

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: **Bloomberg LP**
Permit No. 7111-R1 to Operate One (1) 500 kWe Natural Gas Fired-
Emergency Generator Set at Bloomberg Offices, 11th & I Streets NW (1101
New York Ave. NW), Washington, DC

DATE: June 10, 2022

BACKGROUND

On April 4, 2021, the Air Quality Division (“AQD”) of the Department of Energy and Environment (“the Department”) received a renewal application to operate one 500 kWe natural gas-fired emergency generator from Bloomberg LP. The unit was permitted under Permit No. 7111 issued on August 16, 2016. The permit expired on August 15, 2021, hence a permit renewal application was submitted to AQD for consideration.

The emergency generator is uncertified and was required under the monitoring and record-keeping conditions of the expired permit to conduct an initial performance test, followed by a compliance test demonstration every 8,760 hours of operation or three (3) years whichever came first (See permit Condition IV(f)). The applicant on April 14, 2021, submitted a hard copy of the renewal application, the 2016 initial performance test report, a copy of the previous permit and the previous application.

The renewal application was processed after Bloomberg LP satisfactorily completed the application filing by complying with the Clean Hands requirements. A valid Certificate of Clean Hands, dated March 9, 2022, was submitted to AQD on March 16, 2022.

Bloomberg LP has not requested that any part of the application be held in confidence.

TECHNICAL INFORMATION

The emergency generator is a 500 kWe natural gas-fired Cummins unit powered by a Model Year 2015 Cummins 769 hp natural gas-fired engine with serial number 25413541. The engine is uncertified and must meet the regulatory requirements for an uncertified engine as discussed below.

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REGULATORY REVIEW

The following review is not a full review of all air quality regulations applicable to this generator set but is rather a discussion of regulations whose applicability or requirements were not immediately obvious and therefore warrant documentation of AQD's applicability evaluations.

40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines:

This Bloomberg LP emergency generator set does not meet the eligibility criteria for coverage under source category Permit No. 7043-SC (Permit to Construct and Operate Stationary Natural Gas-Fired Emergency Engines Subject to NSPS Subpart JJJJ) because the engine had no EPA certificate of conformity.

At the time the Bloomberg LP initially applied for the permit to construct and operate this emergency generator set, it was determined that the engine was uncertified, so no EPA certificate of conformity existed. As a result, AQD could not verify that the engine's emissions meet the emissions standards under 40 CFR 60, Subpart JJJJ without such a certificate.

Under 40 CFR 60, Subpart JJJJ, §60.4241(a), manufacturers of stationary SI internal combustion engines that burn natural gas and having a maximum engine power greater than 19 kW can choose to certify their engines to the emission standards in §60.4231(d), under the voluntary certification program described in Subpart JJJJ. The manufacturer did not participate in this voluntary certification program.

A manufacturer who is unable to produce a certificate of conformity has not demonstrated that their stationary SI ICE will meet the requirements of §60.4231(d) or (e), as applicable, and consequently, such an engine will be deemed uncertified.

Beyond this, the Bloomberg LP emergency engine meets all other requirements for a natural gas-fired emergency engine subject to NSPS Subpart JJJJ with respect to: (1) being subject to this subpart (§60.4230); (2) emissions standards for owners and operators (except that it must demonstrate compliance to the emissions standards through a performance test because it is not a certified engine) (§60.4233); (3) notification, reports, and record keeping (§60.4245) and etc. Relevant requirements and citations have been incorporated into the permit.

An initial performance test was performed on September 29, 2016. This test is required to be repeated every 8,760 hours of operation or every three years, whichever comes first pursuant to 40 CFR 60.4243(a)(2)(iii). This requirement is placed in Condition IV(f) of the permit.

20 DCMR 200 – General Permit Requirements

20 DCMR 200 requires a permit for the construction or operation of a stationary source of air pollution in the District of Columbia.

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20 DCMR 606 – Visible Emissions

Visible emissions from the emergency generator set to the outdoor atmosphere are limited by the requirements of 20 DCMR 606.1 and this restriction is included in Condition II(b) of the permit. A note was added to the permit to indicate that, if 20 DCMR 606 is revised as a result of the pending “start-up, shutdown, and malfunction SIP Call”, the new regulatory requirements will supersede the requirements specified in the permit.

20 DCMR 903 – Odorous or Other Nuisance Air Pollutants

Odorous emission resulting from the activity of Bloomberg LP in connection with the construction or operation of the emergency generator is limited by 20 DCRM 903.1. This limitation has been included in the draft permit.

20 DCMR 1406 and 40 CFR 63, Subpart ZZZZ – Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

20 DCMR 1406 adopts, by reference, most aspects of 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The only relevant requirement in this regulation is a requirement to comply with 40 CFR 60, Subpart JJJJ, discussed above. As such, 20 DCMR 1406 is applicable, but is not cited in the permit.

DISCUSSION

Regulatory Basis for Asserting that the Bloomberg LP Emergency Generator is not a Standard Certified Generator

As previously noted, the Bloomberg LP emergency generator application did not meet the eligibility criteria for coverage under source category Permit No. 7043-SC (Permit to Construct and Operate Stationary Natural Gas-Fired Emergency Engines Subject to NSPS Subpart JJJJ) because the engine has no EPA certificate of conformity. Under the source category permit program, the application to operate this emergency generator may still be processed under another permitting program pursuant to 20 DCMR 200. In this case, Bloomberg LP applied for a standard Chapter 2 permit pursuant to 20 DCMR 200.2.

The engine is uncertified as noted earlier. Owners or operators of uncertified engines must demonstrate, through a performance testing program conducted in accordance with 40 CFR 60.4243 and 60.4244, that the emissions from the engine meet the requirements of Table 1, Subpart JJJJ of 40 CFR Part 60.

This requirement was included in Conditions IV(e) and (f) of Permit No. 7111-R1.

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CONCLUSIONS

AQD is publishing a draft permit in the D.C. Register and the Department's website on June 24, 2022. Public comment on the proposed permit action will be solicited through July 25, 2022. If there are no adverse public comments, I recommend issuance of the permit to Bloomberg LP following completion of the public review period. If comments are received during the public review period, they will be addressed before any final action is taken on the permit application.

JCN