

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: Afewerki Birhane
Environmental Engineer

SUBJECT: Permit No. 7353 to Construct and Operate a 10,000 Gallon Gasoline Storage Tank with Associated Gasoline Dispensing Equipment at the Office of the State Superintendent of Education (OSSE), Department of Transportation Facility Located at 1601 W Street NE, Washington DC

DATE: September 11, 2024

BACKGROUND INFORMATION

The District of Columbia Office of the State Superintendent of Education (OSSE), Department of Transportation, submitted an application for a permit to construct and operate a new 10,000 gallon Fireguard gasoline storage tank and associated gasoline dispensing system to be located at the OSSE Bus Terminal, 1601 W Street NE, Washington DC. Characteristics of the system include dispensing cabinets welded to each end of the tank. Each cabinet is to be equipped with a Total Control Systems (TCS) 682-15 piston meter, Hannay Rose reel, 25' x 3/4" hose, 3/4" swivel, breakaway, and a single nozzle. An EJ Ward Fuel Management System will be installed. The application was received by the Air Quality Division (AQD) on June 16, 2023, with final updated gasoline throughput and emission calculations submitted September 9, 2024. The associated application fee was paid on July 3, 2023.

The permit action will be published in the DC Register on September 20, 2024. Public comments for the permit action will be solicited through October 21, 2024.

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

TECHNICAL INFORMATION

The equipment at this site will include a 10,000 gallon Fireguard gasoline storage tank with dispensing cabinets welded to each end of the tank. Each cabinet is equipped with a Total Control Systems (TCS) 682-15 piston meter, Hannay Rose reel, 25' x 3/4" hose, 3/4" swivel, breakaway, and a single nozzle. An EJ Ward fuel management system will be installed.

The maximum monthly throughput is estimated to be 32,083 gallons, which has been established as a limit in the draft permit. The maximum annual throughput is estimated to be 385,000 gallons, though the expected average annual throughput has been estimated to be 225,300

CHAPTER 2 TECHNICAL MEMORANDUM

Permit No. 7353 to Construct and Operate a Gasoline Storage Tank and Gasoline Dispensing System

September 11, 2024

Page 2

gallons. Monitoring, testing, record keeping, and reporting requirements have been included in the permit to ensure that compliance status can be determined.

The supporting documents and calculated emissions estimates submitted to AQD in the application, as revised, indicate that the maximum volatile organic compounds (VOCs) emissions expected from the equipment are 2.60 tons per year. Similarly, maximum total hazardous air pollutant (HAP) emissions are expected to be 0.13 tons per year.

REGULATORY REVIEW

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

A gasoline dispenser and associated storage tank are potential air pollution sources 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 (VOCs) and hazardous air pollutants (HAPs) which are regulated by the District of Columbia. Thus, a Chapter 2 permit is required.

20 DCMR Chapter 5, Section 500: Records and Reports

The Permittee must maintain records relevant to the operations and maintenance of the covered equipment pursuant to 20 DCMR 500.1. Records must be maintained for three years pursuant to 20 DCMR 500.8. However, a five-year retention requirement has been included in Condition V of the permit as the 20 DCMR 500.8 three-year requirement has been streamlined with the five-year requirement in 40 CFR 63.10(b)(1). Condition V(e) specifically references 20 DCMR 500.1 with respect to maintaining monthly gasoline throughput data. Condition V(j) also references 20 DCMR 500.1 with respect to reporting of test results to the Department.

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 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, Condition II(a) reflects a requirement that no emissions be visible and does not allow for exceptions to this standard as found in 20 DCMR 606.

20 DCMR 700: Miscellaneous Volatile Organic Compounds (VOCs)

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

20 DCMR 704 – Stage I Vapor Recovery:

20 DCMR 704 is the District's primary regulation for controlling air emissions from the transfer of volatile organic compounds or gasoline from any delivery vessel to a storage container (Stage I Vapor Recovery).

CHAPTER 2 TECHNICAL MEMORANDUM

Permit No. 7353 to Construct and Operate a Gasoline Storage Tank and Gasoline Dispensing System

September 11, 2024

Page 3

In particular, the gasoline dispensing system includes one 10,000 gallon Fireguard tank for gasoline storage. 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. Equipment specifications are included in Conditions III(a) through (d). Proper operation procedures are specified in Condition III(e).

One of the key requirements of this regulation are that only delivery vessels (delivery trucks) that have passed a leak test in the prior year can be used to fill the storage tank. This requirement is specified in Condition III(f), pursuant to 20 DCMR 704.4(f). The Permittee will be responsible for ensuring that only certified trucks are used pursuant to 20 DCMR 704.4(f) and Condition IV(b) of the permit. Records of these truck inspections must be maintained pursuant to Condition V(d).

20 DCMR 705 – Stage II Vapor Recovery:

20 DCMR 705 is the District's primary regulation for controlling air emissions from the transfer of gasoline from any stationary storage tank to a vehicle fuel tank. Starting January 1, 2022, an owner or operator may construct a new gasoline dispensing facility without a Stage II vapor recovery system in the District of Columbia, therefore much of this section is not applicable. The applicant has confirmed that they do not intend to install a Stage II vapor recovery system.

However, portions of this section apply to any gasoline dispensing facility, regardless of whether a Stage II vapor recovery system is installed. As a result, Conditions III(j) through (l) incorporate the requirements of 20 DCMR 705.9 through 705.11. These conditions require transfer of gasoline to a vehicular fuel tank only through a nozzle equipped with an automatic shut-off when the fuel tank is full or nearly full, a requirement that operators not transfer additional gasoline after the shut-off has been triggered, and a requirement to properly maintain and operate the equipment.

Additionally, Condition IV(d) incorporates the testing requirements applicable to gasoline dispensing facilities that do not have Stage II equipment installed, as specified in 20 DCMR 705.15. Condition V(j) requires reporting of the test results, pursuant to 20 DCMR 705.14. Condition V(l) incorporates the requirements of 20 DCMR 705.16, which specifies the actions to be taken if one of the aforementioned tests are failed. The reporting requirements of the regulation, found in 20 DCMR 705.17 are incorporated into Condition V(m) of the permit.

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 Condition II(b) of the permit. The affirmative defensive provisions of 20 DCMR 903.13(b) have

CHAPTER 2 TECHNICAL MEMORANDUM

Permit No. 7353 to Construct and Operate a Gasoline Storage Tank and Gasoline Dispensing System

September 11, 2024

Page 4

also been incorporated into this condition. The Odor Control Plan (OCP) requirements of this regulation do not apply at this time, and are therefore not included in the draft permit.

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. The applicant has asserted that this facility will have a maximum throughput of 32,083 gallons per month (in the range between 10,000 and 100,000 gallons per month). As such, pursuant to 40 CFR 63.11111(c) and 40 CFR 63.11117, the requirements applicable under this rule include the basic housekeeping requirements found in 40 CFR 63.11116(a), the submerged fill requirements found in 40 CFR 63.11117(b), the record keeping requirements of 40 CFR 63.11117(d) and the notification requirements of 40 CFR 63.11117(e). These requirements have been incorporated into Conditions III(b), (h), and (i), V(e), and VI(a). Additionally, to ensure that throughput remains at or below the 32,083 gallons per month maximum asserted by the applicant, Condition III(g) so limits operations. In addition to these requirements that are throughput dependent, the general duty to properly operate and maintain the equipment, pursuant to 40 CFR 63.11115(a) is included in Condition II(c) of the permit. Applicable record keeping and reporting requirements are included in Conditions V(f) through (h).

COMMENT PERIOD AND PUBLIC HEARING

Based on AQD's evaluation of the application and review of applicable regulations, the construction and operation of the gasoline storage tank and gasoline dispensing station, as proposed in the application (as revised), and the draft operating permit as written, are consistent with all applicable federal and District air pollution control laws and regulations.

Public comments for the permit action will be solicited from September 20, 2024 through October 21, 2024. **No comments submitted after October 21, 2024 will be accepted.**

During the public comment period, any interested person may submit written comments on the draft permit.

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
stephen.ours@dc.gov

CHAPTER 2 TECHNICAL MEMORANDUM

Permit No. 7353 to Construct and Operate a Gasoline Storage Tank and Gasoline Dispensing System

September 11, 2024

Page 5

In addition, AQD has scheduled a public hearing to take further comment on this draft permit. Information on this hearing and how to participate is as follows:

Public Hearing:

HEARING DATE: Monday, October 21, 2024

TIME: 5:30 PM

IN-PERSON LOCATION: Department of Energy and Environment (DOEE) Office, 1200 First Street NE, 5th Floor, Washington DC

In-person attendees are encouraged to arrive 10 minutes early to allow time to be directed to the meeting room.

Information on how to attend the meeting virtually will be provided in the public notice of this action, which can be found at: <https://doee.dc.gov/service/public-notices-hearings>

All persons attending the hearing, either in person or virtually, who wish to be heard may testify at the hearing. All presentations shall be limited to five minutes. Persons testifying are urged to submit paper or electronic copies of any written statements.

All relevant comments received during the comment period and the public hearing will be considered before taking final action on the permit application.

POINT OF CONTACT FOR INQUIRIES:

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
stephen.ours@dc.gov

SSO/AB