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CEDARS-SINAI MEDICAL CTR
8700 BEVERLY BLVD
LOS ANGELES, CA 90048

Facility ID No. 16389

Equipment Location: Same.

PERMIT TO CONSTRUCT/OPERATE

A/N 556616—Significant Title V Revision

Rev. 4—Significant Title V Revision.

This revision consists of the addition of a Permit to Construct/Operate for a new emergency internal combustion engines equipped with a Johnson Matthey diesel particulate filter (DPF) (A/N 556615) to replace the engine permitted under F16016 (A/N 343820). A/N 518526 had been submitted to permit the existing DCL International diesel particulate filter (DPF) on the existing engine (F16016), but the permit for the existing engine and DPF was denied on 8/9/13 because the DPF failed to provide the 85% reduction required by Rule 1470(c)(3)(C)(iii).

A/N 556615—Emergency ICE

INTERNAL COMBUSTION ENGINE, CUMMINS, MODEL NO. QSL9-G7, DIESEL- FUELED, FOUR-CYCLE, SIX CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 464 BHP, EQUIPPED WITH A DIESEL PARTICULATE FILTER SYSTEM, JOHNSON MATTHEY CONTINUOUSLY REGENERATING TECHNOLOGY (CRT(+))2-H-BITO-6-LP), A CONTINUOUSLY REGENERATING TECHNOLOGY DIAGNOSTIC MODULE (CRTdm) WITH DATA LOGGING AND ALARM SYSTEM, DRIVING AN EMERGENCY ELECTRICAL GENERATOR, 250 KW

Conditions:

- OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
- THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
- THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 431.2 AND RULE 1470.
[RULE 431.2, RULE 1470]
- THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE

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AND TESTING, NO MORE THAN 4.2 HOURS IN ANY ONE MONTH FOR MAINTENANCE AND TESTING.

[RULE 1110.2, RULE 1303(a)(1)-BACT, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1313, RULE 1401, RULE 1470, 40 CFR 60.4211(f)]

5. OPERATING BEYOND THE 50 HOURS PER YEAR ALLOTTED FOR MAINTENANCE AND TESTING PURPOSES SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
[RULE 1303(a)(1)-BACT, RULE 1470]
6. AN OPERATIONAL NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, RULE 1303(a)(1)-BACT, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1401, RULE 1470, 40 CFR 60.4209(a)]
7. AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED, DOCUMENTING THE TOTAL TIME THE ENGINE IS OPERATED EACH MONTH AND SPECIFIC REASON FOR OPERATION AS:
 - A. EMERGENCY USE.
 - B. MAINTENANCE AND TESTING.
 - C. OTHER (DESCRIBE THE REASON FOR OPERATING).

IN ADDITION, EACH TIME THE ENGINE IS MANUALLY STARTED, THE LOG SHALL INCLUDE THE DATE OF OPERATION, THE SPECIFIC REASON FOR OPERATION, AND THE TOTALIZING HOUR METER READING (IN HOURS AND TENTHS OF HOURS) AT THE BEGINNING AND END OF OPERATION.

[RULE 1110.2, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1470, 40 CFR 60.4214(b)]

8. ON OR BEFORE JANUARY 15TH OF EACH YEAR, THE OPERATOR SHALL RECORD IN THE ENGINE OPERATING LOG THE FOLLOWING:
 - A. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR, AND
 - B. THE TOTAL HOURS OF ENGINE OPERATION FOR MAINTENANCE AND TESTING FOR THE PREVIOUS CALENDAR YEAR.

THE ENGINE OPERATING LOG SHALL BE RETAINED ON SITE FOR A MINIMUM OF FIVE CALENDAR YEARS AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER OR REPRESENTATIVE UPON REQUEST.

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[RULE 1110.2, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1470, RULE 3004]

9. THIS ENGINE SHALL NOT BE OPERATED FOR NON-EMERGENCY USE BETWEEN THE HOURS OF 7:30 A.M. AND 3:30 P.M. ON DAYS WHEN SCHOOL IS IN SESSION.
[RULE 1470]
10. THIS ENGINE SHALL NOT BE OPERATED UNLESS IT IS VENTED TO A DIESEL PARTICULATE FILTER SYSTEM WHICH IS IN FULL OPERATION AND IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 1303(a)(1)-BACT, RULE 1470]
11. THE OPERATOR SHALL OPERATE THE DIESEL PARTICULATE FILTER SYSTEM ONLY WITH AN OPERATIONAL CRT DIAGNOSTIC MODULE (CRTDM) EQUIPPED WITH EXHAUST TEMPERATURE AND BACK PRESSURE MONITORS.
[RULE 1470, §60.4209(B)]
12. THE CRT DIAGNOSTIC MODULE SHALL BE PROGRAMMED TO PROVIDE AN AUDIBLE ALARM WHENEVER THE ENGINE BACKPRESSURE REACHES THE MAXIMUM ALLOWABLE BACKPRESSURE OF 41 INCHES OF WATER.
[RULE 1470]
13. THE ENGINE SHALL BE OPERATED AT THE LOAD LEVEL REQUIRED TO ACHIEVE AN ENGINE EXHAUST GAS TEMPERATURE OF 464 DEG F (240 DEG C) FOR PASSIVE REGENERATION OF THE DIESEL PARTICULATE FILTER FOR AT LEAST 40% OF THE ENGINE'S OPERATING TIME.
[RULE 1470]
14. THE ENGINE SHALL NOT BE OPERATED BELOW THE PASSIVE REGENERATION TEMPERATURE OF 464 DEG F (240 DEG C) FOR MORE THAN 720 CONSECUTIVE MINUTES.
[RULE 1470]
15. THE OPERATOR SHALL REGENERATE THE DIESEL PARTICULATE FILTER AFTER EVERY 24 COLD STARTS AND 30 MINUTE IDLE SESSIONS, OR WHENEVER AN AUDIBLE ALARM INDICATING THE BACKPRESSURE IS 35 INCHES OF WATER IS RECEIVED FROM THE CRT DIAGNOSTIC MODULE, WHICHEVER OCCURS FIRST. FILTER REGENERATION IS COMPLETE WHEN THE BACKPRESSURE MONITORING SYSTEM INDICATES A NORMAL BACKPRESSURE READING.
[RULE 1470]
16. THE ENGINE SHALL BE SHUT DOWN AND THE DIESEL PARTICULATE FILTER SHALL BE CLEANED WHENEVER THE BACKPRESSURE REACHES THE MAXIMUM BACKPRESSURE LIMIT OF 41 INCHES WATER. CLEANING SHALL BE PERFORMED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
[RULE 1470]

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17. AFTER EVERY 200 HOURS OF NORMAL ENGINE OPERATION, THE OPERATOR SHALL INSPECT THE INTEGRITY OF THE DIESEL PARTICULATE FILTER AND, IF NECESSARY, REPLACE THE FILTER.
[RULE 1470]

18. THE OPERATOR SHALL MAINTAIN RECORDS OF DIESEL PARTICULATE FILTER INSPECTIONS, REPLACEMENTS, AND CLEANING.
[RULE 1470, §60.4214(C)]

19. REMOVAL OF THE DIESEL PARTICULATE FILTER'S FILTER MEDIA FOR CLEANING MAY ONLY OCCUR UNDER THE FOLLOWING CONDITIONS:

- A. THE INTERNAL COMBUSTION ENGINE SHALL NOT BE OPERATED FOR MAINTENANCE AND TESTING OR ANY OTHER NON-EMERGENCY USE WHILE THE DIESEL PARTICULATE FILTER MEDIA IS REMOVED; AND
- B. THE DIESEL PARTICULATE FILTER'S FILTER MEDIA SHALL BE RETURNED AND RE-INSTALLED WITHIN 10 WORKING DAYS FROM THE DATE OF REMOVAL; AND
- C. THE OWNER OR OPERATOR SHALL MAINTAIN RECORDS INDICATING THE DATE(S) THE DIESEL PARTICULATE FILTER'S FILTER MEDIA WAS REMOVED FOR CLEANING AND THE DATE(S) THE FILTER MEDIA WAS RE-INSTALLED. RECORDS SHALL BE RETAINED FOR A MINIMUM OF 36 MONTHS.

[RULE 1470]

20. THIS ENGINES SHALL COMPLY WITH THE FOLLOWING EMISSION LIMITS:

- A. NOX + NMHC 3.0 GRAMS/BHP-HR (BACT)
- B. CO 2.6 GRAMS/BHP-HR (BACT)
- C. PM 0.15 GRAMS/BHP-HR (BACT)
- D. PM 0.01 GRAMS/BHP-HR (RULE 1470)

[RULE 1303(a)(1)-BACT, RULE 1470, RULE 1313, 40 CFR 60.4205(B)]

21. THE SULFUR CONTENT OF DIESEL FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 15 PPM BY WEIGHT.

[RULE 1303(a), 40 CFR 60.4207(b)]

22. THE OPERATOR SHALL OPERATE AND MAINTAIN THE STATIONARY ENGINE AND DIESEL PARTICULATE FILTER ACCORDING TO THE MANUFACTURER'S WRITTEN EMISSION-RELATED INSTRUCTIONS (OR PROCEDURES DEVELOPED BY THE OPERATOR THAT ARE APPROVED BY THE ENGINE MANUFACTURER), CHANGE ONLY THOSE EMISSION-RELATED SETTINGS THAT ARE PERMITTED BY THE MANUFACTURER, AND MEET THE REQUIREMENTS OF 40 CFR 89, 94 AND/OR 1068, AS THEY APPLY.

[40 CFR 60.4211(a)]

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23. THE OPERATOR SHALL COMPLY WITH THE EMISSION STANDARDS SPECIFIED IN 40 CFR 60.4205(b) BY PURCHASING AN ENGINE CERTIFIED TO THE EMISSION STANDARDS IN 40 CFR 60.4205(b), AS APPLICABLE, FOR THE SAME MODEL YEAR AND MAXIMUM ENGINE POWER. THE ENGINE MUST BE INSTALLED AND CONFIGURED ACCORDING TO THE MANUFACTURER'S EMISSION-RELATED SPECIFICATIONS.
[40 CFR 60.4211(c)]
24. ALL RECORDS SHALL BE MAINTAINED ON FILE FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1110.2, RULE 3004]

Emissions and Requirements:

25. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 NOX + NMHC: 3.0 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
 CO: 2.6 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
 PM: 0.15 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
 PM: 0.01 G/BHP-HR, RULE 1470

BACKGROUND

Cedars-Sinai Medical Center provides healthcare services to patients, conducts biomedical research, and provides training to physicians and other healthcare professionals. The facility is Title V, but not RECLAIM. The Title V renewal facility permit was issued on 10/25/11 as Rev. 2.

On 10/3/13, the facility submitted A/N 556615 as a P/C- P/O application for an emergency ICE, Cummins, Model QSL9-G7, rated at 464 bhp. This engine is AQMD-certified under A/N 542405, with an expiration date of 12/31/14. Permitting is required instead of registration, however, because the engine is located at a Title V facility and within 1000 ft of a K-12 school. Accordingly, Rule 212 public notice and a diesel particulate filter (DPF) are required. A/N 556616 was submitted as the associated significant Title V revision application.

This engine will replace the Detroit Diesel, Model No. 8063-7405, two stroke emergency ICE, rated at 423 bhp, permitted under F16016 (A/N 343820). A/N 518526 had been submitted to modify the engine to add the DCL International diesel particulate filter that had been installed on the engine in 2006 to meet the 85% reduction for particulate matter emissions. The DPF is required by Rule 1470(c)(3)(C)(iii) because the engine is located 261 ft from Maimonides Academy. A denial letter, dated 8/9/13, was issued because the diesel particulate filter installed fails to provide the necessary control efficiency. The proposed engine will be installed on the same pad as the existing engine, and will serve the outpatient surgery center building (the 310 Building), located at 310 N. San Vicente Blvd., which is part of the Cedars-Sinai campus.

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PROCESS DESCRIPTION

- **Emergency ICE**
 The ICE, Cummins, Model No. QSL9-G7, rated at 464 BHP, will drive an emergency electrical generator. The generator will be sitting on a pad that is 44 feet above ground level, with the stack height 65 feet above ground level.

- **DPF**
 Rule 1470 requires a diesel particulate filter (DPF), because the engine will be located 100 meters (328 ft) or less from Maimonides Academy.

Consequently, the engine will be equipped with a Johnson Matthey Continuously Regenerating Technology (CRT+) DPF with a CRT Diagnostic Module. The combination silencer-DPF will be directly above the generator enclosure mounted on an adaptor-support structure. The engine exhaust will be vertical and upwards. A load bank will not be installed.

The Johnson Matthey CRT+ DPF is verified by CARB under Executive Order DE-08-009-06, executed on 8/8/2013, to reduce emissions of diesel particulate matter consistent with a Level 3 device (greater than or equal to 85 percent reduction), with the use of California diesel fuel with less than or equal to 15 ppm sulfur. Attachment 1 to the EO, entitled "Johnson Matthey CRT(+) Diesel Particulate Filter Off-Road Certified Engine Family List(0<=0.2 g/bhp-hr PM)," sets forth the engine families for which the filter system is verified. This list includes Cummins engine family DCEXL0540AAB (2013).

As the filter is CARB verified, a source test for PM is not required. A copy of the Johnson Matthey Operation and Maintenance Manual, dated 9/18/12, was provided by the facility. Although the manual states the filter reduces CO by 80% and VOC by 70%, this evaluation will not recognize those reductions because emissions reductions are CARB verified for PM only.

The CRT DPF is a patented emission control technology that contains a Platinum (Pt) catalyst and a particulate filter. It is modularly engineered as a totally passive emission control system, which does not require the use of supplemental heat. The CRT® particulate filter requires ultra low (<15 ppm) sulfur fuel and functions on the basis that soot will oxidize in the presence of NO₂ at a lower temperature than with oxygen.

The device is made up of two chambers where the oxidation catalyst is separate from the soot collection/combustion process. The first chamber contains a substrate coated with a proprietary, highly active Pt oxidation catalyst which is designed to oxidize a portion of the NO in the exhaust to NO₂. This is the key to the oxidation of soot collected by the filter. The catalyst also converts CO, HC and hazardous air pollutants into CO₂ and H₂O. In the second chamber, the exhaust flows through a particulate filter, where gaseous components pass through but soot is trapped on the walls of the filter, where it is combusted by the NO₂ produced by the catalyst in the first chamber. The filter is capable of converting >85% PM,

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80% CO and 70% HC, including toxics. NOx reductions, while not guaranteed, are typically in the 5-10% range.

The PM particles (soot) are sufficiently large to be retained inside the filter where, with the exhaust gas heat and reaction with the NO₂, they are converted into ash. Combustion of soot in an NO₂ rich environment occurs more efficiently and at a lower temperature than in an O₂ rich environment. This allows the soot caught in the filter to be continuously burned off, thus eliminating the need for a separate soot combustion and filter regeneration process. Back pressure of the engine, however, will increase as the ash layer in the filter builds. Eventually the pressure level exceeds a predetermined value requiring the filter to be removed and cleaned.

The Continuously Regenerating Technology Diagnostic Module (CRTdm) supplied with the CRT continuously logs exhaust temperature and back pressure data when the engine is running. Audible alarm(s) will be provided to alert personnel of over-pressure conditions that may require filter cleaning. The Cummins Power Generation Generator set data sheet for Model DQDAA specifies the maximum back pressure is 41 inches of water. At this maximum backpressure, condition no. 12 requires an audible alarm, but the engine will not be shut down automatically, in accordance with the facility's proposal. Condition no. 15 requires a warning audible alarm at 35 inches (10% below maximum).

Executive Order DE-08-009-06, dated 8/8/2013, provides the following operating conditions for the CRT. Compliance or assurance of compliance with each condition is discussed below.

1. Engine Type— Diesel, with or without turbocharger, without exhaust gas recirculation (EGR), mechanically or electronically controlled, Tier 1, Tier 2, or Tier 3 certified off-road engines meeting 0.2 g/bhp-hr diesel PM or less based on certification or in-use emissions testing.

Discussion: The proposed engine is certified Tier 3.

2. Minimum Exhaust Temperature for Filter Regeneration--The engine must operate at the load level required to achieve 240 degrees Celsius (°C) for a minimum of 40 percent of the engine's operating time and an oxides of nitrogen (NOx)/PM ratio of 15 @ ≥ 300°C and 20 @ ≤ 300°C. Operation at lower temperatures is allowed, but only for a limited duration as specified below.

Discussion: Condition no. 13 requires operation at a load level required to achieve 240 deg C (464 deg F) for a minimum of 40% of the engine's operating time.

The Johnson Matthey representative provided the following ratios:

25% load - 7.6

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50% load - 10.4
75% load - 27.4
100% load - 85.5

As the ratio will be 85.5 at 100% load, the ratio will not be an issue for the application of its CRT(+) unit.

3. Maximum Consecutive Minutes Operating Below Passive Regeneration Temperature--720 minutes.

Discussion: This requirement is incorporated in condition no. 14.

4. NOx/PM Ratio Requirements--NOx/PM ratio of at least 8 with a preference for 20 or higher.

Discussion: As the ratio will be 85.5 at 100% load, the ratio will not be an issue for the application of its CRT(+) unit.

5. Number of Consecutive Cold Starts and 30 Minute Idle Sessions before Regeneration Required--24

Discussion: This requirement is incorporated in condition no. 15 which sets forth the conditions under which regeneration is required.

6. Number of Months of Operation Before Cleaning of Filter Required— Filter cleaning is not required till after 150 half-hour cold starts with associated regenerations or 1000 hours of emergency/standby use or 6 to 12 months of prime operation depending on hours of operation, maintenance practice, and oil used. The CRTdm, which monitors engine exhaust back pressure and temperature will determine the actual cleaning interval and provide an alert when filter cleaning is required.

Discussion: As the cleaning requirement is application specific, condition no. 16 requires cleaning when the back pressure reaches the allowable limit of 41 inches water. Further, condition no. 17 requires a filter inspection and replacement, if necessary, after 200 hours of operation, which is equal to the allowed hours of operation per year.

7. Fuel-- California diesel fuel with less than or equal to 15 ppm sulfur

Discussion: Condition no. 3 requires compliance with Rule 431.2.

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EMISSIONS CALCULATIONS

1. Criteria Pollutants

The emission factors are from A/N 542405, the AQMD-certification file for engine

Operating schedule: 50 wk/yr, 1 day/wk, 1 hr/day

NOx

NOx, uncontrolled = NOx, controlled

$$\begin{aligned} \text{NOx, lb/hr} &= (464 \text{ bhp}) (2.632 \text{ g/bhp-hr per AQMD certification}) (\text{lb}/454 \text{ g}) = 2.69 \text{ lb/hr} \\ \text{lb/day} &= (2.69 \text{ lb/hr}) (1 \text{ hr/day}) = 2.69 \text{ lb/day} \\ 30 \text{ DA} &= (2.69 \text{ lb/day}) (1 \text{ day/wk} \times 4.2 / 30 \text{ days}) = 0.38 \text{ lb/day} \end{aligned}$$

CO

CO, uncontrolled = CO, controlled.

$$\begin{aligned} \text{CO, lb/hr} &= (464 \text{ bhp}) (2.461 \text{ g/bhp-hr per AQMD website}) (\text{lb}/454 \text{ g}) = 2.52 \text{ lb/hr} \\ \text{lb/day} &= (2.52 \text{ lb/hr}) (1 \text{ hr/day}) = 2.52 \text{ lb/day} \\ 30 \text{ DA} &= (2.52 \text{ lb/day}) (1 \text{ day/wk} \times 4.2 / 30 \text{ days}) = 0.35 \text{ lb/day} \end{aligned}$$

ROG

ROG, uncontrolled = ROG, controlled

$$\begin{aligned} \text{ROG, lb/hr} &= (464 \text{ bhp}) (0.201 \text{ g/bhp-hr per AQMD certification}) (\text{lb}/454 \text{ g}) = 0.21 \text{ lb/hr} \\ \text{lb/day} &= (0.21 \text{ lb/hr}) (1 \text{ hr/day}) = 0.21 \text{ lb/day} \\ 30 \text{ DA} &= (0.21 \text{ lb/day}) (1 \text{ day/wk} \times 4.2 / 30 \text{ days}) = 0.03 \text{ lb/day} \end{aligned}$$

SOx

SOx, uncontrolled = SOx, controlled

$$\begin{aligned} \text{SOx, lb/hr} &= (464 \text{ bhp}) (0.0049 \text{ g/bhp-hr for 15 ppmw fuel}) (\text{lb}/454 \text{ g}) = 0.01 \text{ lb/hr} \\ \text{lb/day} &= (0.01 \text{ lb/hr}) (1 \text{ hr/day}) = 0.01 \text{ lb/day} \\ 30 \text{ DA} &= (0.01 \text{ lb/day}) (1 \text{ day/wk} \times 4.2 / 30 \text{ days}) = 0.001 \text{ lb/day} \end{aligned}$$

PM₁₀

PM₁₀, uncontrolled

$$\begin{aligned} \text{PM}_{10}, \text{ uncontrolled, lb/hr} &= (464 \text{ bhp}) (0.112 \text{ g/bhp-hr PM per AQMD} \\ &\quad \text{certification}) (0.96 \text{ PM}_{10}/\text{PM}) (\text{lb}/454 \text{ g}) = 0.11 \text{ lb/hr} \\ \text{lb/day} &= (0.11 \text{ lb/hr}) (1 \text{ hr/day}) = 0.11 \text{ lb/day} \end{aligned}$$

PM₁₀ is reduced by 85% by the diesel particulate filter.

$$\text{PM}_{10}, \text{ controlled, lb/hr} = (0.11 \text{ lb/hr}) (1 - 0.85) = 0.02 \text{ lb/hr}$$

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$$\text{lb/day} = (0.02 \text{ lb/day}) (1 \text{ hr/day}) = 0.02 \text{ lb/day}$$

$$30 \text{ DA} = (0.02 \text{ lb/day}) (1 \text{ day/wk} \times 4.2 / 30 \text{ days}) = 0.003 \text{ lb/day}$$

2. Greenhouse Gases

Combustion of diesel fuel no. 2 results in emissions of CO₂, CH₄, and N₂O. Greenhouse gases will be included to the NSR database.

Emission factors are from Emission Factors for Greenhouse Gas Inventories, revised November 11, Table 1—Stationary Combustion Emission Factors, for fuel type natural gas (<http://www.epa.gov/climateleadership/guidance/ghg-emissions.html>). Distillate Fuel Oil No. 2 emission factors are the same for all types of equipment.

CO₂: 10.21 kg CO₂/gallon
 CH₄: 0.41 g CH₄/gallon
 N₂O: 0.08 g N₂O/gallon

Fuel flow at Rated Load = 19.6 gal/hr (Cummins Power Generation Generator set data sheet--Model DQDAA)

$$\text{CO}_2 = (10.21 \text{ kg/gallon})(19.6 \text{ gal/hr})(2.2046 \text{ lb/kg}) = 441.18 \text{ lb/hr}$$

$$\text{CH}_4 = (0.41 \text{ g/gallon})(19.6 \text{ gal/hr})(2.205 \times 10^{-3} \text{ lb/g}) = 0.02 \text{ lb/hr}$$

$$\text{N}_2\text{O} = (0.08 \text{ g/gallon})(19.6 \text{ gal/hr})(2.205 \times 10^{-3} \text{ lb/g}) = 0.003 \text{ lb/hr}$$

RULE EVALUATION

The emergency ICE is expected to comply with all applicable SCAQMD rules and regulations as follows:

District Rules and Regulations

Rule 212—Standards for Approving Permits and Issuing Public Notice

Public notice is required for the installation of the emergency ICE, as discussed below:

(c)(1)—This subsection requires public notice for a new engine located within 1000 feet of the outer boundary of a school. The applicant has provided a map indicating that this engine will be located 261 ft from Maimonides Academy, 310 N. Huntley Dr, Los Angeles, CA 90048. Maimonides Academy is a private school founded in 1968, with a total of 437 students in grades K-8. However, since the engine is a replacement permit unit, additional criteria must be evaluated.

The E & C Policies & Procedures No. E2006-01 regarding Rule Implementation Guidance, Rule 212 Public Notices, dated 12/19/06, provides the following clarification and guidance on determining the applicability of public notice requirements to equipment replacement. Under Rule 212(c)(1), a replacement of an existing permit unit will trigger the public notice requirement unless the replacement (new permit unit) will result in a reduction of emissions of

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air contaminants from the facility and it can be shown that no increase in health risk will occur at any receptor location. The equipment being replaced must be removed from service (operation) and its permit to operate surrendered to the AQMD prior to the operation of the replacement (new) equipment. For implementation purposes, there is no increase in health risk at any receptor location if the following criteria are met.

1. The new equipment is installed at the same location or an adjacent location within the same area of the facility where the old equipment was installed.

Analysis:

The new engine will be located in the exact same location as the old engine which will be removed.

2. The new equipment has a lower allowable potential to emit (the lower of equipment design or permit limit) for all criteria air contaminants (CO, NOx, PM10, SOx and VOC) than the old equipment.

Analysis:

The relative hourly emissions are proportional to the relative potentials to emit because the operating schedule is the same.

Criteria Contaminant	Existing Engine, F16016 lb/hr ¹	New Engine, A/N 556615, lb/hr	New Engine Lower PTE?
CO	7.30	2.52	Yes
NO _x	8.10	2.69	Yes
PM ₁₀	0.20	0.02	Yes
SO _x	0.17	0.01	Yes
VOC	0.11	0.21	No

¹ Emission factors for existing engine adjusted for 4.0° timing retard based on manufacturer's data for NOx and CO and an estimated 38.5% increase in CO, 20% increase in ROG and estimated 20% reduction of NOx.

3. The maximum risk (MICR, HIA, and HIC) from the new equipment is no greater than the maximum risk (MICR, HIA and HIC) from the old equipment.

Analysis:

The maximum risk from the new engine equipped with a DPF is lower than the maximum risk from the old engine not equipped with a DPF because the diesel particulate levels are significantly lower.

Therefore, since the potential to emit for VOC is higher for the new engine than the existing engine, public notice is required.

Note: A Spanish version of the public notice is NOT requested by the facility.

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Subdivision (d) provides that in the case of notifications performed under paragraph (c)(1) of this rule, distribution of the public notice shall be to the parents or legal guardians of children in any school within 1/4 mile (1320 feet) of the facility and the applicant shall provide distribution of the public notice to each address within a radius of 1000 feet from the outer property line of the proposed new or modified facility. The facility has confirmed there is no other school within 1/4 mile.

(c)(2)—This subsection does not require public notice because the on-site emission increase from this project, consisting of the addition of an emergency ICE, will not exceed any of the daily maximum thresholds set forth in subdivision (g).

	VOC	NO_x	PM₁₀	SO_x	CO	Lead
Project Emissions (30-day averages)	0.03	0.38	0.003	0.001	0.35	0
Rule 212 Daily Maximum, lbs/day	30	40	30	60	220	3

(c)(3)—This subsection regarding cancer risk is not applicable because emergency ICEs are exempt from Rule 1401, pursuant to Rule 1401(g)(1)(F).

Note: For the drafting of the (c)(1) public notice, a Rule 1401 risk assessment will be performed based on the 50 hours allowed for testing and maintenance. See discussion below under Rule 1401—New Source Review of Toxic Air Contaminants.

Rule 401—Visible Emissions

Based on experience with similar equipment, the engine is expected to comply with the opacity limits.

Rule 402—Nuisance

Based on experience with similar equipment, nuisance complaints are not expected.

Rule 404—Particulate Matter - Concentration

Based on experience with similar equipment, compliance with the rule requirements are expected.

Rule 407—Liquid and Gaseous Air Contaminants

The engine is exempt per section (b)(1), which exempts stationary internal combustion engines.

Rule 431.2—Sulfur Content of Liquid Fuels

Compliance is expected to comply with the requirement that diesel fuel supplied to equipment is to contain 15 ppm or less sulfur by weight. Condition no. 3 requires compliance.

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Rule 1110.2—Emissions from Gaseous- and Liquid-Fueled Engines

The engines are exempt per section (h)(2), which exempts emergency standby engines that operate 200 hours or less per year as determined by an elapsed operating time meter. Condition no. 4 limits operation to no more than 200 hours in any one year, and condition no. 6 requires an operational non-resettable elapsed operating time meter. Section (f)(3) requires all data, logs, test reports, and other information required by this rule to be maintained for at least five years.

Regulation XIII—New Source Review

• Rule 1303(a)—BACT

The BACT Guidelines for Non-Major Polluting Facilities for I.C. Engine, Stationary, for Emergency, Compression-Ignition, Rev. 4, dated 10-3-08, set forth emissions limits for NOx + NMHC, SOx, CO, and PM. Footnote 3 restricts operation to 50 hours for maintenance and testing, or less if required by Rule 1470, and sets forth the parameters for allowed operation beyond the 50 hours.

The restriction of operation to 50 hours for maintenance and testing is implemented by condition no. 4, and the parameters for allowed operation beyond the 50 hours are set forth in condition no. 5.

As shown below, the emission levels for the engine comply with the Tier 3 BACT standards.

	NOx + NMHC	SOx	CO	PM
BACT Limits 175 ≤ HP < 750	Tier 3 3.0 g/bhp-hr	Diesel fuel with a sulfur content no greater than 0.0015% by wt. (Rule 431.2)	Tier 2 or Tier 3 2.6 g/bhp-hr	Compliance with Rule 1470 [0.01 g/bhp-hr] and Tier 2 or Tier 3 0.15 g/bhp-hr
AQMD Engine Certification File, A/N 542405	2.833 g/bhp-hr (2.632 g/bhp-hr + 0.201 g/bhp-hr)		2.461 g/bhp-hr	0.112 g/bhp-hr, uncontrolled 0.01 g/bhp-hr, controlled

Lowest Achievable Emission Rate (LAER)

For major polluting facilities, emergency engines are subject to LAER (diesel particulate filter) if the maximum PM₁₀ emissions are 1 lb/day or greater for testing and maintenance (not emergency use).

Since the controlled PM₁₀ emissions is 0.02 lb/hr, the PM₁₀ emissions will remain less than 1 lb/day even if the engine is operated for 24 hr in any day for testing and maintenance, calculated as follows:

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$$\frac{[1 \text{ lb/day}]}{0.02 \text{ lb/hr}} = 50 \text{ hr/day}$$

Therefore, LAER does not require a DPF, but Rule 1470 does.

- Rule 1303(b)(1)—Modeling
- Rule 1303(b)(2)—Offsets

The engines are exempt from modeling and offset requirements per Rule 1304(a)(4), which exempts a source exclusively used as emergency standby equipment for nonutility electrical power generation, provided the source does not operate more than 200 hours per year as evidenced by an engine-hour meter. Condition no. 4 limits operation to no more than 200 hours in any one year, and condition no. 6 requires an operational non-resettable elapsed operating time meter.

- Rule 1313-Permits to Operate
(g) Emission Limitation Permit Conditions

Every permit shall have the following conditions:

- (1) Identified BACT conditions
Condition nos. 20 and 25 set forth the Tier 3 BACT limits.
- (2) Monthly maximum emissions from the permitted source
Condition no. 4 limits maintenance and testing to 4.2 hrs in any one month.

Rule 1401—New Source Review of Toxic Air Contaminants

The engines are exempt from Rule 1401 per section (g)(1)(F), which exempts emergency internal combustion engines that are exempted under Rule 1304.

The Rule 212(c)(1) public notice, however, requires a risk assessment pursuant to District policy. The Tier 2 risk assessment, based on the 50 hours allowed for testing and maintenance, is included in the attachments.

Tier 2 Risk Assessment

Operating Schedule: 50 wk/yr, 1 day/wk, 1 hr/day, based on hours allowed for maintenance and testing.

T-BACT: Yes, because the diesel particulate filter that contains a catalyst to reduce toxics.

Distance to nearest residential or sensitive receptor: 46 meters (150 ft), miscellaneous residences.

Distance to nearest worker receptor: 91 meters (300 ft), One West Bank, 8653 Beverly Blvd.

Stack height: 65 ft from the ground to the top of the stack. Generator will be sitting on a pad that is 44 feet above ground level.

Nearest meteorological station: West L.A.

Diesel PM = 0.02 lb/hr, carcinogenic and chronic, but not acute.

Results

The Tier 2 risk assessment results are summarized below.

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Health Risk Index	Residential/ Sensitive Receptor Risk	Commercial Receptor Risk	Rule 1401 Standard (with T-BACT)
Maximum Individual Cancer (MICR)	8.18×10^{-7}	4.61×10^{-7}	10×10^{-6}
HIA	N/A	N/A	1
HIC	5.13×10^{-4}	3.52×10^{-4}	1

Rule 1470—Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines, amended 5/4/12

(b)(47) This defines a “new engine” as a stationary CI engine installed or to be installed at a facility on or after January 1, 2005. As the engine will be installed in 2013, it is a “new engine” for the purpose of this rule.

(c)(2)(A)(ii)—A new engine that is located 100 meters (328 feet) or less from a school shall not be operated for non-emergency use between the hours of 7:30 a.m. and 3:30 p.m., once control equipment is in place, on days when school is in session. The above requirement is implemented by condition no. 9.

(c)(2)(C) No person shall operate any new stationary emergency standby diesel-fueled CI engine (>50 bhp), excluding new direct-drive emergency standby fire pump engines and new direct-drive emergency standby flood control pump engines, unless it meets all of the following applicable operating requirements and emission standards.

- (i) Such engines shall not operate more than 50 hours per year for maintenance and testing, as defined in (b)(43). Condition no. 4 implements this requirement.
- (v) New stationary emergency standby diesel-fueled engines located on school grounds or 100 meters or less from a school which exists at the date the application for Permit to Construct or Permit to Operate is deemed complete, whichever is earlier, shall emit diesel PM at a rate less than or equal to 0.01 g/bhp-hr. Accordingly, the engine will be equipped with a DPF. Using the alternative compliance determination set forth in (f)(6), this engine meets the 0.01 g/bhp-hr.
- (vii) **NMHC + NO_x, and CO Standards**
Any new stationary emergency standby diesel-fueled CI engines (> 50 bhp) installed and with an application for Permit to Construct or Permit to Operate deemed complete on or after January 1, 2011, shall meet the standards for off-road engines of the same maximum rated power as specified in Table 2 below:

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Table 2: NMHC+NO_x and CO Emission Standards for New Stationary Emergency Standby Diesel-Fueled CI Engines – g/bhp-hr (g/kW-hr)

Maximum Engine Power	NMHC+NO _x g/bhp-hr (g/kW-hr)	CO g/bhp-hr (g/kW-hr)
175 ≤ HP ≤ 750	3.0 (4.0)	2.6 (3.5)
HP > 750	4.8 (6.4)	2.6 (3.5)

The proposed engine meets the Tier 3 levels set forth in the above table.

(c)(2)(F) Diesel Particulate Filter Cleaning Option for New Emergency Standby Engines
Owners or operators using a diesel particulate filter to comply with the diesel PM standards of this rule may remove the control equipment filter media for cleaning, provided all of the following conditions are met:

- (i) the new emergency standby engine shall not be operated for maintenance and testing or any other non-emergency use while the diesel particulate filter media is removed;
- (ii) the control equipment filter media shall be returned and re-installed within 10 working days from the date of removal;
- (iii) the owner or operator shall maintain records indicating the date(s) the control equipment filter media was removed for cleaning and the date(s) the filter media was re-installed. Records shall be retained pursuant to the requirements specified in (d)(7)(C) (36 months).

Condition no. 19 implements the above requirements.

(c)(7)(C)(i) To be part of a Demand Response Program (DRP) and enrolled in an Interruptible Service Contract (ISC) after on or after January 1, 2005, the engine is required to meet a diesel PM standard of 0.01 gram/bhp-hr or less, among other requirements. The engine with DPF meets this standard. The hospital, however, has not requested such enrollment.

(f)(6) Alternative Compliance Demonstration
The owner or operator of a new or in-use stationary diesel-fueled CI engine (>50 bhp) may demonstrate compliance with the 0.01 g/bhp-hr PM emission standard of (c)(2) through (c)(8) by using one of the following:

- (A) a level 3 Verified Diesel Emission Control Strategy in combination with a certified CI engine that meets a 0.15 g/bhp-hr or less PM emission standard.

Using this compliance demonstration, the engine meets 0.01 g/bhp-hr.

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Rule 1472—Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines

The existing engine was not included in the Rule 1472 compliance plan application, A/N 517737, approved on 2/3/11, because it was not part of a “group.” Since the replacement engine will be installed at the same location, it will also not be part of a group.

Regulation XXX—Title V Permits

• Rule 3003—Applications

This facility is not in the RECLAIM program. The proposed project is considered as a “significant permit revision” to the Title V permit for this facility.

Rule 3000(b)(31) specifies that a “significant permit revision” includes, but is not limited to any of the following:

- Rule 3000(b)(31)(I)—installation of new equipment subject to a New Source Performance Standard (NSPS) pursuant to 40 CFR Part 60, or a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to 40 CFR Part 61 or 40 CFR Part 63.

Analysis: This project is a “significant permit revision” because the engine is subject to 40 CFR Part 60 Subpart III--NSPS for Stationary Compression Ignition Internal Combustion Engines and 40 CFR Part 63 Subpart ZZZZ--NESHAPS for Stationary Reciprocating Internal Combustion Engines.

This proposed project will be issued as revision no. 4 of the Title V facility permit.

Federal Regulations

40 CFR Part 60 Subpart III--NSPS for Stationary Compression Ignition Internal Combustion Engines

§60.4200(a)—The provision of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) engines as specified in paragraphs (a)(1) through (a)(4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

§60.4200(a)(2)(i) specifies this subpart is applicable to owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE is manufactured after April 1, 2006 and are not fire pump engines. Therefore, this subpart is applicable to the engines under evaluation.

§60.4205(b)—Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

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§60.4202(a)—Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

§60.4202(a)(2) provides that for engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

40 CFR 89.112—Exhaust emission from nonroad engines shall not exceed the applicable exhaust standards in Table 1 of this provision.

According to Table 1, for an engine rated at 250 kW for model year 2006 and later, Tier 3 is applicable (4.0 g/kW-hr NMHC + NO_x, 3.5 g/kW-hr CO, 0.2 g/kW-hr PM). The proposed Cummins engine complies with these limits, which are the same as the District BACT standards.

Permit condition: Accordingly, the emissions limits in conditions nos. 20 and 25 for NMHC + NO_x, CO, and PM will be tagged with Rule 1301(a)—BACT and 40 CFR 60.4205(b), as well as other applicable rules.

§60.4207(b)—Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

§80.510(b)—Except as other specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards:

(1) Sulfur content.

- (i) 15 ppm maximum for NR [nonroad] diesel fuel
- (ii) 500 ppm maximum for LM [locomotive or marine] diesel fuel

Permit condition: Condition no. 21 limits diesel fuel sulfur content to 15 ppm, which is the same as BACT. The condition is tagged with Rule 1303(a) and 40 CFR 60.4207(b).

§60.4209(a)— An owner or operator of an emergency stationary CI ICE that does not meet the standards applicable to non-emergency engines must install a non-resettable hour meter prior to start-up of the engine.

Permit condition: Condition no. 6 requires a non-resettable hour meter. The rule tags include 40 CFR 60.4209(a).

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§60.4209(b)—An owner or operator of a stationary CI ICE equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Permit condition: Condition no. 11 requires a backpressure monitor. Condition no. 12 requires an audible alarm at the maximum allowable backpressure of 41 inches, and condition no. 15 requires a warning audible alarm at the backpressure of 35 inches of water.

§60.4211(a)—An owner or operator who must comply with the emission standards specified in this subpart must do all of the following, except as permitted under paragraph (g) of this section:

- (1) Operate and maintain the stationary CI internal combustion engine and control device according to manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply.

Permit condition: Pursuant to prior EPA guidance, condition no. 22 is added to implement the above requirements regarding the engines, with 40 CFR 60.4211(a) as the rule tag.

§60.4211(c)—An owner or operator of a 2007 model year and later stationary CI ICE and must comply with the emission standards specified in §60.4204(b) [non-emergency engine] or §60.4205(b) [emergency engine], or an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to the fire pump engine power rating in table 3 to this subpart and must comply with the emission standard specified in §60.4205(c), must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

Permit condition: Pursuant to EPA guidance, condition no. 23 is added to implement the above requirements regarding the engine, with 40 CFR 60.4211(c) as the rule tag. As discussed above, the engine is in compliance with the emissions standards specified in 40 CFR 60.4205(b).

§60.4211(f)—Emergency stationary ICE 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, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations....

Permit condition: Federal standards allow 100 hours per year for testing and maintenance and no time limit for emergency use. District requirements are more stringent and allow 50

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hours for testing and maintenance, and 200 hours total including the 50 hours for testing and maintenance. Condition no. 4 implements the more stringent District requirements, and includes 40 CFR 60.4211(f) as a rule tag.

§60.4214(b)—If the stationary CI ICE is an emergency stationary ICE, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to on-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

Permit condition: Condition no. 7 sets forth the recordkeeping requirements, and includes 40 CFR 60.4214(b) as a rule tag.

§60.4214(c)—If the stationary CI ICE is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Permit condition: Condition no. 18 requires records of diesel particulate filter inspections, replacements, and cleaning.

40 CFR Part 63 Subpart ZZZZ--NESHAPS for Stationary Reciprocating Internal Combustion Engines

§63.6580 Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions.

§63.6585(b) A “major source” is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§63.6585(c) An “area source” is a source that is not a major source. This hospital is an area source for HAPs, as demonstrated by the 2012 annual emissions report shown below.

Toxic Pollutants for 2012 (lb/yr):

Pollutant ID	Pollutant Description	Annual Emissions
106990	1,3-Butadiene	1.975
7664417	Ammonia <i>Note: Ammonia is not a federal HAP.</i>	5104.629
7440382	Arsenic	0.024
1332214	Asbestos	70.000
71432	Benzene	3.320

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7440439	Cadmium	0.022
18540299	Chromium (VI)	0.001
1104	Fluorocarb (CL)	715.000
50000	Formaldehyde	231.683
7439921	Lead (inorganic)	0.126
91203	Naphthalene	0.289
7440020	Nickel	0.059
1151	PAHs, total, with components not reported	0.633
	Total	1023.13 lb/yr = 0.51 tpy

§63.6590(a) This subpart applies to each affected source. An “affected source” is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

§63.6590(a)(2)(iii) A stationary RICE located at an area source of HAP emissions is new if construction of the stationary RICE is commenced on or after June 12, 2006. Therefore, the engine under evaluation is new.

§63.6590 (c) provides an affected source that meets any of the criteria in paragraphs (c)(1) through (c)(7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart III for compression ignition engines or 40 CFR part 60 subpart JJJJ for spark ignition engines. No further requirements apply for such engines under this part.

(c)(1) A new or reconstructed stationary RICE located at an area source.

Conclusion: Since the emergency engine will be a new compression-ignition RICE located at an area source, it is required to meet 40 CFR Part 60 Subpart III—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. (See discussion on Subpart III, above.)

RECOMMENDATION

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “significant permit revision”, all public participation procedures pursuant to Rule 3006 (a) will be followed prior to the issuance of the permit. A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review period pursuant to Rule 3003(j), which will run concurrently with the 30-day public notice period required by Rule 212(c)(1). If EPA does not have any objections within the review period and subject to any comments received for the Rule 212 public review, a revised Title V permit will be issued to this facility.