RENEWAL APPLICATION FOR COVERAGE OF AN EMERGENCY ENGINE SUBJECT TO A SOURCE CATEGORY PERMIT

Instructions:

- *Please complete a separate copy of this form for each covered engine or generator.*
- *This application is a shortened form for equipment previously approved for coverage by a source category permit, where the source category permit has been renewed or amended, and therefore renewed approval of coverage is required. Separate application forms are available for equipment to be covered for the first time.*
- *If you have questions, please contact the Air Quality Division (AQD) at (202) 535-2250.*

I. Applicability

1. Check the source category permit under which you are applying for coverage:

   ☐ Permit 7043-SC-R2 for operation of a stationary natural gas-fired emergency engine subject to NSPS Subpart JJJJ;

   ☐ Permit 7048-SC-R2 for operation of a stationary diesel-fired emergency engine subject to NSPS Subpart IIII;

   ☐ Permit 7115-SC-R2 for operation of a stationary diesel-fired emergency engine exempt from NSPS Subpart IIII but subject to NESHAP Subpart ZZZZ;

   ☐ Permit 7116-SC-R2 for operation of a stationary natural gas-fired emergency engine exempt from NSPS Subpart JJJJ, but subject to NESHAP Subpart ZZZZ;

2. List the approval number found on your most recently received approval letter for this equipment:

   _____

3. Please attach a copy of your most recently received approval letter for this equipment to this application.

4. Please check the following box to certify that you have reviewed the source category permit under which you are applying for coverage and are both able to and intend to comply with its requirements: I so certify: ☐

If you have questions about your eligibility or how to complete this application, please contact AQD at (202) 535-2250.

II. Facility and Applicant Information

1. _____
   Full Legal Name of Applicant/Organization

2. _____
   Type of Organization

3. _____
   Name of Owner(s) or Principal Partner(s) of Above Organization

4. _____
   Mailing Address of Applicant (No., Street, City, State, Zip)

5. _____
   Street Address of Facility (if different from Mailing Address)

6. Owner/Responsible Official Name: _____

   Owner/Responsible Official Title: _____

   Phone No. _____ E-mail: _____

7. Contact Person: _____

   Contact Person Title: _____

   Phone No. _____ E-mail: _____

III. General Equipment Information

1. Equipment Name/Identification: _____

2. Fuel type: _____

3. Is the engine used in a load response program or for peak shaving? Yes ☐ No ☐
   Note: If the unit is to be used in a load response program or for peak shaving, it is not eligible for coverage by a source category permit. Please contact AQD at (202) 535-2250 with any questions.

4. Rated generator electrical output: _____ kW/kWe
   Note: Enter n/a if your engine is not associated with a generator

5. Maximum engine power: _____ ☐ HP or ☐ kWm (choose units) @ _____ RPM

6. Has the equipment or its operational purpose been modified since submittal of the previous source category application for this unit? Yes ☐ No ☐

   If so, please specify how:

7. Have there been any other changes since the last application that you believe might be relevant to review of this application? Yes ☐ No ☐

   If so, please describe:

IV. Notes and Required Attachments

1. Please attach a copy of the EPA Certificate of Conformity applicable to the unit (applicable only to applications for coverage under permits 7043-SC-R2 and 7048-SC-R2).

2. Please attach a copy the previous source category permit coverage approval letter issued for this unit.

3. Please attach a copy of a recent "Certificate of Clean Hands" which can be obtained from mytax.dc.gov.

4. Please attach any other supporting documentation you feel would assist the AQD in its review of this application.

5. Deviations from submitted plans and specifications are not permissible without securing formal approval from AQD via an application update request and re-approval, if already approved. If an application update is submitted, the 45 day passive approval period will re-set as of the date of submission of the revised application.

6. Please submit the complete application and applicable supporting documentation online using the link below or by scanning the QR code.

   Apply Online

APPLICATION CONTINUED ON NEXT PAGE

V. Applicant Certification:

I hereby certify, under penalty of D.C. Official Code § 8-101.05e, that I am authorized to submit this application on behalf of the applicant and that the statements contained herein are true and correct to the best of my knowledge. I further certify that all attached information and previously submitted information referenced in this application remains true, correct, and current, to the best of my knowledge.

Authorized Signature:

_____

Owner/Responsible Official Signature Print Name and Title Date

_____

Mailing Address of Owner/Responsible Official if Different From II.4 above

Report Fraud, Waste, Abuse, and Mismanagement to the District of Columbia Office of the Inspector General.
Confidential Toll Free Hotline: 1-800-521-1639 or 202-724-TIPS (8477). Email: hotline.oig@dc.gov

Attachment 1

Source Category Permit to Construct and Operate Stationary Diesel-Fired Emergency Engines Subject to NSPS Subpart IIII

Permit No. 7048-SC-R2

Source Category Permit to Construct and Operate Stationary Diesel-Fired Emergency Engines Subject to NSPS Subpart IIII

Permit No. 7048-SC-R2

February 5, 2024

I. Applicability[1]:

a. This source category permit is applicable to a subset of owners and operators of diesel-fired emergency engines in the District of Columbia who submit an application to the Department of Energy and Environment ("the Department"), Air Quality Division ("AQD") and are approved for coverage under this permit, either actively or by passive approval which will occur 45 days after submission of a complete application to AQD, unless AQD objects to the approval in writing in that timeframe.

b. This source category permit covers new installation as well as operation of diesel-fired compression ignition (CI) internal combustion engines that are regulated under 40 CFR 60, Subpart IIII and are classified as emergency engines (a subset of stationary compression ignition internal combustion engines). To be covered under this permit, equipment must meet the following criteria:

1. The equipment consists of a diesel-fired emergency generator set or other diesel-fired emergency engine;

2. The equipment is stationary (i.e., it will remain in place for greater than 12 months);

3. The project that involves construction of the equipment to be covered does not trigger applicability of 20 DCMR 204, Permit Requirements for Major Sources Located in Non-Attainment Areas (New Source Review);

4. The engine's per cylinder displacement is less than 30 liters;

5. The engine has not been modified or reconstructed as defined in 40 CFR 60.14 or 60.15;

6. One of the following must be true:

A. The model year of the engine is 2007 or later for engines that are not fire pump engines;

[1] For definitions of terms used in this permit, please see the relevant definition sections of 20 DCMR as well as 40 CFR 60.2 and 40 CFR 60.4219.

B. The engine is for a fire pump and its model year is equal to or newer than those specified in the following table, based on the size of the engine:

Fire Pump Engine Applicability Table		
Engine Power		**Starting Applicability Model Year***
Mechanical Kilowatts (kW_m)	**Horsepower (hp)**	
kW_m <75	hp<100	2011
75≤kW_m<130	100≤hp<175	2010
130≤kW_m≤560	175≤hp≤750	2009
kW_m>560	hp>750	2008

*Fire pump engines with a maximum engine power greater than or equal to 37 kW_m (50 hp) and less than 450 kW_m (600 hp) and a rated speed of greater than 2,650 revolutions per minute (rpm) are covered only three years after the model year listed in this table for the applicable power category.

or;

C. The engine was ordered by the owner or operator after July 11, 2005 and one of the following is true:

i. The engine was manufactured after April 1, 2006 and is not a fire pump engine; or

ii. The engine was manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006;

7. One of the following must be true:

A. The equipment was installed before January 1, 2014;

B. The equipment has been or will be installed after January 1, 2014 and is no more than one model year older than the year of installation (e.g., if it is installed in calendar year 2015, it is no older than a model year 2014 unit.); or

C. The potential to emit NO_x from the equipment, assuming 500 hours per year of operation, is less than 5 TPY; and

8. The equipment must be constructed and operated in compliance with all conditions of this permit.

c. Similar sources that do not meet the above criteria may be eligible for a different source category permit or a standard unit-specific permit issued pursuant to 20 DCMR Chapter 2, but cannot be covered by this source category permit.

II. General Requirements:

a. The emergency engine shall be maintained and operated in accordance with the air pollution control requirements of the applicable sections of 20 DCMR.

b. This permit expires on February 4, 2029 [20 DCMR 200.4]. If an applicant covered by this permit wishes to continue operation after this date, the owner or operator shall submit an application for renewal by November 4, 2028.

c. Construction or operation of equipment under the authority of this permit shall be considered acceptance of its terms and conditions.

d. 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.

e. A copy of this permit, as well as any associated coverage approval letter, shall be kept on the premises and produced upon request.

f. Failure to comply with the provisions of this permit may be grounds for suspension or revocation of a Permittee's approval to construct and operate under this permit. [20 DCMR 202.2]

g. For any equipment covered by this permit that is located at a major stationary source (as defined in 40 CFR 199) facility or other facility subject to 20 DCMR Chapter 3, the Permittee shall submit a complete Chapter 3 (Title V) permit amendment request or, in the case of a facility with a current application under review, a revision to that pending application, within twelve (12) months of the date of approval of coverage under this permit, to include the requirements of this permit in the facility's Title V permit for the covered equipment. [20 DCMR 301.2]

III. Emission Limitations:

a. Emissions from the engine shall not exceed those specified in 40 CFR 60.4205 for the appropriate engine type. Any engine subject to a Family Emission Limit (FEL) shall comply with any such limits as specified on an EPA Certificate of Conformity. If the engine is certified as a non-emergency engine, the engine shall comply with the standards to which it has been certified. [40 CFR 60.4205 and 20 DCMR 201]

b. Visible emissions shall not be emitted into the outdoor atmosphere from the engine, except that discharges shall be permitted for two (2) minutes during any start-up, cleaning, adjustment of combustion or operational controls, or regeneration of emissions control equipment; provided, that such discharges shall not exceed twenty-seven percent (27%) opacity (unaveraged). [20 DCMR 606.1 and 606.2(d)]

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]

   Violation of the requirements of this condition that occur as a result of unavoidable malfunction, despite the conscientious employment of control practices, shall be an affirmative defense for which the owner or operator shall bear the burden of proof. A malfunction shall not be considered unavoidable if the owner or operator could have taken, but did not take, appropriate steps to eliminate the malfunction within a reasonable time, as determined by the Department. [20 DCMR 903.13(b)]

   Note: This condition is District enforceable only.

IV. Operational Limitations:

a. The emergency engine shall be operated for fewer than 500 hours in any 12-consecutive-month period. If operation of 500 hours or more is intended, the engine is not eligible for coverage under this permit and must seek and obtain an equipment-specific Chapter 2 permit from the Department prior to initiating such operation.

b. Except as specified in Condition IV(c), the emergency engine shall be operated only during emergencies as follows:

   1. For engines associated with emergency generators, emergencies resulting from electrical power outages due to: a failure of the electrical grid; on-site disaster; local equipment failure; or public service emergencies such as flood, fire, natural disaster, or severe weather conditions. (e.g. hurricane, tornado, blizzard, etc.)

   2. For engines associated with fire pumps, any fire emergency; or

3. For engines associated with emergency water pumps, any stormwater management emergency.

c. The emergency engine may be operated for the purpose of maintenance checks and readiness testing and in non-emergency situations for a period not to exceed one hundred (100) hours per calendar year as specified in Conditions IV(c)(1) and (2) below. Any such operation shall be considered as part of the 500 hours allowed under Condition IV(a) above. [40 CFR 60.4211(f)]

1. The emergency engine may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. [40 CFR 60.4211(f)(2)(i) and DCMR 201]; and

2. The emergency generator may be operated for up to fifty (50) hours per calendar year in non-emergency situations, subject to the following conditions [40 CFR 60.4211(f)(3) and 20 DCMR 201]:

i. Any such operations shall be counted as part of the 100 hours per calendar year for maintenance and testing as provided in Condition IV(c);

ii. These 50 hours of non-emergency operations per calendar year cannot be used for peak shaving, or as part of any program to supply power to generate income for the facility as part of a financial arrangement with another entity;

iii. All operations prohibited under Condition IV(f) are also prohibited under this condition; and

iv. All operations of the emergency generator resulting from a deviation in voltage or frequency from the electric provider to the premises shall be considered non-emergency operation and counted as part of this 50 hour per calendar year allowance.

d. The emergency engine shall fire only diesel fuel that contains a maximum sulfur content of 15 ppm (0.0015 percent by weight) and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]

e. The emergency engine shall be operated and maintained in accordance with the manufacturer's emission-related written instructions. [20 DCMR 201 and 20 DCMR 606.4(b)]

f. The emergency engine shall not be operated in conjunction with a voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant, or system operator. [20 DCMR 201]

g. At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the engine 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 and 20 DCMR 606.4(a)]

h. The owner or operator shall ensure that persons participating in the maintenance and operation of the equipment are adequately trained and supervised to meet the requirements of Conditions IV(e) and (g). [20 DCMR 606.4(c)]

V. Monitoring and Testing Requirements:

a. The owner or operator shall monitor the date, time, duration, and reason for each emergency engine startup to ensure compliance with Conditions IV(a), (b), (c), and (f). [20 DCMR 500.2]

b. In order to ensure compliance with Condition IV(a), the owner or operator shall monitor the total hours of operation each month with the use of properly functioning, non-resettable hour metering device. [40 CFR 60.4209(a) and 40 CFR 60.4214(b)]

c. The owner or operator shall monitor and/or test for the sulfur content in diesel fuel obtained for use in the engine, to ensure compliance with Condition, to ensure compliance with Condition IV(d), and in accordance with VI(c). [20 DCMR 500.1, 502.3, and 502.6]

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

e. The owner or operator shall maintain an awareness of the operation of the engine to identify potential exceedances of Conditions III(b) and (c). If significant visible emissions are observed from the engine, the Permittee shall have the visible emissions tested by a qualified person certified to perform testing pursuant to 40 CFR 60, Appendix A, Method 9. [20 DCMR 502.1]

VI. Record Keeping Requirements:

a. The following information shall be recorded, initialed (except records generated automatically by an electronic system), and maintained in a log at the facility (or readily accessible electronically from the facility) for a period not less than three (3) years or, in the case of any major stationary source facility or other facility subject to 20 DCMR Chapter 3, five (5) years [20 DCMR 302.1(c)(2)(B), 20 DCMR 500. 8, and 40 CFR 60.4214(b)]:

1. The date, time, duration, and reason for each start-up of the emergency engine, including the following specific information:

    i. If the unit is operated in non-emergency situations pursuant to Condition IV(c)(2), the specific purpose for each operation period must be recorded; and

    ii. If the unit is operated for emergency purposes, what classified the operation as emergency;

2. The total hours of operation for each month and the cumulative 12-month rolling period shall be calculated and recorded within 15 days of the end of each calendar month for the previous month and the 12-month period ending at the end of that month;

3. Records of the date, time, and duration of any equipment manual startup, manual shutdown, cleaning, combustion control adjustment, emission control regeneration, and malfunction [20 DCMR 606.5(a)];

4. For any malfunction, investigate the cause of the malfunction and maintain records of the investigatory activities and conclusions of such investigation [20 DCMR 606.5(b)];

5. The total hours of operation for maintenance checks and readiness testing and non-emergency operation pursuant to Condition IV(c) each month, recorded within 15 days of the end of each calendar month, and totaled for each calendar year by January 15 of each year for the previous calendar year;

6. The total hours of operation each calendar year for non-emergency purposes pursuant to Condition IV(c)(2), totaled by January 15 of each calendar year for the previous calendar year;

7. Records of the maintenance performed on the unit *[Note that these records must be sufficient such that the Permittee is complying with the requirements of Conditions IV(e) and (g)*;

8. Records of the results of any visible emissions monitoring performed;

9. Records of the occurrence and duration of each malfunction of operation;

10. Records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunction process and air pollution control and monitoring equipment to its normal or usual manner of operation;

11. Records of staff training performed pursuant to Condition IV(h); and

12. For any equipment covered by this permit that is located at a major stationary source (as defined in 40 CFR 199) facility or other facility subject to 20 DCMR Chapter 3, the Permittee shall maintain fuel usage records for the unit on a monthly and annual total basis for use in reporting fuel use and emissions from the facility, including equipment covered by this permit, pursuant to the requirements of the Title V permit.

b. The owner or operator shall maintain a copy of the emergency engine's manufacturer's maintenance and operating recommendations at the facility or at an electronic location readily accessible from the facility, for the life of the equipment. [20 DCMR 501]

c. For each delivery of diesel fuel, the owner or operator shall maintain one of the following:

1. A fuel delivery receipt containing the date, fuel type, and amount of the delivery and certification from the fuel supplier that the fuel delivered was tested in accordance with an appropriate ASTM method (specified in the certification) and met the requirements of Condition IV(d); or

2. A fuel delivery receipt and documentation of sampling and analysis containing the following information:

i. The fuel oil type and the ASTM method used to determine the type (see the definition of distillate oil in 40 CFR 60.41c for appropriate ASTM methods);

ii. The weight percent sulfur of the fuel oil as determined using ASTM test method D-4294 or D-5453 or other method approved in advance by the Department;

iii. The date and time the sample was taken,

iv. The name, address, and telephone number of the laboratory that analyzed the sample, and

v. The test method used to determine the sulfur content.

d. The owner or operator shall maintain a copy of the EPA Certificate of Conformity at the facility (or at an electronic location readily accessible from the facility) at all times, for the life of the equipment. [40 CFR 60.4214(a)(2)(iii)]

VII. Reporting Requirements:

a. If the facility at which the engine is located is subject to a permit issued pursuant to 20 DCMR Chapter 3 (Title V), the Permittee shall include the equipment covered by this source category permit in all reports required by the Title V permit, including, but not limited to, semi-annual and annual compliance certifications and reports.

b. The Permittee shall, within ten (10) days of becoming aware of a deviation from any condition of this permit, submit a written report to the Department at the following address [20 DCMR 502]:

air.quality@dc.gov

Approved by:

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

2/5/2024
Date

SSO:JCN