



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

STATIONARY SOURCE PERMIT TO OPERATE

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

James Madison University
181 Patterson Street MSC 0501
Harrisonburg, Virginia 22807
Registration No.: 80117

is authorized to operate:

Fuel Burning Equipment (FB3)

located at

James Madison University Campus
Harrisonburg, Virginia 22807

in accordance with the Conditions of this permit.

Approved on **DRAFT**

Trevor H. Wallace, P.E.
Air Permit Manager, Valley Region

Permit consists of 7 pages.
Permit Conditions 1 to 13.
Attachment A – FB3 Unit List

INTRODUCTION

This permit approval is based on the following permit application:

Application Signature Date	Application Amendment Date	Application Additional Information Received Date
July 8, 2025	--	July 28, 2025

Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

Words or terms used in this permit document shall have meanings as provided in 9VAC5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the Department of Environmental Quality (DEQ) for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9VAC5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

Limits in this permit document referencing “Particulate Matter”, “Particulate Matter (PM)” or “PM” include only the filterable portion of particulates determined via Method 5 of 40CFR60 Appendix A. Unless otherwise noted in a specific limit, limits in this permit document referring to “PM10,” “PM2.5,” “Particulate Matter (PM10),” “Particulate Matter (PM2.5)” or any such variation include both the filterable and condensable fraction of the particulate size.

Equipment List - Equipment at this facility covered by this permit consists of:

Equipment included in the Application:			
Reference No.	Equipment Description	Rated Capacity	Referenced Federal Requirements
FB3	Natural gas-fired fuel burning equipment, as listed in the permit Attachment A – FB3 Unit List	Combined Capacity = 142.466 MMbtu/hr	--

Specifications provided above are for informational purposes only and do not form enforceable terms or conditions of the permit document.

OPERATING LIMITATIONS

- Fuel** - The approved fuel for the FB3 fuel burning units is natural gas. A change in the fuel shall be considered a change in the method of operation of the FB3 fuel burning units and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.
(9VAC5-80-850)
- Fuel Throughput** – The annual combined natural gas throughput for the fuel burning units (FB3) shall not exceed that allowed by the following formula for each pollutant:

$$Q_{NG_FB3} \leq \frac{FB3_{NG} * 2000 \frac{lb}{ton}}{EF_{AP42}}$$

Where:								
Q_{NG_FB3}	=	Annual combined natural gas throughput (mmscf/yr) for the fuel burning units (FB3)						
$FB3_{NG}$	=	Emissions (tons/yr) from the FB3 fuel burning units from combusting natural gas, as listed in Condition 3						
EF_{AP42}	=	EPA AP-42 (July 1998), Chapter 1.4, Tables 1.4-1 and 1.4-2 emission factors (lb/mmscf).						
		PM	PM-10	PM-2.5	NOx	CO	VOC	SO2
		1.9	7.6	7.6	100	84	5.5	0.6

Annual combined natural gas throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-850)

EMISSION LIMITS

3. **Fuel Combustion Emission Limits** – Total combined emissions from the operation of the fuel burning units (FB3) shall not exceed the limits specified below:

PM-10	1.1	tons/yr
PM-2.5	1.1	tons/yr
Nitrogen Oxides (as NO ₂)	15.0	tons/yr
Carbon Monoxide	12.6	tons/yr
Volatile Organic Compounds	0.8	tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1, 2, 4, and 5.
(9VAC5-80-850)

4. **Operating and Training Procedures** – The fuel burning units (FB3) emissions shall be controlled by proper operation and maintenance. Fuel burning units (FB3) operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the fuel burning units (FB3). These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9VAC5-50-20 and 9VAC5-80-850)

RECORDS

5. **On Site Records** – The permittee shall maintain records of emissions data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ. These records shall include, but are not limited to:
- Monthly and annual throughput of natural gas (mmscf) and emissions (tons/yr) for fuel burning units (FB3), as required in Conditions 2 and 3.

- b. Records of maintenance, operating procedures, and training, as required by Conditions 4 and 8.
- c. Records of bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment, as required by Condition 9.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-900 and 9VAC5-50-50)

GENERAL CONDITIONS

6. Permit Suspension/Revocation – This permit may be suspended or revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the conditions of these permits;
- c. Fails to comply with any emission standards applicable to a permitted emissions unit;
- d. Causes emissions from the stationary source which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard; or
- e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.
- f. Fails to comply with the applicable provisions of Articles 6, 8, and 9 of 9VAC5, Chapter 80.

(9VAC5-80-1010)

7. Right of Entry – The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of these permits;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of these permits or the State Air Pollution Control Board Regulations;

- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of these permits or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9VAC5-170-130 and 9VAC5-80-850)

8. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance;
- b. Maintain an inventory of spare parts;
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum; and
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

(9VAC5-50-20 E and 9VAC5-80-850)

9. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9VAC5-20-180 J and 9VAC5-80-850)

10. **Notification for Facility or Control Equipment Malfunction** – The permittee shall furnish notification to the DEQ of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour. Such notification shall be made as soon as practicable but no later than four daytime business hours after the

malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the DEQ. (9VAC5-20-180 C and 9VAC5-80-850)

11. **Violation of Ambient Air Quality Standard** – The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9VAC5-20-180 I and 9VAC5-80-850)
12. **Change of Ownership** – In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the DEQ of the change of ownership within 30 days of the transfer.
(9VAC5-80-940)
13. **Permit Copy** – The permittee shall keep a copy of this permit document on the premises of the facility to which it applies.
(9VAC5-80-860 D)

