June 25, 2019

Dennis B. Martin

Facilities Manager

United States Marine Corps

Marine Barracks

8th & I Streets SE

Washington DC 20390

**RE: Permit Nos. 6321-R2, 6322-R2, and 6323-R2 to Operate Three (3) 8.37 MMBtu per Hour Natural Gas-Fired Water Tube Boilers at the United States Marine Corps Barracks**

Dear Mr. Martin:

Pursuant to §200.1 and §200.2 of Title 20 of the District of Columbia Municipal Regulations (20 DCMR), a permit shall be obtained from the Department of Energy and Environment (the Department) before any person may cause or allow the construction or operation of a stationary source in the District of Columbia. The application of the United States Marine Corps (the Permittee) to operate three (3) natural gas fired boilers 1, 2, and 3 (serial numbers 15578-1, 15578-2 and 15578-3, respectively), located at the Marine Barracks, Bachelor Enlisted Quarters (BEQ), Building #20, 8th and I Streets SE, Washington DC, have been reviewed. The boilers and their associated permit numbers are listed in the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Boiler Description** | **Natural Gas Heat Input Rating (MMBTU/hr)** | **Equipment ID** | **Permit Number** |
| Universal Boiler Works Model BF-200, Serial Number 15578-1 | 8.37 | Boiler 1 | 6321-R2 |
| Universal Boiler Works Model BF-200, Serial Number 15578-2 | 8.37 | Boiler 2 | 6322-R2 |
| Universal Boiler Works Model BF-200, Serial Number 15578-3 | 8.37 | Boiler 3 | 6323-R2 |

Based on the plans and specifications as detailed in the air permit renewal application submittal and its updates received on October 17, 2018, February 21, 2019, and February 28, 2019, respectively, the applications are hereby approved, and the operation of the boilers is permitted, subject to the following conditions:

I. General Requirements:

* 1. The approval is issued pursuant to the applicable air pollution control requirements of 20 DCMR for the operation of the boilers.

b. This set of permits will expire on June 24, 2024. If continued operation after this date is desired, the owner or operator shall submit application for renewal by March 24, 2024. [20 DCMR 200.4]

c. Operation of equipment under the authority of this set of permits shall be considered acceptance of its terms and conditions.

1. The Permittee shall allow authorized officials of the District, upon presentation of identification, to:

1. Enter upon the Permittee’s premises where a source or emission unit is located, an emissions related activity is conducted, or where records required by this permit are kept;

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement.

1. This set of permits shall be kept on the premises and produced upon request.
2. Failure to comply with the provisions of this permit document may be grounds for suspension or revocation. [20 DCMR 202.2]

II. Emission Limitations:

* 1. The total hourly emissions of criteria pollutants from each of the three boilers shall not be greater than those specified in the following table [20 DCMR 201]:

|  |  |
| --- | --- |
| **Pollutant** | **Short Term Emissions Limit****(lb/hr)** |
| Carbon Monoxide (CO) | 0.67 |
| Oxides of Nitrogen (NOx) | 0.80 |
| Total Particulate Matter (PM Total)\* | 0.06 |
| Volatile Organic Compounds (VOC) | 0.04 |
| Sulfur Dioxide (SO2) | 0.005 |

\* PM Total includes both filterable and condensable particulate matter fractions.

*Note that, unless other credible evidence of a violation is identified, such as by testing required in accordance with Condition IV(d), the Permittee will be considered to be in compliance with Condition II(a) as long as compliance is maintained with Condition III(a) of this permit.*

* 1. b. Visible emissions shall not be emitted into the outdoor atmosphere from the boilers, except that discharges not exceeding forty percent (40%) opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period during start-up, cleaning, adjustment of combustion controls, or malfunction of the equipment [20 DCMR 606.1]
	2. *Note that 20 DCMR 606 is subject to an EPA-issued call for a State Implementation Plan (SIP) revision (known as a “SIP call”) requiring the District to revise 20 DCMR 606. See “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction”, 80 Fed. Reg. 33840 (June 12, 2015). It is likely that this federal action will result in changes to the requirements of 20 DCMR 606. Any such changes, once finalized in the DCMR, will supersede the language of Condition II(b) as stated above.*

c. 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]

d. Particulate matter emissions from the boilers shall not exceed 0.11 pound per million BTU. *Note that, unless other credible evidence of a violation is identified, such as by testing required in accordance with Condition IV(d), the Permittee will be considered to be in compliance with Condition II(d) as long as compliance is maintained with Condition III(a) of this permit.* [20 DCMR 600.1]

III. Operational Limitations:

* 1. a. Only natural gas shall be used as fuel in the boilers covered by this permit. No other fuels are approved for use. [20 DCMR 201].
	2. b. This approval is valid for the specific activity cited in the application submitted to the Department. Any deviation from the specific activity is a violation of the permit.

c. The boilers shall be operated at all times in a manner consistent with the manufacturer’s specifications for the equipment. [20 DCMR 201]

d. At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate each boiler in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [20 DCMR 201]

IV. Monitoring and Testing Requirements:

a. The Permittee shall monitor the operation of the boilers in a manner consistant with a good preventive maintenance program.

b. The Permittee shall monitor the type and amount of fuel burned in the boilers.

c. The Permittee shall monitor the stack outlets and identify any visible emissions to ensure that if they occur, the problem is promptly identified and repaired.

d. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source, as requested. [20 DCMR 502.1]

e. Unless otherwise specified by the Department, if performance testing is required pursuant to Condition IV(d), the Permittee shall follow the following procedures and shall furnish the Department with a written report of the results of such performance test in accordance with the following requirements [20 DCMR 502]:

1. One (1) original test protocol shall be submitted to the following address a minimum of thirty (30) days in advance of the proposed test date. The test shall be conducted in accordance with Federal and District requirements.

Chief, Compliance and Enforcement Branch

Department of Energy and Environment

Air Quality Division

1200 First Street NE, 5th Floor

Washington, DC 20002

2. The test protocol and test date(s) shall be approved by the Department prior to initiating any testing. The Department must have the opportunity to observe the test for the results to be considered for acceptance.

3. The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original copy of the test report shall be submitted to the address in Condition IV(e)(1) above.

4. The final report of the results shall include the emissions test report (including raw data from the test) as well as a summary of the test results and a statement of compliance or non-compliance with permit conditions to be considered valid. The summary of results and statement of compliance or non-compliance shall contain the following information:

A. A statement that the Permittee has reviewed the report from the emissions testing firm and agrees with the findings.

B. Permit number(s) and condition(s) which are the basis for the compliance evaluation.

C. Summary of results with respect to the permit condition.

D. Statement of compliance or non-compliance with each permit condition.

5. The results must demonstrate to the Department’s satisfaction that the emission unit is operating in compliance with the applicable regulations and conditions of this permit; if the final report of the test results shows non-compliance the Permittee shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.

V. Record Keeping:

The following information shall be recorded and maintained in a log at the facility for a period not less than three years from the date of each test, monitoring, sample measurement, report, application, or other activity. [20 DCMR 500.8]

a. The Permittee shall keep records of fuel use for the boilers, showing therms or standard cubic feet of natural gas combusted in each boiler, each month. These records shall be kept as a 12-month rolling sum.

b. The Permittee shall keep records of all maintenance performed on the emission units so as to document compliance with Conditions III(c) and (d). These records shall be initialed to attest to their accuracy.

c. The Permittee shall keep records of the results of any visible emissions monitoring performed.

d. The Permittee shall keep records of the results of any testing the Permittee performed pursuant to Condition IV(d).

VI. Record Keeping:

* 1. The Permittee shall immediately contact the Air Quality Division’s Compliance and Enforcement Branch upon becoming aware of a sudden equipment failure or emergency or emissions in excess of any emission limit. The Department may be contacted at (202) 535-2600.

b. The Permittee shall report the fuel usage and the criteria pollutants emissions from the boilers to the Department upon request.

c. In addition to complying with Condition VI(a) and any other reporting requirements mandated by the District of Columbia, the Permittee shall, within thirty (30) calendar days of becoming aware of any occurrence of excess emissions, supply the Department in writing with the following information:

* + 1. The name and location of the facility;
		2. The subject source(s) that failed, experienced the emergency, or caused the excess emissions;
		3. The time and date of the first observation of the equipment failure, emergency, or excess emissions;
		4. The cause and estimate/expected duration of the excess emissions (if applicable); and
		5. The proposed corrective actions and schedule to correct the conditions causing the emergency or excess emissions.

d. Written reports submitted pursuant to Condition VI of this permit shall be submitted to:

Chief, Compliance and Enforcement Branch

Department of Energy and Environment

Air Quality Division

1200 First Street NE, 5th Floor

Washington DC 20002

If you have any questions, please call me at (202) 535-1747 or Abraham T. Hagos at (202) 535-1354.

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

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