (a contractor assisting AQD with portions of the review of the application), dated October 27, 2015. They were also revised by TetraTech and AQD to include three small external combustion units installed in Building 59 as identified by JBM-HH in a letter to Stephen S. Ours of AQD dated August 22, 2016. They were again revised by Stephen Ours following receipt of the aforementioned March 28, 2017 email from Gregory Olmsted to remove the three generators and woodworking operations from the emission estimates.

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

The facility has the potential to emit (PTE) approximately 39.93 tons per year (TPY) oxides of nitrogen (NO_x). This total exceeds the major source threshold in the District of Columbia of 25 TPY of NO_x or VOCs, and/or 100 TPY of any other criteria pollutant. Because potential emissions of NO_x exceed the relevant major source threshold, pursuant to 20 DCMR 300.1(a), the source is subject to Chapter 3 and must obtain an operating permit in accordance with that regulation and Title V of the federal Clean Air Act. Note that, even if the emissions were below the major source threshold, the emissions from the thirteen emergency generator sets at the Virginia Electric and Power Company support facility would also need to be added in for source determination purposes.

LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The conditions contained in the draft 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 those 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, recordkeeping, and reporting requirements authorized under 20 DCMR 500.1.

The draft Title V Operating Permit has been developed to incorporate 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 draft Title V Operating 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

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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 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
- 20 DCMR 606 - Visible Emissions
- 20 DCMR 700 - Miscellaneous Volatile Organic Compounds (VOCs)
- 20 DCMR 704 - Stage I Vapor Recovery
- 20 DCMR 705 - Stage II Vapor Recovery
- 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
- 20 DCMR 1406 - Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- 20 DCMR 1408 - Emission Standards for Hazardous Air Pollutant for Gasoline Dispensing Facilities
- 40 CFR 51.212, 52.12, 52.30, 60.11, and 61.12 - Credible Evidence
- 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CIICE)
- 40 CFR 63, Subpart CCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
- 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE)
- 40 CFR 82 - Protection of Stratospheric Ozone (Federally enforceable only except through Title V) (*Note: Air Quality Division [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.*)

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.*)

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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

Discussion of Specific Regulations:

20 DCMR 704 Stage I Vapor Recovery:

The capacity of the gasoline storage tank at the facility exceeds two hundred and fifty (250) gallons. Thus 20 DCMR 704 is applicable and has been included in the permit in Condition III(e).

20 DCMR 705 Stage II Vapor Recovery:

The facility has gasoline dispensing facilities with a throughput of greater than 10,000 gallons per month as confirmed by information provided by the applicant. Thus 20 DCMR 705 is applicable and has been included in the permit in Condition III(f).

20 DCMR 801: Sulfur Content of Fuel Oils:

This regulation limits fuel oil sulfur content to 1% by weight as a base standard. After July 1, 2016, "commercial fuel oil" (i.e. heating oil) must meet a 500 ppm sulfur standard. After July 1, 2018, "commercial fuel oil" must meet a 15 ppm standard. However, the permit application asserted that potential emissions of sulfur dioxide were based on the use of 0.0015% by weight sulfur #2 fuel oil/diesel throughout the facility for all equipment. As a result, pursuant to authority under Chapter 2, the 0.0015% level was adopted as a limitation for all fuel oil/diesel use allowed in the permit. This is a standard at least as stringent as that specified in 20 DCMR 801 and all relevant federal standards.

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

New Source Performance Standards (NSPS) Subpart IIII applies to stationary compression ignition internal combustion engines (CIICE): (1) with model years of 2007 or later, (2) that commenced construction after July 11, 2005 and were manufactured after April 1, 2006, or (3) that were modified or reconstructed after July 11, 2005. This subpart applies to only one of the diesel emergency generators (Unit ID EG-39-1). This subpart does not apply to the other diesel emergency generators or the fire pump because the units were manufactured and installed prior to July 2005. Condition III(d) includes the requirements of this regulation for the covered units.

40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (NESHAP for RICE)

Subpart ZZZZ of 40 CFR 63 regulates/monitors hazardous air pollutants (HAPs) such as acetaldehyde, acrolein, benzene, toluene, xylene, cadmium, chromium, and lead through surrogate compounds such as formaldehyde, CO, and/or VOC. A facility that emits or has the

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

Subpart ZZZZ is applicable to nearly all of the internal combustion engines at the facility, but per Subpart ZZZZ, the only requirement under this regulation for the unit covered under 40 CFR 60, Subpart IIII (discussed above) is to comply with that standard. Two of the diesel fired generators (EG-32-1 and EG 62-1) are fully subject to the standard. The applicant could potentially assert that these four units are at an institutional facility and therefore exempt from this standard pursuant to 40 CFR 63.6585(f)(3). However, because they need to operate in low voltage or frequency situations, they need to be covered by the regulation to be granted permission to operate for 50 hours per calendar year in non-emergency situations (something not granted to units not subject to one of the NSPSs or Subpart ZZZZ). Therefore, the requirements of this subpart have been included in the operating permit for these four units.

The only stationary internal combustion engine at the site not subject to Subpart ZZZZ is emission unit EG-62-2 (also referred to in the application as "FP (62-2)"), the emergency fire pump located at building 62. This unit does not need to operate for any non-emergency purposes, and is located at an institutional facility that is an area source of HAPs. As such, Subpart ZZZZ is not applicable for this unit and its requirements have not been included in Condition III(c) of the permit.

40 CFR 63 Subpart CCCCCC - National Emission Standards for Hazardous Air

Pollutants for Source Category: Gasoline Dispensing Facilities:

40 CFR 63 Subpart CCCCCC applies to any existing or new gasoline distribution facility that is located at an area source of HAPs as defined in 40 CFR 63.2. The facility has gasoline dispensing facilities, including associated gasoline storage tanks with a throughput of greater than 10,000 gallons per month as confirmed by information provided by the applicant. Thus 40 CFR 63, Subpart CCCCCC was determined to be applicable and the requirements of 40 CFR 63.11117 apply to the facility.

Note that notifications under 40 CFR 63.11124 are not applicable pursuant to 40 CFR 63.11124(a)(3) because the facility was required to use submerged fill equipment prior to January 10, 2008 per 20 DCMR 704.

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

A CAM Plan does not apply to the emission units at Fort McNair identified for coverage by the draft Title V Operating Permit. The emission units covered in this permit include primarily boilers, engines, heaters, and emergency generators. These combustion units do not use a control device other than the inherent design of the unit and the proper operation and maintenance. Emissions from these units are products of the combustion of fuel burned and are controlled by

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proper operation, good combustion, and maintenance practices. Individually, emissions from each of these units will not exceed the major source threshold for air contaminant emissions identified within 40 CFR 64; therefore none of the units meet the criteria for CAM applicability.

Greenhouse Gas (GHG) Requirements:

Because Chapter 3 (Title V) was triggered by other pollutants, no evaluation was made to determine if the facility would trigger Title V applicability under the GHG Tailoring Rule. No modifications have been made to the source that would trigger Prevention of Significant Deterioration (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.

20 DCMR Chapter 2 Permits:

AQD is using Chapter 2 authority to update other permit requirements where applicable. As such, this draft Title V Operating Permit will be issued for public notice pursuant to both Chapter 2 and Chapter 3 public notice requirements. The requirements of the following permits, issued under the authority of 20 DCMR Chapter 2 since the 2004 Title V permit was issued, have been incorporated into the draft Title V Operating Permit and updated where appropriate:

Permit Number	Equipment Type	Date Issued
5920	Two (2) 8.0 MMBTU/hr natural gas-fired Cleaver Brooks Model FLX-700-800 boilers located in building 64	April 30, 2007
5971-R1	One (1) 600 kW Kohler generator set with 918 hp diesel engine located in building 39	May 2, 2013
6949	One (1) 80 kW John Deere generator set with 163 hp diesel engine located in Building 32 with Diesel Generator	May 27, 2015

AQD is also using Chapter 2 authority to place unpermitted emission units, which should have previously obtained Chapter 2 permits but did not, directly into the Title V Operating Permit, along with appropriate requirements established pursuant to Chapter 2. Additionally, AQD is using Chapter 2 authority to update other permit requirements. As such, this Title V Operating Permit will be issued for public notice pursuant to both Chapter 2 and Chapter 3 public notice requirements.

COMPLIANCE HISTORY:

The applicant has been subject to no enforcement actions by AQD in the past three years. No air quality violations are identified in the EPA Enforcement and Compliance History Online (ECHO) database over the last three years, as of the time of this writing.

COMMENT PERIOD:

Beginning Date: August 11, 2017

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Ending Date: September 11, 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 the public comment period, any interested person may submit written comments on the draft Title V Operating 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 Department shall grant such a request if it is deemed appropriate. The venue, date, and time for any public hearing shall be announced in the D.C. Register and a daily newspaper.

POINT OF CONTACT FOR INQUIRIES:

John C. Nwoke
Environmental Engineer
Department of Energy and Environment
Air Quality Division
1200 First Street NE, 5th Floor
Washington, DC 20002
(202) 724-7778

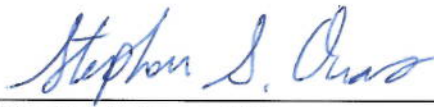
REVIEWS:

Prepared by:



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SSO:JCN

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