

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. 028-R1

APPLICANT AND PERMITTEE:

Fort Myer Construction Corporation
2237 33rd Street, NE
Washington, DC 20018

FACILITY LOCATION:

Fort Myer Construction Corporation Plant #1
2001 5th Street NE
Washington, DC 20002

FACILITY DESCRIPTION:

Fort Myer Construction Corporation (FMCC) operates two separate asphalt plants locations in the District of Columbia (Plant #1 and Plant #2) with both of them producing hot mix asphalt for the paving and construction industries. This permit is for Plant #1, located at 2001 5th Street NE, Washington DC. Unlike Plant #2, this is a batch mix plant. The facility is currently operating under Title V operating permit #28 issued April 17, 2000. There are two Chapter 2 permits that have been issued to Fort Myer for this facility since that time, one for a crusher and the other for a screener. These units are on an adjacent property, but are considered part of the Plant #1 facility.

The emission sources related to plant operation at this site consist of: a 75 MMBtu/hr Rotary Kiln with Genco Ultra II dual-fuel (natural gas and No. 2 fuel oil) burner and Genco/Bituma #99 baghouse fabric filter and a crusher and screener with associated conveyors for recycled asphalt processing. The facility is operated for the purpose of producing asphaltic concrete for paving. The Permittee is covered under Standard Industrial Classification (SIC) Code 2951.

This 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.

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EMISSIONS SUMMARY:

The following table provides a list of the estimated maximum emissions the facility could emit in a given 12-month period, under the terms of the permit and given the physical and operational design of the equipment at the facility.

Plantwide Emissions Summary (tons per year)	
Pollutant	Potential Emissions
Sulfur Dioxide (SO ₂)	104.31*
Oxides of Nitrogen (NO _x)	156.91
Total Particulate Matter (PM Total)	312.30
Volatile Organic Compounds (VOCs)	50.74
Carbon Monoxide (CO)	364.76
Total Hazardous Air Pollutants (HAPs)	7.12

*Note that this is based on an assumption that the unit is using fuel oil with a sulfur content of 1% by weight. At the time of this writing, use of such fuel is still permitted, but is being phased out in accordance with a revision to 20 DCMR 801, promulgated November 13, 2015.

The potential to emit data are based on maximum asphalt production of 200 tons per hour and 1,725,000 tons asphalt production as requested by the source. The source explained that the annual production limitation is based on a derated 200 tons per hour production rate and 8,760 hours per year of operation. Based on experience, FMCC has stated that it is not capable of producing more than 200 tons per hour due to the moisture content of the raw materials, though the unit is technically rated to produce more per hour. The source added that recordkeeping in their facility has shown that at no time since the start-up has the capacity of 200 tons per hour has been exceeded. Therefore, the Air Quality Division ("AQD") of the Department of Energy and Environment ("DOEE" or "the Department") included the requested limit on annual production of 1,725,000 tons of asphalt in the permit as an operational limitation.

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

This facility has the potential to emit 156.91 tons per year of NO_x and 50.74 tons per year of VOCs. These exceed the major source threshold in the District of 25 tons per year for each of these pollutants. Additionally, the facility has the potential to emit 104.31 tons per year of SO₂, and 364.76 tons per year of CO. These exceed the major source threshold in the District of 100 tons per year of CO and SO₂. Note that most of the total particulate matter is larger than 10 microns, so the potential to emit PM10 is less than the major source threshold of 100 tons per year. Based on this analysis, 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.

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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 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 pursuant to 20 DCMR Chapter 2. As such, it will be issued for public notice as a merged permit under the authority of both Chapters 2 and 3.

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 774 - Architectural and Industrial Maintenance Coatings
- 20 DCMR 800 - Control of Asbestos
- 20 DCMR 801 - Sulfur Contents of Fuel Oils
- 20 DCMR 803 - Sulfur Process Emissions
- 20 DCMR 805 - Reasonably Available Control Technology for Major Stationary Sources of the

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Oxides of Nitrogen

40 CFR 51.212, 52.12, 52.30, 60.11, and 61.12 - Credible Evidence 40 CFR 60, Subpart I - Standards of Performance for Hot Mix Asphalt Facilities

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40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels

40 CFR 61.12 - Credible Evidence

40 CFR 64 - Compliance Assurance Monitoring (CAM)

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.)*

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:

The Department issued Chapter 2 permits #6757 and 6758 for a crusher and a screener on December 31, 2013. When the Title V permit is issued, the conditions therein will supersede any previous Chapter 2 permit conditions.

As noted above, this Title V permitting action is also being performed under the authority and procedures of 20 DCMR Chapter 2. Many requirements are being updated pursuant to Chapter 2 authority from the previous Title V permit, issued in 2000. Of particular note is that, for the first time, the facility will be authorized to use up to 25% recycled asphalt pavement (RAP) in the process. It should be noted that the applicant initially requested a 15% RAP limit in their application, but later requested an increase to 25% RAP. The permit has incorporated slightly enhanced visible emissions monitoring for when the unit is operating between 15% and 25% RAP.

20 DCMR Chapter 6: Particulates

One of the primary pollutants from an asphalt plant operation is particulate matter from the dryer. Also, fugitive dust from material handling or other industrial-type operation is frequent therefore Chapter 6 requirements are applicable. Associated emission limits are found in Conditions

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III(a)(1)(A), (E), (H) and (I) for the burner, III(c)(1)(A),(B),(C) and E for the screener and III(d)(1)(A), (B), (C) and (E) for the crusher. Operational limits are found in Conditions III(a)(2)(E) and (G) for the burner, III(c)(2)(B) for the screener and III(d)(2)(B) for the crusher.

20 DCMR Chapter 7: Volatile Organic Compounds and Hazardous Air Pollutants

Chapter 7 requirements are not applicable to this facility as there are no applicable sections.

20 DCMR Chapter 8: Asbestos, Sulfur, Nitrogen Oxides, and Lead

20 DCMR 801, Sulfur Content of Fuel Oils, is applicable. The applicant committed to using natural gas as the primary fuel and diesel fuel as a back-up fuel. Therefore, Condition III(a)(2)(D) reflects that commitment. The permit application's emission estimates were based on a 1% sulfur by weight in fuel assumption, which is the current standard. However, on November 13, 2015, the Department finalized an update to 20 DCMR 801 that tightens this standard progressively over the next couple of years. The requirements of the updated rule have been included in Condition II(f) of the permit and cited throughout where applicable.

20 DCMR 803, Sulfur Process Emissions, is applicable to the asphalt operations. Its requirements have been added to Condition III(a)(1)(B)(ii) and a related emission testing requirement was added to Condition III(a)(3)(J).

20 DCMR 805, Reasonably Available Control Technology for Major Stationary Sources of the Oxides of Nitrogen, is applicable pursuant to 20 DCMR 805.1(a)(3) because the facility is an asphaltic concrete plant with the potential to emit greater than 25 tons per year of NO_x. This was derived using an annual production limit of 1,725,000 tons per year and a 200 ton per hour production rate. 20 DCMR 805.6(b) is applicable. The associated emission limits for NO_x and CO have been included in Condition III(a)(1)(C) and (D) of the permit. The testing requirements are found in Condition III(a)(3)(J), (K) and (L).

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 (which has been overturned by the courts 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.

40 CFR 60, Subpart I – Standards of Performance for Hot Mix Asphalt Facilities

This regulation is applicable as this facility meets the definition of a hot mix asphalt facility and it commenced construction or modification after June 11, 1973. The 0.04 gr/dscf emission limit found in 40 CFR 60.92 has been streamlined with the 0.03 gr/dscf limit of 20 DCMR 603.1 and can be found in Condition III(a)(1)(A)(ii) of the permit. The 20% opacity limit can be found in

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Condition III(a)(1)(F). The Permittee requested that the Method 9 test be done while the burner fires natural gas instead of No. 2 fuel oil citing that the source seldom uses No. 2 fuel oil in actual operation. The permit has therefore been worded to allow the source to test with fuel oil only once during the term of the permit and every other year to test with whatever fuel was the primary fuel since the last required test, which is expected to be consistently natural gas. See Condition III(a)(3)(O).

Testing requirements required by this subpart and the referenced 40 CFR 60.8 can be found in Condition III(a)(3)(J).

40 CFR 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Per 40 CFR 60.110b(b), this subpart is not applicable to storage vessels with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kPa. The only tank at the facility that exceeds 75 m³ is the aboveground liquid asphalt tank that has two sections (one 10,000 gallons = 37.9 m³ and one 20,000 gallons = 75.7 m³). Vapor pressures for liquid asphalt are generally very low. One MSDS was located for PG64-22 that indicated a vapor pressure of <0.1 mmHg at 20°C (0.013 kPa). Adjusted for storage conditions, this would still be well below 15.0 kPa. Thus, this subpart is not applicable.

40 CFR Parts 61 and 63 – National Emission Standards for Hazardous Air Pollutants (NESHAPs)

There are no Part 61 or 63 NESHAPs applicable to this facility.

40 CFR 64 – Compliance Assurance Monitoring (CAM)

The requirements of 40 CFR 64 to establish a Compliance Assurance Monitoring (CAM) Plan is applicable to this facility because the asphalt plant cannot achieve compliance without the use of the control device (the baghouse) for compliance. A CAM plan was submitted by the Permittee and has been incorporated as part of the permit under Condition III(b) with some modifications to harmonize the plan with the requirements in the rest of the permit.

COMPLIANCE HISTORY:

The applicant has been subject to enforcement action related to Clean Air Act violations within the past three years. According to EPA's Enforcement and Compliance History Online (ECHO) database, on Notice of Violation was issued by EPA on July 13, 2013 which resulted in a \$30,000 penalty. The case covered both Plant #1 and Plant #2. EPA's claims against FMCC included:

1. Failure to comply with the Title V permits annual particulate matter emissions testing

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- requirements at Plant #1;
2. Failure to comply with the requirement of the Title V permit to obtain a permit to construct prior to construction of RAP processing equipment at Plant #1;
 3. Failure to comply with the Title V permit's requirement to keep records of daily monitoring of pressure drops across the baghouse at Plant #1;
 4. Various violations at Plant #2.

No other air quality violations or enforcement actions are recorded in ECHO over the last three years.

COMMENT PERIOD:

Beginning Date: April 22, 2016

Ending Date: May 23, 2016

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 permit and may request a public hearing, if no public hearing has already been scheduled. A request for a 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 D.C. Register and a daily newspaper.

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POINT OF CONTACT FOR INQUIRIES:

Olivia Achuko
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Air Quality Division
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Washington, DC 20002
(202) 535-2997

REVIEWS:

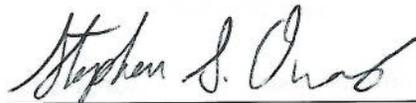
Prepared by:



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Approved by:



Stephen S. Ours, P.E.
Chief, Permitting Branch
Air Quality Division