UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Four Penn Center – 1600 John F Kennedy Blvd
Philadelphia, Pennsylvania 19103-2852

Report Title: Clean Air Act Inspection of WMATA Four Mile Run
Inspection Date(s): 10/25/2022
Regulatory Program(s): SIP, NSPS, MACT

Company Name: Washington Metro Area Transit Authority
Facility Name: WMATA Four Mile Run Bus Facility
Facility Location: 3501 South Glebe Road
Arlington, VA 22202
Latitude: 38.84266 **Longitude:** -77.05374
County/Parish: Arlington

AFS Number: VA0000005101344005
Permit Number: Formerly No. 39
NAICS Code: 485113 **SIC:** 4111
Unique Project #: N/A

Facility Representatives: **Point of Contact**

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BRUCE AUGUSTINE Digitally signed by BRUCE AUGUSTINE Date: 2022.12.20 13:39:41 -05'00'

EPA Lead Inspector Signature **Bruce Augustine** **Date**

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Supervisor Signature	ERIN MALONE Digitally signed by ERIN MALONE Date: 2022.12.20 14:02:39 -05'00'	
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I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at Washington Metro area Transit Authority Four Mile Run Garage (WMATA or Facility) to verify compliance with applicable State and Federal regulations. The Virginia Department of Environmental Quality (VADEQ) was notified of the inspection on October 5, 2022 via email. On October 21, 2022, EPA notified the Facility of the planned inspection via phone and email. EPA emailed a list of records for review to Basil Borisov, prior to the inspection (see Attachment 1). These records are listed in the Records Review section of the report.

A. Summary of the Facility

The Facility is located at 3501 South Glebe Road, Arlington, VA. WMATA is a tri-state government agency that operates buses and trains in Maryland, Virginia, and the District of Columbia. WMATA was formed through an act of Congress and is represented by board members from Maryland, Virginia, the District of Columbia, and the federal government. The capital budget for WMATA comes from the federal government while the operating budget is provided by the local jurisdictions and fares collected.

The Facility received a minor source permit (Permit Number 70093) from VADEQ issued on September 26, 2005. The Four Mile Run Site is permitted as a minor source for all criteria pollutants.

The Facility is subject to, or potentially subject to the following federal regulations:

- 40 C.F.R. Part 60 Subpart IIII: New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (NSPS 4I)
- 40 C.F.R. Part 63 Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (MACT 4Z)
- 40 C.F.R. Part 63 Subpart CCCCCC: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (MACT 6C)

B. Inspection Opening Conference

At 1:07PM on October 25, 2022, EPA inspectors arrived at the Facility for a CAA Inspection and conducted a brief opening conference. WMATA was represented by Basil Borisov, Brian Brown, Duane Schulterbrandt, and Dana Jones. In addition, WMATA was represented by Jan Walker and Tiffany Dillow from Power Engineers. VADEQ inspector Peter Thaler was also present for the inspection. EPA inspectors Bruce Augustine, Riley Burger and Carly Joseph, presented their credentials and explained the purpose of the visit was to conduct a Clean Air Act inspection to determine compliance with their permit and any applicable regulations. EPA inspectors Chris Williams and Nicholas Bobbs, from EPA's Office of Enforcement & Compliance Assurance were also present for the inspection, EPA instructed WMATA that mobile emission monitoring would be conducted using data acquisition in real time (DART).

The DART mobile monitoring device uses a mobile gas chromatograph to detect volatile organic compounds (VOC) in the atmosphere. Additionally, EPA informed the facility representatives of their right to claim any confidential business information (CBI). At that time, WMATA did not claim any photos or documentation as CBI.

II. Site Activity/Process Description

WMATA is comprised of a bus and rail division. The Four Mile Run Garage is part of the bus division and serves as a maintenance and fueling station for commuter buses that operate in Maryland, Virginia, and the District of Columbia. WMATA currently operates nine bus maintenance facilities, while two additional sites are temporarily closed. The Four Mile Run Site performs general bus maintenance including tire repairs, seat and window replacement, and light bodywork. There are no paint booths at this location, however, there is a parts washer that is serviced by an outside company. The facility also conducts bus re-fueling. The facility has approximately 85 employees (not including drivers) and 218 buses at this location. No heavy maintenance, painting, or other bus activity is performed at this site. The facility operates 24 hours/day with three shifts per day.

All of the buses at this location are fueled with natural gas, but they also have diesel capability. There are two natural gas fueling pumps at the Four Mile Run Site and a gasoline pump for non-revenue fleet vehicles. There are two boilers at the site which provide comfort heat and hot water to the buildings. Both boilers combust natural gas. There are three emergency diesel-powered generators onsite; one for natural gas fueling backup and two for building power backup. Four Mile Run has a submerged fill gasoline tank that is used to re-fuel fleet vehicles (other than buses). WMATA requires tank vapor tightness testing on each truck that delivers gasoline to the site.

The opening conference concluded at 1:31PM.

III. Observations

Immediately following the opening conference, EPA inspectors were led on a walkthrough of the Facility by WMATA representatives. EPA inspectors noted photos would be taken during the Facility walkthrough (Attachment 2). Also, EPA used a FLIR GF320 infrared camera during the walkthrough to observe the fueling racks and other sources (Attachment 3).

The walkthrough began by observing EG3, a 1500kW Caterpillar emergency generator that is used as emergency backup power for the fueling racks and was installed in 2005. The hour meter on the Caterpillar generator was 385 total hours of operation. EG1 is a 207HP Cummins generator that is used to provide backup power for the administration building. The nameplate on the unit indicates that it was constructed in 2003 and the hour meter, as observed during the inspection, was 827 hours. EG2 is also a Cummins generator that is used for emergency backup power. This generator is rates at 300kW and was built in May 2003. The total hours for the generator is 312 hours. None of the emergency generators was operating during the inspection.

EPA inspected the natural gas fueling pumps and the natural gas compressor building. WMATA operates three compressors to maintain pressure on the natural gas fueling system. EPA observed the fueling rack and compressor building with the FLIR camera and noticed emissions from the discharge valves on Compressors B and C. WMATA stated that they were aware of leaks on these valves and have ordered replacement parts. The EPA inspection team also observed the natural gas dryer system and a leak was observed using the FLIR camera at a valve on the system. WMATA stated that the dryer system is scheduled to be rebuilt but a timeline for the rebuild is not known.

Two Smith boilers rated at 2.5MMBtu/hr were also observed. These boilers are used to provide comfort heat and hot water for the Facility and are powered by natural gas. EPA conducted a slow speed ride through of the facility with the DART at 2:30PM. The ride through concluded at 2:33PM and no elevated VOC levels were detected.

The walkthrough concluded at 2:33PM.

IV. Records Review

EPA requested several records prior to the inspection (Attachment 1). During the inspection, WMATA provided copies of the following records:

- Date and amount (gallons) of each diesel and gasoline fuel delivery in 2021 and 2022.
- A list of each combustion source at the Four Mile Run Site.
- List of current emergency generators at the Four Mile Run Site.
- WMATA also provided records of the operating hours of the 1500kW generator and fuel delivery receipts for 2021 and 2022 via email.

EPA reviewed these records with WMATA during the opening conference. EPA requested records of compressed natural gas (CNG) throughput for 2021-2022 during the inspection.

V. Closing Conference

After the DART drive through EPA inspectors and WMATA representatives had a brief closing conference to ask additional questions and discuss observations. The EPA inspectors noted that the investigation is on-going, and any areas of concern identified in the final reports do not necessarily reflect a violation or deviation, rather, they are areas that will require further investigation. EPA also noted that they would issue an inspection report within in 60 days, with a copy to the State. Simultaneously, EPA will perform a detailed review of records and may have additional questions. The inspection concluded at 2:43PM.

VI. List of Attachments

Attachment 1:	Email correspondence to Basil Borisov of records requested to review during inspection
Attachment 2:	Photo Log
Attachment 3	FLIR Video Log