

**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. 050**

**APPLICANT AND PERMITTEE:**

MedStar Georgetown University Hospital  
3800 Reservoir Road NW  
Washington, DC 20007

**FACILITY LOCATION:**

MedStar Georgetown University Hospital  
3800 Reservoir Road NW  
Washington, DC 20007

**RESPONSIBLE OFFICIAL**

Mr. Michael Sachtleben, President, MedStar Georgetown University Hospital

**FACILITY DESCRIPTION:**

MedStar Georgetown University Hospital provides general medical and surgical hospital services (Standard Industrial Classification Code (SIC) 80, North American Industry Classification System (NAICS) 622110). Eight (8) diesel-fueled emergency generator sets serve as back-up power during emergencies.

This is the first Chapter 3 (Title V) permit application for MedStar Georgetown University Hospital. The Department of Energy and Environment (the Department) received a Chapter 3 (Title V) permit application on October 13, 2017. This permitting action is to address this Title V application.

Initially, the application appeared to be incomplete because it did not include emission unit EG-7 from a previously-filed source category permit coverage application, approved as Approval No. 7048-SC-0008. An email correspondence of December 7, 2017 indicated that the Title V should disregard EG-7 because the same emission unit was later permitted as EG-9 (source category permit Approval No. 7048-SC-0020). The facility had changed the nomenclature and subsequently, inadvertently, applied for approval a second time. Only the most up-to-date permit reference, EG-9, as approved by Approval No. 7048-SC-0020, is included in the Title V.

The Title V permit application listed six (6) non-NSPS internal combustion diesel fired emergency generators and two (2) diesel fired emergency standby generators subject to NSPS (40 CFR 60) Subpart IIII. In addition, the facility maintains the following

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miscellaneous/insignificant sources:

- Two (2) natural gas-fired commercial cooking units;
- Four (4) Underground Storage Tanks (USTs) for diesel oil;
- Eight (8) Aboveground Storage Tanks (ASTs) for diesel oil;
- One (1) cooling tower; and
- Miscellaneous chemical usage (with or without fume hoods).

**EMISSIONS SUMMARY:**

<b>Plant-wide Emissions Summary (tons per year)</b>	
<b>Pollutant</b>	<b>Potential Emissions</b>
Oxides of Sulfur (SO <sub>x</sub> )	1.01
Oxides of Nitrogen (NO <sub>x</sub> )	34.29
Particulate Matter (PM/PM10)	3.54
Volatile Organic Compounds (VOCs)	1.51
Carbon Monoxide (CO)	5.66
Total Hazardous Air Pollutants (HAPs)	0.29

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

This facility has the potential to emit 34.29 tons per year of oxides of nitrogen (NO<sub>x</sub>). The value for this criteria pollutant exceeds the major source thresholds in the District of Columbia of 25 TPY of NO<sub>x</sub> or VOC, and/or 100 TPY of any other criteria pollutant. Because potential emissions of NO<sub>x</sub> 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.

**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 draft Title V 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 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 will be issued to include updated requirements established

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pursuant to 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 noted 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 800 - Control of Asbestos
- 20 DCMR 801 - Sulfur Contents of Fuel Oils
- 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 ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (NESHAP for RICE)
- 40 CFR 82, Subpart G - 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.*)
- 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*)

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:

All stationary engines are subject to Chapter 2 permitting requirements, regardless of size. As

such, all of the significant units at the facility are subject to Chapter 2 permitting requirements.

AQD is incorporating the previously issued Chapter 2 source category permit approvals into the Title V permit with this action. Additionally, AQD is using Chapter 2 authority to update permit requirements where applicable. As such, the draft Title V permit will be issued for public notice pursuant to both Chapter 2 and Chapter 3 public notice requirements.

**20 DCMR Chapter 3 – Operating Permits and Acid Rain Programs:**

Please see the discussion above in the section entitled “Basis of 20 DCMR Chapter 3 (Title V) Applicability” for a discussion of the applicability of Chapter 3 to the facility. The acid rain portions of this chapter are not applicable to the facility.

**20 DCMR Chapter 5 – Source Monitoring and Testing:**

Throughout the permit, appropriate monitoring, testing, and record keeping requirements have been established to ensure that all emission and operational limits in the permit are enforceable as a practical matter. These requirements are established under the authority of Chapter 5.

**20 DCMR 801: Sulfur Content of Fuel Oils:**

This regulation limits fuel oil sulfur content to 1% by weight in all circumstances. There are more stringent requirements for commercial fuel oil, but the only portion of 20 DCMR 801 applicable to the emergency engines is the 1% sulfur content limit. This requirement is streamlined with the more stringent requirements found in 40 CFR 63.6604(b) for the non-NSPS engines and 40 CFR 60.4207(b) for the NSPS engines.

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

The engines of two diesel emergency generator sets at the facility are subject to 40 CFR 60, Subpart IIII. 40 CFR 60, Subpart IIII applies to stationary compression ignition internal combustion engines (CI-ICE) that: 1) are model year of 2007 or later, 2) commenced construction after July 11, 2005 and were manufactured after April 1, 2006, or 3) were modified or reconstructed after July 11, 2005.

The Department confirmed that the two (2) diesel CI-ICE identified below are subject to 40 CFR 60, Subpart IIII:

<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Identification</b>	<b>Description</b>
EG-8	S8	Cummins Model No. QSB7-G5 NR3 engine/Model No. 150DSGAC generator set	150 kWe generator set powered by a 324 hp diesel engine, installation date: 2016 (NSPS)
EG-9	S9	John Deere Model No. 4045HF285 engine/Model No. 125REOZJG generator set	125 kWe generator set powered by a 197 hp diesel engine, installation date: 2016 (NSPS)

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The requirements of this regulation are incorporated throughout Condition III(b) of the permit for these units.

40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Engines  
This subpart does not apply to this facility because this facility only includes compression ignition (diesel) engines.

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 applies to stationary reciprocating internal combustion engines (RICE) at area sources of HAP emissions to regulate/monitor 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 TPY of any single HAP or 25 TPY 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 TPY of a single HAP or an aggregate of more than 25 TPY of total HAPs, it is an area source. Therefore the area source NESHAP requirements of Subpart ZZZZ are applicable to this facility.

Subpart ZZZZ is applicable to new or reconstructed diesel compression ignition (CI) engines at this facility, where “new” is defined as those engines that are manufactured or reconstructed after June 12, 2006. However, the only requirements for these units are to comply with 40 CFR 60, Subpart IIII, as applicable. This situation affects the two generator sets previously discussed as covered by 40 CFR 60, Subpart IIII. Only the NSPS requirements have been cited in the permit for these units because Subpart ZZZZ does not add any additional compliance requirements.

“Existing” CI engines are also covered by this regulation. Six diesel engines associated with generator sets at the facility fall into this category as shown in the following table:

<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Identification</b>	<b>Description</b>
EG-1	S1	Caterpillar Model No. 3412 generator set located at Gorman Building	500 kWe generator set powered by 749 hp diesel engine, installation date: 1995 (non-NSPS)
EG-2	S2	Caterpillar Model No. 3406 generator set located at Lombardi Building	200 kWe generator set powered by a 375 hp diesel engine, installation date: 1980 (non-NSPS)
EG-3	S3	Detroit Diesel Model No. 91237305 generator set located at Concentrated Care Center (CCC) Main Building	800 kWe generator set powered by a 1,070 hp diesel engine <sup>2</sup> , installation date: 1974 (non-NSPS)
EG-4	S4	Detroit Diesel Model No.	800 kWe generator set powered by a

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<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Identification</b>	<b>Description</b>
		91237305 generator set located at CCC Main Building	1,070 hp diesel engine <sup>2</sup> , installation date: 1974 (non-NSPS)
EG-5	S5	Cummins Model No. KTA38-G3 generator set located at CCC Main Building	900 kWe generator set powered by a 1,340 hp diesel engine, installation date: approximately 1992 (non-NSPS)
EG-6	S6	Cummins Model No. NTA-495-G2 generator set located at the Pasquerilla Healthcare Center (PHC) Building	150 kWe generator set powered by a 245 hp diesel engine, installation date: approximately 1987 (non-NSPS)

The applicant may have been able to justify an exemption from the requirements of this regulation for these six emergency engines under one of the exemptions in 40 CFR 63.6585(f)(2) or (3). However, the District does not permit stationary emergency engines to operate in non-emergency situations, unless they are subject to the requirements NSPS Subpart IIII or JJJJ or NESHAP Subpart ZZZZ. These regulations specify certain circumstances during which they can operate in non-emergency situations. Pursuant to the partial vacatur of this standard resulting from Delaware v. EPA (see <https://www.epa.gov/stationary-engines/technical-documents-neshap-reciprocating-internal-combustion-engines-0>), operating in low voltage or frequency circumstances is no longer considered emergency operation. Hospitals typically must operate emergency in these circumstances and typically accept applicability of Subpart ZZZZ in order to be able to operate in these circumstances. In previous permitting actions, when these six units were approved for coverage by source category permit 7115-SC, the applicant accepted applicability of Subpart ZZZZ requirements. As a result, Subpart ZZZZ has been determined to be applicable to these six “existing” units and the relevant requirements have been included in the Title V permit.

40 CFR 63, Subpart JJJJJ - National Emission Standards for Hazardous Air Pollutants (HAP) for Industrial, Commercial, and Institutional Boilers Area Sources

This subpart does not apply to this facility because this facility does not include boilers.

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

A Compliance Assurance Monitoring Plan (CAM) does not apply to the emission units at MedStar that are covered by the draft Title V permit. The emissions units covered in the permit are engines. These 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 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.

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**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 PSD applicability under the GHG Tailoring Rule. Other than this requirement, there are no other applicable requirements related to GHGs at this time, therefore none were included in the permit.

**Chapter 2 Permits:**

AQD is using Chapter 2 authority to update other permit requirements where applicable. As such, this draft Title V permit will be issued for public notice pursuant to both Chapter 2 and Chapter 3 public notice requirements. The requirements of the following source category permits issued under the authority of 20 DCMR Chapter 2 (approval numbers listed; the source category permit number is the first six characters of the approval number) have been incorporated into the draft Title V permit and updated where appropriate.

<b>Emission Unit ID</b>	<b>Emission Unit Identification</b>	<b>Source Category Permit Approval No.</b>	<b>Approval Date</b>
EG-1	Caterpillar Model No. 3412 generator set located at Gorman Building	7115-SC-0004	1/30/2017
EG-2	Caterpillar Model No. 3406 generator set located at Lombardi Building	7115-SC-0005	1/30/2017
EG-3	Detroit Diesel Model No. 91237305 generator set located at Concentrated Care Center (CCC) Main Building	7115-SC-0006	1/30/2017
EG-4	Detroit Diesel Model No. 91237305 generator set located at CCC Main Building	7115-SC-0007	1/30/2017
EG-5	Cummins Model No. KTA38-G3 generator set located at CCC Main Building	7115-SC-0008	1/30/2017
EG-6	Cummins Model No. NTA-495-G2 generator set located at the Pasquerilla Healthcare Center (PHC) Building	7115-SC-0009	1/30/2017
EG-8	Cummins Model No. QSB7-G5 NR3 engine/Model No. 150DSGAC generator set	7048-SC-0019	11/9/2016
EG-9	John Deere Model No. 4045HF285 engine/Model No. 125REOZJG generator set	7048-SC-0020	11/9/2016

**COMPLIANCE HISTORY:**

The applicant has not been subject to enforcement actions by AQD in the past three years. No air quality violations have been identified by the Compliance and Enforcement Branch over the last

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three years. No air quality violations are listed in the three year compliance status summary in EPA's Enforcement and Compliance History Online (ECHO) database.

**COMMENT PERIOD:**

Beginning Date: September 28, 2018  
Ending Date: October 29, 2018

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, 5<sup>th</sup> 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 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:**

Abraham Hagos  
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Air Quality Division  
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**REVIEWS:**

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