

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

TECHNICAL SUPPORT MEMORANDUM

TO: File

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

FROM: John C. Nwoke
Environmental Engineer

SUBJECT: **Potomac Electric & Power Company (PEPCO)
Permit No. 7192-R1 to Operate an Existing Fleet Fueling System at Benning
Service Center, 3400 Benning Road, NE Washington, DC**

DATE: May 28, 2024

BACKGROUND INFORMATION

A permit application to construct and operate a new fleet fueling system at Potomac Electric & Power Company (PEPCO) Benning Service Center, located at 3400 Benning Road NE, Washington DC was received by the Air Quality Division (AQD) on November 30, 2017. Permit No. 7192 issued to PEPCO on March 20, 2018, expired March 19, 2023, and must be renewed for continued operation of the facility.

The renewal application was received on March 15, 2023. It has been reviewed and Draft Permit No. 7192-R1 has been prepared. The existing equipment, activities and operation of the PEPCO Benning Service Center have not changed as previously permitted.

The permit action will be published in the DC Register on June 7, 2024. Public comments for the permit action will be solicited through July 8, 2024.

PEPCO has not requested that any of the materials submitted with this application be held confidential.

TECHNICAL INFORMATION

The equipment at this site includes:

1. (1) 12,000 gallon gasoline UL 2085 AST and standard appurtenances, remote dispensers with (3) dispensing nozzles, stage I vapor recovery systems, and a stage II Healy Central Vacuum (VP500 Series) vapor recovery systems.
2. (1) 12,000 gallon diesel UL 2085 AST and standard appurtenances, and remote dispensers with (4) dispensing nozzles.



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Although listed, the 12,000 gallon diesel AST is not subject to 20 DCMR 704 as the Stage I regulation was not intended to cover diesel fuel due to its low volatility. Thus, no requirements were placed in the permit for the storage and handling of diesel fuel at the facility.

The supporting document and calculated emissions estimate submitted to AQD with the original 2017 application show that the volatile organic compounds (VOCs) emissions are not expected to exceed 368.31 pounds per year or 0.184 tons per year. AQD has not required updated calculations as the equipment is unchanged.

Note that this estimate is based on an estimated average annual throughput of 99,000 gallons and a maximum monthly throughput of 9,200 gallons. However, in a discussion with Stephen Ours of AQD on February 2, 2018, Seth Cheney of KCI Technologies, Inc. indicated that the monthly throughput estimate was based on the highest actual monthly throughput in recent years and could be exceeded. As such, the applicant does not want to be limited to less than 10,000 gallons per month throughput. The regulatory evaluation and permit language will reflect this.

REGULATORY REVIEW

20 DCMR Chapter 2, Section 200: General Permit Requirements:

A fleet fueling system is a potential air pollution source due to the emissions from standing storage losses, the losses due to deliveries made into the storage tank, and the losses due to dispensing of gasoline. The emissions contain volatile organic compounds which are regulated by the District of Columbia. Thus, a Chapter 2 permit is required for the gasoline part of the fleet fueling system.

20 DCMR Chapter 5, Section 502: Sampling, Tests, and Measurements

In the prior permit, the sampling, tests, and measurements provisions of 20 DCMR 502 were applied to require PEPCO to conduct Stage II vapor recovery testing not specified in 20 DCMR 705. However, since that time, specific testing requirements have been added to 20 DCMR 705, so 20 DCMR 502 is no longer cited in the permit.

20 DCMR Chapter 6, Section 606: Visible Emissions

The visible emissions limitations of 20 DCMR 606 are applicable to this facility. Proper operation of the fleet fueling system would preclude any visible emissions from being emitted into the outdoor atmosphere from construction, refueling, and other operational activities at the facility. AQD requires that all equipment be operated properly in order to be protective of public health and the environment per 20 DCMR 201. As such, Conditions II(a)(1) and III(a)(1) reflect a requirement that no emissions be visible and do not allow for exceptions to this standard other than as found in 20 DCMR 606.2(d). It is noteworthy that the visible emissions provision of 20 DCMR 606 was updated based on the August 11, 2023, D.C. Register publication of the Final Rulemaking on Visible Emissions. The Department of Energy and Environment revised 20 DCMR 606 with changes and new requirements in response to the EPA "SIP call" in 2015. However, per the evaluation above, it would still be an indication of improper maintenance or

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operation of the equipment if emissions were visible at any time, so the exceptions found in 20 DCMR 606.2 have not been included in the permit.

Other updates to the regulation, including the maintenance, operation, and training requirements of 20 DCMR 606.4 and the record keeping requirements of 20 DCMR 606.5 have been added to the permit, however.

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

The requirements of 20 DCMR 700 were not included in the permit as they are not applicable when 20 DCMR 704 and 20 DCMR 705 are applicable.

Sections 20 DCMR 704 and 20 DCMR 705 are the District's primary regulations for controlling air emissions from the transfer of volatile organic compounds or gasoline from any delivery storage container (Stage I Vapor Recovery), and the transfer of gasoline to any vehicular fuel tank from any stationary storage container (Stage II Vapor Recovery). The requirements of these regulations have been included in the permit.

The fleet fueling system is subject to 20 DCMR 704 due to the size of the gasoline storage tank. The fleet fueling system includes one 12,000 gallon gasoline above ground storage tank for gasoline. This tank capacity exceeds the threshold value of 250 gallons for the applicability of 20 DCMR 704.1, hence the fueling system is subject to 20 DCMR 704 and the requirements of this regulation have been included in the permit.

The facility was previously required to install Stage II vapor recovery equipment under the prior version of 20 DCMR 705 because there are three gasoline dispensing nozzles involved in the project and because the facility had the realistic potential to dispense more than 10,000 gallons per month of gasoline.

Due to revisions to 20 DCMR 705 (promulgated April 8, 2022), PEPCO is authorized to decommission their vacuum assist vapor recovery system at any time. The procedures for such decommissioning, as specified in the regulation, have been incorporated into the draft permit.

The permit maintains the full requirements for Stage II systems as specified in the regulation pending any such decommissioning that may occur as well as some testing requirements that apply under 20 DCMR 705.15 even after such a system is decommissioned.

20 DCMR Chapter 9, Section 903: Odorous or Other Nuisance Air Pollutants

"An emission into the atmosphere of odorous or other air pollutants from any source in any quantity and of any characteristic, and duration which is, or is likely to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life or property is prohibited [20 DCMR 903.1]" is applicable to all sources. This requirement is contained in Conditions II(a)(2) and III(a)(2) of the permit. Many of the other conditions of the permit,

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especially many of those brought into the permit pursuant to 20 DCMR 704 and 20 DCMR 705 are intended, at least in part, to reduce detectable odors.

20 DCMR 903 was revised and published in the D.C. Register on August 4, 2023. The odor regulation was substantially amended to require an Odor Control Plan (OCP) for certain industrial sectors and other odor emitting sources determined to be non-compliant with the new odor regulation. An OCP is not required for this source at this time as it is not in one of the default categories required to submit such OCPs, but may be required if odor complaints are received or odor violations are identified.

Additionally, Condition II(a)(2) and III(a)(2) have been revised to reflect the affirmative defense provisions of 20 DCMR 903.13(b).

Other Regulations:

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 Hazardous Air Pollutants (HAP) as defined in 40 CFR 63.2. This subpart is applicable to this source. This facility is an area source of HAP and may consistently have a gasoline dispensing station with monthly throughput of under 10,000 gallons of gasoline. However, as noted above, the facility does not want to be limited below this level. As such, this subpart is applied as if the throughput were above 10,000 gallons per month.

To address the requirements of this regulation, a streamlined component has been added to Condition II(b)(2) covering the gasoline storage tank. Also Condition II(d)(4) has been added to address the need for recording keeping. Condition III(b)(11) has been added to address the requirements of 40 CFR 63.11117(a). The notification requirements of this subpart are not included in the permit as they were required to be met upon installation of the equipment.

RECOMENDATIONS

The permit action will be published in the DC Register on June 7, 2024. Public comments for the permit action will be solicited through July 8, 2024. AQD will address any comments received before taking any final action on the permit application. If no adverse comments are received, I recommend that permit No. 7192-R1 be issued in accordance with 20 DCMR 200.2 promptly upon the completion of the public review period.

SSO:JCN