

**ENGINEERING EVALUATION
AUTHORITY TO CONSTRUCT**

Facility Name: Verizon Wireless -Kensington
Application Number: APCD2024-APP-008079
Equipment Type: Natural Gas Emergency Engine
Facility ID: APCD2024-SITE-04453
Equipment Address: 3905 Adams Avenue, San Diego, CA 92116
Facility Contact: Wilson Rodriquez, Verizon Wireless, wilson.rodriquez@verizonwireless.com

Permit Engineer:

2/6/2024

X Priscilla Castanon

Priscilla Castanon
Jr. Air Pollution Control Engineer
Signed by: 9633941a-18e2-4f2e-adf1-2707549e5c7c

Senior Engineer Signature:

3/11/2024

X Nicholas Horres

Nicholas Horres
Senior Air Pollution Control Engineer
Signed by: NHorres

1.0 BACKGROUND

- 1.1 Type of Application – New equipment installation
- 1.2 Permit History – This is the first application for this equipment. The site has no permitted equipment and no other open applications.
- 1.3 Facility Description – This site is telecommunication facility with a cell tower for Verizon Wireless.
- 1.4 Other Background Information – New facility, no Hearing Board actions, permit denials, legal settlements, NOV, or nuisance complaint, not a Title V facility.

2.0 PROCESS DESCRIPTION

- 2.1 Equipment Description
Emergency Natural Gas Engine Generator:
Manufacturer: Ford
Model: MSG-425
S/N: TBD,
Maximum Rated Horsepower: 60 BHP,
Model Year 2021,
Engine Family: MEDIB02.5MSG,
With 3-way catalyst, driving a 27kW emergency electrical generator.
Exhausting horizontally with rainguard, 7 feet above ground.
- 2.2 Process – Natural gas engine that powers an electrical generator to provide backup power to the facility during power outages.

- 2.3 Emissions Controls – Lean burn engine
- 2.4 Attachments – Manufacturer specification data sheets and exhaust emission data sheets.

3.0 EMISSIONS

- 3.1 Emission Estimate Summary –

Potential Emissions:

	Lbs/hour	Lbs/day	Tons/year
NOx	0.07	1.57	0.00
CO	0.46	11.13	0.01
VOC	0.00	0.08	0.00
PM	0.01	0.20	0.00
SOx	0.00	0.01	0.00

- 3.2 Emissions Estimate Assumptions – EPA Family number Emissions provided by the applicant for NOx, CO, VOC;
Potential emissions based on 24 hour per day and 52 hours per year.
- 3.3 Emission Calculations – Calculations were performed using the attached spreadsheets and standard calculation methods.
- 3.4 Attachments - Manufacturer specification data sheets – See BCMS Attachments

4.0 APPLICABLE RULES

- 4.1 Prohibitory Rules

Rule 50: Visible emissions

This Rule prohibits any person from discharging from any sources of emissions for a period of more than three minutes any air contaminant which is darker in shade than that designated as Number 1 on the Ringlemann Chart, or of such opacity as to obscure an observer’s view to a degree greater than does smoke of a shade designated as number 1 on the Ringlemann chart.

The engine is fueled with natural gas, therefore, it is expected to be in compliance with this rule.

Rule 51: Nuisance

This Rule prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other materials which causes injury, nuisance or annoyance to the public or which causes damage to business or property.

Nuisance complaints are extremely rare from this type of equipment. Therefore, compliance is expected.

Rule 52: Particulate Matter

This Rule prohibits a person from discharging into the atmosphere from any source particulate matter in excess of 0.10 grain per dry standard cubic foot (0.23 grams per dry standard cubic meter) of gas.

The provisions of this rule shall not apply to stationary internal combustion engines.

Rule 53(d): Specific Air Contaminants

This Rule prohibits a person from discharging into the atmosphere from any single source of emission whatsoever any one or more of the following contaminants, in any state or combination thereof, exceeding in concentration at the point of discharge:

Sulfur compounds: Subsection (d)(1) of this rule prohibits a source from discharging into the atmosphere sulfur compounds calculated as SO₂ in excess of 0.05 percent by volume on a dry basis.

Assuming all sulfur in the fuel is converted into SO₂, SO₂ emissions concentration is 0.0012% SO₂ by volume.

Particulate Matter: Subsection (d)(2) of this rule prohibits a source from discharging into the atmosphere combustion particulate matter in excess of 0.1 grain per dry standard cubic foot of gas which is standardized to 12 percent of CO₂ by volume.

Particulate emission from this engine is 0.006 grain/dry scft gas at 12% CO₂.

Rule 69.4.1: Stationary Reciprocating Internal combustion Engines – Best Available Retrofit Control Technologies.

1. Applicability:

Rule 69.4.1(a)(1) indicates that except as provided in Section (b) on Exemptions, this rule applies to stationary internal combustion engines with a brake horsepower (bhp) rating of 50 or greater.

This engine is subject to Rule 69.4.1.

2. Standards:

Rule 69.4.1(d)(1)(ii)(E) requires new or replacement emergency standby engines to meet the following emission standards:

Engine Type	Concentration of NO _x ¹	Concentration of VOC ²	Concentration of CO ³
Rich-burn engines using gaseous fuel	25 ppmv	86 ppmv	540 ppmv
Lean-burn engines using gaseous fuel	2.0 g/bhp-hr or 160 ppmv	1.0 g/bhp-hr or 86 ppmv	4.0 g/bhp-hr or 540 ppmv
Black start engines using gaseous fuel	2.0 g/bhp-hr or 160 ppmv	1.0 g/bhp-hr or 86 ppmv	4.0 g/bhp-hr or 540 ppmv
Certified engines using diesel fuel, 50 ≤ bhp < 100	3.5 g/bhp-hr	N/A	3.7 g/bhp-hr
Certified engines using diesel fuel, 100 ≤ bhp < 175	3.0 g/bhp-hr	N/A	3.7 g/bhp-hr
Certified engines using diesel fuel, 175 ≤ bhp < 750	3.0 g/bhp-hr	N/A	2.6 g/bhp-hr
Certified engines using diesel fuel, bhp ≥ 750	4.8 g/bhp-hr	N/A	2.6 g/bhp-hr

¹Calculated as nitrogen dioxide in ppmv corrected to 15% oxygen on a dry basis, or in grams of NO_x per brake horsepower-hour, as indicated.

²Calculated as methane in ppmv corrected to 15% oxygen on a dry basis, or in grams of VOC per brake horsepower-hour, as indicated, and excluding emissions of formaldehyde.

³Calculated as carbon monoxide in ppmv corrected to 15% oxygen on a dry basis, or in grams of CO per brake horsepower-hour, as indicated.

The engine complies with these emission standards with 27.57 ppmv NO_x, 320.13 ppmv CO, 4.17 ppmv VOC at 15% oxygen.

Rule 69.4.1(d)(2) requires any engine subject to this rule and operating on diesel fuel to use only California Diesel Fuel.

This engine is only authorized to burn gaseous fuel.

3. Monitoring:

Rule 69.4.1(e)(1) requires an owner or operator of an engine without add-on control equipment, except engines specified in Subsections (b)(3) or (b)(4), to monitor the operating parameters recommended by the engine manufacturer and any additional operating parameters identified by the Air Pollution Control Officer. Such operating parameters may include, but are not limited to:

- (i) engine air-to-fuel ratio;
- (ii) engine inlet manifold temperature and pressure; and
- (iii) oxygen content of the exhaust gas.

Where the Air Pollution Control Officer determines that it is not feasible to monitor operating parameters of an engine or such monitoring may not be indicative of air contaminant emissions, the requirements of this subsection may be waived provided that periodic inspection and maintenance are conducted as specified in Section (f) – Inspection and Maintenance Requirements.

This engine has manufacturer installed 3-way catalyst as the add-on control device, therefore (e)(2) applies instead of (e)(1).

Rule 69.4.1(e)(2) requires an owner or operator of an engine with add-on control equipment, except engines specified in Subsections (b)(3) or (b)(4), to install, operate and maintain in calibration, devices that continuously monitor the operational characteristics of the engine and any NO_x emission reduction system as determined necessary to ensure compliance by the Air Pollution Control Officer. Such operational characteristics shall include, but are not limited to:

- (i) engine air-to-fuel ratio;
- (ii) temperature of exhaust gas at the inlet and outlet of the add-on control equipment;
- (iii) oxygen content of exhaust gas at the inlet and outlet of the add-on control equipment; or
- (iv) flow rate of NO_x reducing agent added to the engine exhaust gas.

This engine has a manufacturer installed 3-way catalyst and is certified with this catalyst as the add-on control device, therefore, the engine is exempt from this requirement as emergency engine per (b)(5).

Rule 69.4.1(e)(3) requires an owner or operator of an engine subject to this rule to install, and maintain in good working order, a non-resettable totalizing fuel meter and/or non-resettable meter that measures elapsed operating time as determined appropriate by the Air Pollution Control Officer. If an engine hour meter is replaced, the owner or operator shall notify the Air Pollution Control Officer in accordance with Subsection (g)(7).

This engine has an hour meter. Requirements for hour meter replacement are included with permit conditions.

Rule 69.4.1(e)(4) requires an owner or operator of a new or replacement non-emergency gaseous-fueled engine rated at 1,000 bhp or greater and permitted to operate more than 2,000 hours per calendar year to install, operate, and maintain a Continuous Emissions Monitoring System (CEMS) for NO_x and CO.

This is an emergency engine that is not subject to CEMS requirement.

Rule 69.4.1(e)(5) requires an owner or operator of a non-emergency gaseous-fueled engine, except engines specified in Subsections (b)(3)(ii), (b)(4)(ii) or (e)(4), to have a trained operator use a portable analyzer to take NO_x and CO emission readings.

This is an emergency engine that is not subject to portable analyzer requirement.

4. Inspection and Maintenance:

Rule 69.4.1(f)(1) requires an owner or operator of an engine subject to this rule, except engines specified in Subsections (b)(3), (b)(4), (e)(4) or (e)(5), to conduct periodic inspections of the engine and any add-on control equipment, as applicable, to ensure that the engine and control equipment is operated in compliance with the provisions of this rule. Inspections shall be conducted at least once every 4,000 hours of operation, or every six months, whichever is less.

This emergency engine is exempt from inspections every 4,000 hours per (b)(4).

Rule 69.4.1(f)(2) requires an owner or operator of an engine subject to this rule to conduct, at a minimum, annual maintenance of the engine and any add-on control equipment, as applicable, as recommended by the engine and control equipment manufacturers or as specified by any other maintenance procedure approved in writing by the Air Pollution Control Officer. Notwithstanding the frequencies recommended by the engine and control equipment manufacturers, the annual maintenance shall be conducted at least once each calendar year. Engine maintenance shall include, but is not limited to, the following:

- (i) Changing the oil and filter, or testing the oil in accordance with the requirements of 40 CFR Part 63, Sections 63.6625(i) or 63.6625(j);
- (ii) Inspecting and cleaning air filters, and replacing as necessary;
- (iii) Inspecting all hoses and belts, and replacing as necessary; and
- (iv) Inspecting spark plugs, if equipped, and replacing as necessary.

(3) Notwithstanding the frequencies specified in Subsections (f)(1) and (f)(2), the Air Pollution Control Officer may require an owner or operator of an engine to conduct inspections and/or maintenance of the engine and any associated add-on control equipment more frequently if deemed necessary to assure compliance with this rule.

These requirements are included with permit conditions.

5. Recordkeeping:

Rule 69.4.1(g)(1) requires an owner or operator of an engine subject to this rule to keep the following records in electronic and/or hardcopy format and shall maintain these records on-site for at least the same period of time as the engine to which the records apply is located at the site:

(i) engine manufacturer name and model number;

(ii) brake horsepower rating;

(iii) combustion method, i.e., rich-burn or lean-burn;

(iv) fuel type(s);

(v) California Diesel Fuel certification, if applicable; and

(vi) a manual of recommended maintenance as provided by the engine manufacturer, or other maintenance procedure as approved in writing by the Air Pollution Control Officer.

Where the information specified in Subsections (g)(1)(i) through (g)(1)(iv) is contained in a District Permit to Operate, and is the most current information, an additional record of this information shall not be required.

Engine information is included with the permit equipment description, permit conditions require maintaining a copy of the recommended maintenance procedure.

Rule 69.4.1(g)(2) requires an owner or operator of an engine exempt pursuant to Subsections (b)(3) or (b)(4) to maintain, at a minimum, the following:

(i) an operating log containing dates and elapsed times of every instance of engine operation either based on actual readings of engine hour or fuel meter, or validated against such actual readings during owner or operator visits to unmanned sites only. In addition, an owner or operator of an emergency standby diesel engine located within 500 feet of school grounds shall also maintain the time of day of every instance of engine operation for testing or maintenance; except for an engine that emits no more than 0.01 g/bhp-hr of diesel particulate matter, or meets the requirements specified in 17 CCR, Section 93115.13(f). If applicable, indicate whether the operation was for testing or maintenance or during an emergency situation and the nature of the emergency, and maintain the following:

(A) for a total external power outage, documentation from the serving utility of an outage in the area where the engine is located;

(B) for an internal power outage, a description of what caused the failure, and receipts and/or work orders for the necessary repairs, as applicable; and

(C) for a partial external power outage, including a low-voltage or electric transient incident, in which the external power voltage is low enough to trigger the operation of an emergency standby engine, a description of the incident.

(ii) total cumulative hours of operation per calendar year; and

(iii) records of annual engine maintenance, including dates maintenance was performed and the nature of the maintenance.

These requirements are included with permit conditions.

Rule 69.4.1(g)(3) requires an owner or operator of an engine subject to this rule, except engines specified in Subsections (b)(3) or (b)(4), to maintain, at a minimum, the following:

(i) records of engine inspection, including dates an inspection was performed; and

(ii) records of annual engine maintenance, including dates maintenance was performed and the nature of the maintenance.

This emergency engine is exempt per (b)(4)(i).

Rule 69.4.1(g) (4) requires an owner or operator of an engine subject to this rule, except engines specified in Subsections (b)(3), (b)(4) or (e)(4), to measure and record at least once each calendar month the applicable operating parameters identified pursuant to Subsections (e)(1) or (e)(2) on Monitoring.

This emergency engine is exempt per (b)(4)(i).

Rule 69.4.1(g) (5) requires an owner or operator of any non-emergency engine claiming an exemption pursuant to Subsection (b)(2)(i) to maintain an operating log and record dates, times and duration of all startups and shutdowns.

This is an emergency engine and not subject to these requirements.

Rule 69.4.1(g)(6) requires an owner or operator of a new, modified, or replacement engine claiming an exemption pursuant to Subsection (b)(2)(ii) during commissioning period to comply with all of the following:

(i) Record and maintain the dates and times when fuel is being combusted and cumulative operating time for each new, modified, or replacement engine; and

(ii) Record and maintain any emissions data or other operating parameter data acquired or calculated by CEMS, or otherwise required by this rule for the engine.

The engine is expected to comply with section (d)(1) on emission standards during commissioning.

Therefore, the records required by this subsection are not applicable.

Rule 69.4.1(g)(7) requires an owner or operator of an engine subject to the requirements of Subsection (e)(3) to provide written notification to the Air Pollution Control Officer within 10 calendar days of replacing the engine hour meter. The notification shall include the following:

(i) Old meter's hour reading upon removal;

(ii) Replacement meter's manufacturer name, model, and serial number, if available;

(iii) Current hour reading of the replacement meter upon installation;

(iv) Copy of receipt of new meter, or of installation work order.

(8) An owner or operator of an engine subject to the requirements of Subsection (e)(5) shall comply with all of the following:

(i) Record and maintain all emission readings, and the dates and times of when the readings were recorded;

(ii) Maintain records of all calibrations, including relative accuracy during calibration, and maintenance of any portable analyzer used;

(iii) Maintain a manual of recommended calibration, maintenance and operation as provided by the manufacturer; and

(iv) Provide written notification to the Air Pollution Control Officer within 2 business days of a reading that exceeds the emission standards of Subsection (d)(1).

This requirement is included with permit conditions.

Rule 69.4.1(g)(8) requires an owner or operator of an engine subject to the requirements of Subsection (e)(5) [portable analyzer requirements] to comply with specified recordkeeping.

This engine is not subject to (e)(5) because it is not a prime engine.

Rule 69.4.1(g)(9) requires all records required by Subsections (g)(2) through (g)(7) to be retained in electronic and/or hardcopy format on-site for at least three years and made available to the District upon request.

This requirement is included with permit conditions.

Rule 69.4.1(g)(10) requires all records required by Subsection (g)(8) to be retained in electronic and/or hardcopy format on-site, or off-site in a central location, for at least three years and made available to the District upon request.

This engine is not subject to (g)(8) or (e)(5) because it is not a prime engine.

6. Test Methods

Rule 69.4.1(h) specifies test methods for engines subject to testing.

This emergency engine is not subject to testing as shown below.

7. Source Test Requirements:

Rule 69.4.1(i)(1) indicates that after initial compliance has been determined, any engine subject to the requirements of Subsection (d)(1), except engines specified in Subsections (b)(3), (b)(4), (b)(7), or (i)(2),

shall be source tested at least once every 2 permit years, unless more frequent testing is otherwise specified in writing by the Air Pollution Control Officer.

This engine qualifies for the exemption of Subsection (b)(4)(i) as a new or replacement emergency engine, with operation less than 52 hours per calendar year for testing and maintenance, therefore, periodic source testing is not required.

4.2 New Source Review

This application is subject to District NSR rules. This site is considered a non-major stationary source, for each pollutant, as shown in the following table, and is therefore subject to District Rule 20.2. Calculation of emissions and determination of applicable requirements is performed in accordance with District Rule(s) 20.1 through 20.3.

Table 3: Classification of Major/PSD Source and Modification New Source Review (NSR) Requirements

	NOx	VOC	PM-10	PM-2.5	SOx	CO	Lead
<i>Major Source Threshold (ton/year)</i>	50	50	100	100	100	100	100
Major Source? (yes/no)	No	No	No	No	No	No	No
<i>Major Modification Threshold (ton/year)</i>	25	25	15	10	40	100	0.6
Major Modification at a Major Source?	No	No	No	No	No	No	No
Contemporaneous Calculations Performed?	No	No	No	No	No	No	No
Federal Major Stationary Source Threshold (ton/year) (Severe non-attainment status)	25	25	100	100	100	100	100
Federal Major Stationary Source?	No	No	No	No	No	No	No
<i>Federal Major Modification Threshold (ton/year)</i> (Severe non-attainment status)	25	25	15	10	40	100	0.6
Federal Major Modification?	No	No	No	No	No	No	No
Contemporaneous Net Calculations Performed	No	No	No	No	No	No	No
<i>PSD Threshold (ton/year)</i>	250	250	250	--	250	250	--
<i>PSD Modification Threshold (ton/year)</i>	40	40	15	--	40	100	0.6
PSD New or Modification?	No	No	No	No	No		No

District Rule 20.2 contains requirements for Best Available Control Technology (BACT), Air Quality Impact Assessment (AQIA), Prevention of Significant Deterioration (PSD) and public notification. No requirements of this rule apply as shown below.

Rule 20.2: New Source Review – Non Major Stationary Sources.

This engine is not a major source, so rule 20.2 applies.

1. Best Available Control Technology:

Rule 20.2(d)(1)(iii) requires any replacement emission unit with a post-project potential to emit of 10 lbs per day or more of particulate matter (PM), NOx, VOC, or SOx to be equipped with Best Available Control Technology (BACT) for each such air contaminant.

Based on twenty-four hours of non-emergency operation per day, the engine emissions do not trigger BACT at 1.57 lbs/day NOx, 0.08 lbs/day VOC, 0.20 lbs/day of PM, 0.01 lbs/day of SOx.

2. Air Quality Impact Analysis

Rule 20.2 (d)(2)(i) requires any new, modified, replacement or relocated unit which results in emissions increase equal to or greater than the amounts listed below to perform an Air Quality Impact Analysis:

Particulate Matter (PM): 100 lbs/day, 15 tpy

NOx: 25 lbs/hour, 250 lbs/day, 40 tpy

SOx: 25 lbs/hour, 250 lbs/day, 40 tpy

CO: 100 lbs/hour, 550 lbs/day, 100 tpy

Lead and lead compounds: 3.2 lbs/day, 0.6 tpy

Based on 24 hours per day and 52 hours per year of total operation, the emissions from this engine do not trigger AQIA requirements at:

	Lbs/hour	Lbs/day	Tons/year
NOx	0.07	1.57	0.00
CO	0.46	11.13	0.01
VOC	0.00	0.08	0.00
PM	0.01	0.20	0.00
SOx	0.00	0.01	0.00

3. Prevention of Significant Deterioration (PSD)

Rule 20.2(d)(3) requires the Air Pollution Control Officer to not issue an Authority to Construct or modified Permit to Operate for any emission unit or project which is expected to have a significant impact on any Class I area, as determined by an AQIA, without satisfying the requirements for Federal Land Manager and Federal EPA notification as well as ARB, SCAQMD and Imperial County APCD Notification .

This engine emissions do not trigger AQIA, therefore, this project is not subject to PSD requirement.

4. Public Notice and Comment

Rule 20.2 (d)(2) requires any emission unit or project subject to the AQIA or notification requirements or for any emission unit or project which results in an emissions increase of VOCs equal to or greater than 250 pounds per day or 40 tons per year to: (A) provide the public with notice of the proposed action in the manner prescribed by Subsection (d)(4)(iii), and (B) provide a copy of the public notice to the federal EPA Administrator, through its Region 9 office, to the California ARB and to any tribal air pollution control agencies having jurisdiction in the San Diego Air Basin, and (C) make available for public inspection all information relevant to the proposed action as specified in Subsection (d)(4)(iv), and (D) provide at least a 30-day period within which comments may be submitted. to go through a 30-day public notice and comment period for any applications which require an AQIA under Sections d(2) or d(3).

With no AQIA required, public notification and comment period are not required for this application.

4.3 Toxic New Source Review

This rule applies to any new, relocated, or modified emission unit which results in any increased emissions of one or more toxic air contaminant(s), and for which an Authority to Construct or Permit to Operate is required.

This engine passed the de minimis assessment so a refined HRA analysis was not needed. Based on the de minimis screening, the proposed engine complies with all applicable requirements of District Rule 1200. (see BCMS attachments)

4.4 AB 3205 – State Law AB3205 requires the District to notify residents, businesses and parents of students about new or modified equipment that emits any toxic air contaminants into the air which will be installed within 1,000 feet of a school site. The law also requires the District to consider any comments before authorizing construction.

This engine is located within 1,000 ft of two schools, therefore, this requirement is applicable. This section shall remain open for comments until the comment period is closed.

4.5 NESHAPS and ATCMs – *This application is not subject to ATCM*

NESHAPS - 40 CFR Part 63 Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines (RICE)

§63.6590(c) requires that an affected source that is a new or reconstructed stationary RICE located at an area source to meet the requirements of 40 CFR part 60 Subpart IIII (NSPS), for compression ignition engines or 40 CFR Part 60 Subpart JJJJ (NSPS) for spark ignition engines. No further requirements apply for such engines under this part.

This engine is a new RICE located at an area source and must comply with the requirements of 40 CFR Part 60 Subpart JJJJ as shown below. Therefore, it is in compliance with NESHAP requirements.

NSPS - 40 CFR Part 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

§ 60.4230(a)(3)(iv) states that the provisions of this subpart are applicable to emergency engines that are manufactured on or after January 1, 2009.

This emergency engine was manufactured after January 1, 2009, therefore, it is subject to the requirement of this subpart.

§ 60.4233 (d) requires owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) to comply with the emission standards in Table 1 of this subpart. Table 1 requires emergency engines rated greater than 25HP and less than 100HP to meet the emission standards of 10 g/bhp-hr of NO_x+ HC and 387 g/bhp-hr of CO.

This engine complies with this requirement with 0.52 g/bhp-hr of NO_x+HC and 3.51 g/bhp-hr of CO.

§ 60.4236 requires that after January 1, 2011, owners and operators of emergency stationary SI ICE with a maximum power of greater than 19 KW (25 HP) to not install engines that do not meet the applicable emission standard requirements of § 60.4233.

This engine meets the emission standards requirements of § 60.4233 as shown above.

§60.4243(a)(1) requires that operators of a certified SI ICE that maintain the engine and control device according to the manufacturer's emission-related written instructions to keep records of conducted maintenance to demonstrate compliance.

Records keeping requirements are included in permit conditions.

§60.4243(b)(1) requires owners or operators of a stationary SI ICE that must comply with the emission standards of §60.4233 to purchase an engine certified for the same model year and demonstrating compliance according to the methods specified in this subpart.

This engine is certified for the same model year for engine family MEDIB02.5MSG.

§60.4243(d) allows emergency stationary ICE to be operated for the purpose of maintenance checks and readiness testing recommended by federal, State or local government for up to 100 hours per year.

This engine is permitted for testing and maintenance operation for 52 hours per year.

§60.4243(g) stated that it is expected that air to fuel ratio controllers be used with the operation of three-way catalyst/non-selective catalytic reduction. The air to fuel ratio controller must be maintained and operated appropriately to ensure proper operation of the engine and control device to minimize emissions at all times.

This engine is equipped with internal electronic air to fuel ratio controller.

§60.4245(a) requires that owners and operators of stationary SI ICE to keep records of all notifications, maintenance, certification, compliance with the emission standard requirements if the engine is not certified.

This engine is certified. Compliance with this requirement is verified for the engineering evaluation and is included in permit conditions.

4.6 Attachments – Authority to Construct, engine emission calculation.

5.0 RECOMMENDATION

The engine is expected to comply with all the applicable rules and regulations. An Authority to Construct is recommended.

6.0 RECOMMENDED CONDITIONS

Standard BEC APCD2020-CON-001653 with a 52 hour/year limit for non-emergency/maintenance and testing use.