

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

TO: File

THROUGH: Stephen S. Ours, P.E. *SSO*
Chief, Permitting Branch

FROM: John C. Nwoke *SSO for JCN*
Environmental Engineer

SUBJECT: Source Category Permit No. 7116-SC-R1 to Operate Existing Stationary Diesel-Fired Emergency Engines Exempt from NSPS Subpart JJJJ but Subject to NESHAP Subpart ZZZZ

DATE: July 16, 2020

BACKGROUND INFORMATION

The Air Quality Division (AQD) of the Department of Energy and Environment (the Department) issued a source category permit (No. 7116-SC) on September 28, 2016 for owners or operators to operate existing stationary natural gas-fired emergency spark ignition (SI) internal combustion engines in the District of Columbia. This particular source category permit is limited to engines exempt from compliance with the federal New Source Performance Standard (NSPS) "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines" (40 CFR 60, Subpart JJJJ), but subject to the federal "National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)" (40 CFR 63, Subpart ZZZZ).

The current source category permit is scheduled to expire on September 27, 2021. Prior to its expiration the Department needs to provide a new permit under which applicants may apply for coverage prior to the expiration of the existing permit. Issuing this permit renewal approximately a year ahead of expiration of the old permit (No. 7116-SC), will allow the Department and the various previously permitted entities time to transition into the new permit. The old permit will not be cancelled or amended, but will rather expire on its scheduled expiration date. Once this renewed permit (No. 7116-SC-R1) is issued, it will be used exclusively for new applications.

TECHNICAL INFORMATION

This source category permit is applicable to owners and operators of stationary natural gas-fired emergency engines in the District of Columbia who submit an application to AQD and are approved for coverage under this permit, either actively or by passive approval which will occur 45 days after submission of the complete application to AQD unless AQD objects to the approval in writing in that timeframe.

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This source category permit covers only the operation of existing, emergency internal combustion engines, operated exclusively on natural gas, that are exempt from the requirements of 40 CFR 60, Subpart JJJJ on the basis that they have not been modified or reconstructed as defined in 40 CFR 60.14 or 60.15 and that they do not trigger NSPS applicability based on one of the three following criteria:

1. The maximum engine power is less than or equal to 25 horsepower (HP) [19 mechanical kilowatts (kWm)] and it was manufactured on or after July 1, 2008;
2. The manufacturer participates in the voluntary manufacturer certification program described in 40 CFR 60, Subpart JJJJ and the date of manufacture of the emergency engine is after January 1, 2009; or
3. The emergency engine was ordered after June 12, 2006, was manufactured on or after January 1, 2009, and has a maximum engine power greater than 25 HP (19 kWm).

In addition, to be covered by this source category permit, an engine must be subject to the requirements of 40 CFR 63, Subpart ZZZZ, on the bases that [See 40 CFR 63.6585 and 40 CFR 63.6590]:

1. The engine is not located at a major source of hazardous air pollutants (HAPs) (i.e. it is located at an area source of HAPs); and
2. The engine will not be used for economic or emergency demand response purposes.

There are additional limitations placed on the equipment covered by this source category permit that are not required by the federal rule and may not be required in all cases by specific District regulations. This source category permit is not intended to disallow such operation in all cases. Instead, for some situations that may need further review by AQD, a case-by-case permit review process is still required to determine if such permits should be issued.

Although the federal regulation covers spark ignition engines with various fuels, AQD plans to require a closer review via a case-by-case permitting process for spark ignition engines that use fuels other than natural gas, hence only natural gas engines are covered by this source category permit.

Similarly, the federal regulation covers non-emergency engines. Again, AQD plans to require a case-by-case review of applications for any such engines at this time, so they are not covered by this source category permit.

For equipment not covered by this source category permit (or other source category permits), if any entity owns, operates, or plans to install any equipment of this sort, they should consult with

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AQD to determine the applicability of any other permitting requirements pursuant to 20 DCMR 200. The main phone number for AQD is (202) 535-2250.

Note that this source category permit does not cover all engines. Examples of engines not covered are: 1) non-emergency engines, 2) non-road engines, 3) compression ignition engines, 4) engines subject to the requirements of the spark ignition NSPS (40 CFR 60, Subpart JJJJ), 6) engines whose owners/operators are requesting exemption from the Reciprocating Internal Combustion Engine (RICE) National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR 63, Subpart ZZZZ, and 7) spark ignition engines burning fuel other than natural gas. These categories may be covered by other source category permits or may be handled on a case-by-case basis by AQD.

REGULATORY REVIEW

The regulatory review for the source category permit is not significantly impacted by this source category permit renewal.

The details of the regulatory review are available in the Technical Supporting Memorandum for the existing Source Category Permit No. 7116-SC dated August 11, 2016.

There have been two substantive changes from the previous permit language incorporated into the new permit. First, language has been included in Condition III(a) (related to visible emissions limits) that there is an outstanding call for a State Implementation Plan (SIP) revision from EPA that may result in revision to 20 DCMR 606. As such, if the regulation is changed, the new regulatory requirements will supersede those expressed in the permit specifically.

The second substantive change in permit language consists of some permit language changes in Condition VI of the permit to allow for maintenance of records in an electronic format, rather than specifically requiring hard copy records to be maintained at the facility.

RECOMMENDATIONS

The public notice announcement was submitted to the D.C. Register for publication in the July 24, 2020 edition. The draft permit is available for public comment through August 24, 2020. Pursuant to 20 DCMR 210, the public notice will also be sent to EPA Region III and affected states (VA, MD, and WV).

The attached proposed permit complies with all applicable federal and District air pollution control laws and regulations. I recommend that the attached source category permit No. 7116-SC-R1 be issued upon completion of the public review period, assuming no adverse comments are received.

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If adverse comments are received, such comments will be addressed prior to issuance of any final permit for this source category.

JCN