

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. 045

APPLICANT AND PERMITTEE:

Verizon Washington DC, Inc.
3011 Hungary Spring Road
Richmond, VA 23228

FACILITY LOCATION:

Verizon Washington DC, Inc.
Southwest Central Office
30 E Street SW
Washington, DC 20016

FACILITY DESCRIPTION:

Verizon Washington DC, Inc. Southwest Central Office is located at 30 E Street SW in Washington, DC 20016. The facility consists of four (4) Detroit Diesel engine powered 1,500 kilowatt (kW) Cummins Model # 1500 DS-4 diesel generators (EG1, EG2, EG3, and EG4); and one (1) Detroit Diesel engine powered 225 kW Cummins Model # 7125-7230 diesel generator (LSEG1). The four 1,500 kW emergency generators are operating under District Department of the Environment (DDOE) permit No. 6102 (EG1: Permit No. 6495, EG2: Permit No. 6496, EG3: Permit No. 6497, and EG4: Permit No.6498) and are located inside the penthouse of the on-site building. They supply emergency electric power to the facility. The 225 kW emergency generator is being operated under Chapter 2 permit No. 6723 and is located on the roof of the building adjacent to the penthouse. The 225 kW generator is a life safety generator and provides backup electrical power to the building safety systems.

Routine operations of all generators are for testing once per month for maintenance purposes and for a five hour time period once per year for extended maintenance for a total of 17 hours of maintenance operating per year per generator in a normal year. Any additional hours of operation would be for emergency purposes only and does not exceed 440 hours per generator



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per year for the four 1,500 kW emergency generators (EG1, EG2, EG3, and EG4) and 125 hours per year for the 225 kW generator (LSEG1).

The facility also contains the following:

- Three 20,000-gallon underground storage tanks located near the east side of the building
- Two 150-gallon day tanks located inside the penthouse. The Title V permit application indicated that the capacity of the day tanks was 250 gallons. However, the day tanks' actual capacity was confirmed during the site visit on August 14, 2013 to be 150 gallons.
- Two chillers located on the roof of the building adjacent to the penthouse.

EMISSIONS SUMMARY:

The facility reported the following emissions in the Title V permit application:

FACILITY WIDE EMISSIONS SUMMARY [TONS PER YEAR]		
Criteria Pollutants	Estimated Future Actual Emissions	Potential Emissions
Sulfur Dioxide (SO ₂)	0.007	0.064
Nitrogen Oxides (NO _x)	1.2	24.95
Particulate Matter (PM & PM ₁₀)	0.028	0.53
Volatile Organic Compounds (VOC)	0.094	1.96
Carbon Monoxide (CO)	0.15	3.03

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

Verizon Washington DC, Inc. Southwest Central Office has the potential to emit approximately 0.064 tons per year (TPY) of sulfur dioxide (SO₂), 24.95 TPY of nitrogen oxides (NO_x), 0.53 TPY of particulate matter (PM & PM₁₀), 1.96 TPY of volatile organic compounds (VOC), and 3.03 TPY of carbon monoxide (CO).

Under normal maximum operating conditions for potential to emit determination (i.e., 500 hours per year per emergency generator), the combined potential emissions of the generators would have exceeded the major source threshold of 25 tons per year of NO_x, and thus trigger a Non Attainment New Source Review (NNSR) as well as the need for a Title V Operating Permit. In order to avert this possibility, the facility opted for operating hour restrictions (440 hours, each, in any given 12 month period for the 1,500 kW generators and 125 hours in any 12 month period for the 225 kW generator) to keep their potential to emit NO_x under the major source threshold and the NNSR trigger threshold. Because the District has no synthetic minor permitting program, the Air Quality Division (AQD) of DDOE is utilizing the Title V Operating Permit program as a vehicle for limiting the facility's operation so as to not trigger NNSR and avoid the need to acquire emission offset and installation of Lowest Achievable Emissions Rate (LAER) controls.

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Based on the operating restrictions taken in this permit, the NO_x potential emissions of this facility are currently just under the major source threshold in the District of Columbia of 25 TPY of NO_x. As stated earlier, the facility's Title V operating permit requirement is not based on the 25 TPY of NO_x criterion, but is as set forth on the preceding discussion. As such, pursuant to Chapter 2 Permit conditions and to a lesser extent, 20 DCMR 300.1(b), 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 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 notes 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

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- 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

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

As noted above, because the potential to emit NO_x would have exceeded 25 tons per year if the standard 500 hours per year of operation of the generators was assumed, the facility has taken operating hour limits in their Chapter 2 permits (listed in the table below). However, since the Department does not have a “synthetic minor” permitting program, Chapter 3 is being used as a vehicle to make these limits federally enforceable and enforceable as a practical matter.

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.

Also, pursuant to Chapter 2 authority, since the source committed to purchasing only ultra-low sulfur diesel for the generators, Condition III(a)(2)(D) (and related monitoring, testing, record keeping and reporting requirements) was added to allow the source to use up whatever higher sulfur diesel that is in the tank, but limit future purchases to ultra-low sulfur (15 ppm by weight) diesel.

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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 considered 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 for area source RICE is not applicable to this facility because the permit has been drafted to include operational limitations to ensure that 1) the emergency generators do not run for more than 15 hours per calendar year under conditions when there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency, and 2) the emergency generators do not operate for emergency demand response (in situations when a blackout is imminent – either the reliability coordinator has declared an Energy Emergency Alert Level 2 as defined in the North American Reliability Corporation (NERC) Reliability Standard).

With these operational limitations in place, the generators are considered to be “existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).” As such, pursuant to 40 CFR 63.6585(f), the generators are not subject to Subpart ZZZZ. As such, the requirements of this subpart have not been included in the permit.

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

Compliance Assurance Monitoring (CAM) Plan 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. CAM does not apply.

New Source Performance Standards (NSPS) [40 CFR 60]:

New Source Performance Standards (NSPS) do not apply to this facility as the generators were manufactured prior to April 1, 2006 and were not constructed, modified, or reconstructed after July 11, 2005.

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The generators identified are as follows:

Equipment Location	Emission Unit ID	Stack ID	Chapter 2 Permit No.	Emission Unit Description	Equipment Serial Number
Penthouse	EG1	EG1	6495	One Detroit Diesel 1500 kW Cummins Diesel Generator, Model # 1500 DS-4	WA-522372-1299
Penthouse	EG2	EG2	6496	One Detroit Diesel 1500 kW Cummins Diesel Generator, Model # 1500 DS-4	WA-522364-1299
Penthouse	EG3	EG3	6497	One Detroit Diesel 1500 kW Cummins Diesel Generator, Model # 1500 DS-4	WA-522273-1199
Penthouse	EG4	EG4	6498	One Detroit Diesel 1500 kW Cummins Diesel Generator, Model # 1500 DS-4	WA-522408-1199
Roof of the building adjacent to the penthouse	LSEG1	LSEG1	6723	One Detroit Diesel 225 kW Cummins Diesel Generator, Model # 7125-7230	12VA14075

Note that AQD is using its Chapter 2 authority to update various permit requirements from the language in the previously issued Chapter 2 permits. As such, this Title V permit will be issued for public notice pursuant to both Chapter 2 and Chapter 3 public notice requirements.

COMMENT PERIOD:

Beginning Date: December 6, 2013

Ending Date: January 6, 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 be raised in the hearing. The District shall grant such a request if it is deemed appropriate. The

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venue, date, and time for any public hearing shall be announced in the District Register and a daily newspaper.

POINT OF CONTACT FOR INQUIRIES:

Olivia Achuko
Environmental Engineer
District Department of the Environment
Air Quality Division
1200 First Street NE, 5th Floor
Washington, DC 20002
(202) 535-2997

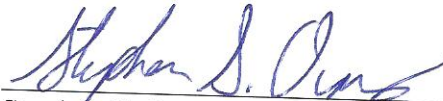
REVIEWS:

Prepared by:



Olivia Achuko
Environmental Engineer
SSO:OA

Approved by:



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

