



GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

CHAPTER 2 TECHNICAL SUPPORT MEMORANDUM

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

FROM: John Nwoke 
Environmental Engineer

SUBJECT: **Wardman Hotel LLC at Washington Marriott Wardman Park
Permit Nos. 7112, 7113, and 7114 to Modify and Operate Three Dual Fuel-
Fired (Natural Gas and No. 2 Fuel Oil) Boilers**

DATE: July 21, 2016

BACKGROUND

On May 12, 2016 the Air Quality Division (AQD), received three permit applications from Wardman Hotel LLC to construct and operate three dual fuel (natural gas and diesel fuel) boilers. The boilers are existing, however an approval is required to upgrade their oil system from No. 4 fuel oil to No. 2 fuel oil, hence the permit applications. This upgrade will result in the reduction of the potential to emit oxides of sulfur from 135.49 tons per year to 0.22 tons per year, per boiler. Particulate matter emissions will also be slightly reduced. The existing boilers are Cleaver Brooks model CB-100-700 units with a rated heat input capacity of 29.29 MMBtu/hr. The newly installed No. 2 fuel oil burners will be rated at 30.31 MMBTU/hr heat input.

Publication of the permit action is planned for July 29, 2016 in the D.C. Register. Public comment for the permit action will be solicited through August, 29, 2016.

ISSUES

Wardman Hotel LLC intends to modify their fuel oil delivery system and combustion processes to make them capable of burning No. 2 distillate fuel oil and remove the capability to burn No. 4 fuel oil. This change in the fuel system will result in lower emissions from the facility, but is considered a "modification" pursuant to 20 DCMR 199, and therefore is subject to permitting requirements pursuant to 20 DCMR 200.1.

REGULATORY REVIEW

Both the federal and District of Columbia regulations and applicable requirements apply to this project as noted below:

1. NSPS: The boilers are subject to Subpart Dc because of their size and age (more than 10 MMBtu/hr of heat input, and will be constructed after June 9, 1989).
2. NESHAP: The boilers primarily operate on natural gas. However No. 2 fuel oil will be used as alternative fuel. The boilers are dual fuel-fired and thus subject to 40 CFR 63, Subpart JJJJJJ.

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Appropriate conditions have been placed in the set of permits to reflect the applicability of this regulation.

3. Non-attainment New Source Review (NNSR): The facility is both a major source and a title v permit holder. Emissions of oxides of nitrogen are not expected to change as a result of this modification. VOC emissions may increase slightly, but well below the 25 ton per year significance threshold to trigger NNSR.

4. Chapter 2 Regulations: The boilers are required to comply with the following requirements of 20 DCMR and these requirements have been incorporated as permit conditions: 20 DCMR 200.4, 20 DCMR 202.2, 20 DCMR 502, 20 DCMR 500.8, 20 DCMR 606.1, 20 DCMR 903.1, 20 DCMR 801.1, 20 DCMR 805.8 and 20 DCMR 201.

CONCLUSIONS

Subject to receiving no adverse public comments, EPA objection or adverse comments from affected states with regard to a segment of this project or all of it, I recommend based on all the aforementioned regulatory review that the permit be issued to Wardman Hotel LLC following completion of the public review period. If comments are received during the public review period, they will be addressed before issuance of a permit.

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