



FEB 23 2015

Mr. Thomas Williams
California Dairies Inc.
P.O. Box 11865
Fresno, CA 93775-1865

**Re: Notice of Preliminary Decision – ATC / Certificate of Conformity
District Facility # S-1346
Project # S-1144271**

Dear Mr. Williams:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. Install 900 horsepower Tier 2 certified diesel engine to provide emergency power in the event of an electrical outage.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authority to Construct with a Certificate of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,


Arnaud Marjollet
Director of Permit Services

AM:RG/st

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

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**San Joaquin Valley Air Pollution Control District
Authority to Construct
Application Review
Diesel-Fired Emergency Standby IC Engines**

Facility Name: California Dairies, Inc.
Mailing Address: P. O. Box 11865
Fresno, CA 93775-1865

Date: February 02 , 2015
Engineer: Rupi Gill

Contact Person: Thomas Williams
Telephone: 559-233-5154
Application #: S-1346-28-0
Project #: S-1144271
Complete: November 24, 2014

I. Proposal

California Dairies is proposing to install a 900 bhp diesel-fired emergency standby internal combustion (IC) engine powering an electrical generator.

This facility is operating under Title V permit and is subject to the requirements of this rule. The proposed project is classified as "minor modification" to the Title V permit since the applicant is not proposing to relax any existing monitoring, recordkeeping or reporting requirements. The applicant has proposed to process the ATC with COC.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410 Prevention of Significant Deterioration (June 16, 2011)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4001 New Source Performance Standards (4/14/99)
Rule 4002 National Emission Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4201 Particulate Matter Concentration (12/17/92)
Rule 4701 Stationary Internal Combustion Engines – Phase 1 (8/21/03)
Rule 4702 Stationary Internal Combustion Engines (8/18/11)
Rule 4801 Sulfur Compounds (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice

Title 17 CCR, Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines
California Environmental Quality Act (CEQA)
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The equipment is located at 11894 Avenue 120, Tipton, CA.

The District has verified that the engine will not be within 1,000 feet of a K-12 school. Therefore, the public notification requirements of section 42401.6 of the California Health & Safety Code is not applicable to this project.

IV. Process Description

The emergency standby engine will power electrical generator. Other than emergency standby operation, applicant proposed that the engine may be operated up to 16 hours per year for maintenance and testing purposes.

V. Equipment Listing

900 BHP CATERPILLAR MODEL C18 TIER 2 CERTIFIED DIESEL-FIRED
EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

VI. Emission Control Technology Evaluation

The applicant has proposed to install a Tier 2 certified diesel-fired IC engine that is fired on very low-sulfur diesel fuel (0.0015% by weight sulfur maximum).

NO_x, CO, VOC and PM₁₀:

Per District Guidance Document FYI-324 and the District BACT Guideline 3.1.1, the applicant is required to install the latest available tier certification standard for emergency engines as noted below. A new emergency engine shall meet the requirements as follows:

50 ≤ bhp < 75: Tier 4 Interim certification standards
75 ≤ bhp < 750: Tier 3 certification standards
≥ 750 bhp: Tier 2 certification standards

The applicant has proposed to install a 900 bhp Tier 2 certified emergency engine which meets the requirements of District Policy FYI-324 (see Appendix B for copies of the emissions data sheet for this engine).

SO_x:

The use of very low-sulfur diesel fuel (0.0015% by weight sulfur maximum) reduces SO_x emissions by over 99% from standard diesel fuel.

VII. General Calculations

A. Assumptions

Emergency operating schedule: 24 hours/day
 Non-emergency operating schedule: 16 hours/year
 Density of diesel fuel: 7.1 lb/gal
 EPA F-factor (adjusted to 60 °F): 9,051 dscf/MMBtu
 Fuel heating value: 137,000 Btu/gal
 BHP to Btu/hr conversion: 2,542.5 Btu/bhp-hr
 Thermal efficiency of engine: commonly ≈ 35%
 PM₁₀ fraction of diesel exhaust: 0.96 (CARB, 1988)

B. Emission Factors

Emission Factors		
Pollutant	Emission Factor (g/bhp-hr)	Source
NO _x	4.76	EPA Certification ¹
SO _x	0.0051	Mass Balance Equation Below
PM ₁₀	0.03	Engine Manufacturer
CO	0.46	Engine Manufacturer
VOC	0.01	Engine Manufacturer

$$\frac{0.000015 \text{ lb-S}}{\text{lb-fuel}} \times \frac{7.1 \text{ lb-fuel}}{\text{gallon}} \times \frac{2 \text{ lb-SO}_2}{1 \text{ lb-S}} \times \frac{1 \text{ gal}}{137,000 \text{ Btu}} \times \frac{1 \text{ bhp input}}{0.35 \text{ bhp out}} \times \frac{2,542.5 \text{ Btu}}{\text{bhp-hr}} \times \frac{453.6 \text{ g}}{\text{lb}} = 0.0051 \frac{\text{g-SO}_x}{\text{bhp-hr}}$$

C. Calculations

1. Pre-Project Emissions (PE1)

The units are new, therefore, PE1 = 0.

¹ Total NO_x+NMHC certification limit is 6.4 g/kw-hr (4.77 g/bhp-hr).

2. Post-Project PE (PE2)

The daily and annual PE are calculated as follows:

$$\text{Daily PE2 (lb-pollutant/day)} = \text{EF (g-pollutant/bhp-hr)} \times \text{rating (bhp)} \times \text{operation (hr/day)} / 453.6 \text{ g/lb}$$

$$\text{Annual PE2 (lb-pollutant/yr)} = \text{EF (g-pollutant/bhp-hr)} \times \text{rating (bhp)} \times \text{operation (hr/yr)} / 453.6 \text{ g/lb}$$

Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Daily Hours of Operation (hrs/day)	Annual Hours of Operation (hrs/yr)	Daily PE2 (lb/day)	Annual PE2 (lb/yr)
NO _x	4.76	900	24	16	226.7	151
SO _x	0.0051	900	24	16	0.2	0
PM ₁₀	0.03	900	24	16	1.4	1
CO	0.460	900	24	16	21.9	15
VOC	0.01	900	24	16	0.5	0

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid ATCs or PTOs at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

The following are from the previous project # S-1111873 (see Appendix E).

Post-Project Stationary Source Potential to Emit [SSPE1] (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
Pre-Project SSPE (SSPE1 _{total})	35,641	5,801	55,436	142,395	7,031

4. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to Section 4.10 of District Rule 2201, the Post-Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid ATCs or PTOs, except for emissions units proposed to be shut down as part of the Stationary Project, at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Post-Project Stationary Source Potential to Emit [SSPE2] (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
Pre-Project SSPE (SSPE1 _{total})	35,641	5,801	55,436	142,395	7,031
S-1346-23-4	-53	-2	-1	-4	-2
S-1346-28-0-0	151	0	1	15	0
Total	35,739	5,799	55,436	142,406	7029

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

Rule 2201 Major Source Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
Facility emissions pre-project	35,641	5,801	55,436	142,395	7,031
Facility emissions post-project	35,739	5,799	55,436	142,406	7,029
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	No	No	No	No

As seen in the table above, the facility is an existing Major Source for NO_x and will remain so.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Estimated Facility PE before Project Increase	17.8	3.5	2.9	71.2	27.7	27.7
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source ? (Y/N)	N	N	N	N	N	N

As shown above, the facility is not an existing major source for PSD for any pollutant. Therefore the facility is not an existing major source for PSD.

6. Baseline Emissions (BE)

BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.23

Since this is a new emissions unit, BE = PE1 = 0 for all criteria pollutants.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the, increases in fugitive emissions are not included in the SB 288 Major Modification calculation.

Non-road engines shall not be considered in determining whether a project is an SB 288 Major Modification. The Federal CAA reserves the regulation of non-road engines to Title II (National Emission Standards) of the CAA.

Since this facility is a major source for NO_x, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO _x	151	50,000	No
SO _x	0	80,000	No
PM ₁₀	1	30,000	No
VOC	0	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification

8. Federal Major Modification

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in a project.

The engine's emissions were calculated in this document above. Per the District's draft policy titled *Implementation of Rule 2201 (as amended on 12/18/08 and effective on 6/10/10) for SB288 and Federal Major Modifications*, a permitting action is a Federal Major Modification if it will result in an increase in emission in excess of the thresholds specified in section 3.18 of Rule 2201 (see table below). The draft policy further states that if the emission increases are less than or equal to 0.5 lb/day, on an average basis, then they are to be rounded to zero (consistent with District Policy APR-1130 Increases in Maximum Daily Permitted Emissions of Less than or Equal to 0.5 lb/day.)

As shown in section VII.C.2 of this document, the total annual potential to emit for NO_x, PM₁₀ and VOC emissions are 151 lb/year, 1 lb/year and 0 lb/year respectively. Assuming that the engine would operate an average of no more than 45 minutes per day, for testing and maintenance purposes, it could potentially operate 365 days per year. Therefore, the average daily emission rates can be determined using the annual potential to emit divided by a worst case operating scenario of 365 days per year.

Average Daily PE2 = Annual PE / 365 days/yr

Pollutant	Annual PE (lb/year)	Worst Case Operation (days/year)	Average Daily PE2 (lb/day)
NO _x	151	365	0.0 ¹
PM ₁₀	1	365	0.0 ¹
VOC	0	365	0.0 ¹

¹ As explained above, in accordance with District Policy APR-1130, the PE2 rounds to zero for each of these pollutants.

The project's emission increases were calculated in Section VII C and compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO _x	0	0	No
VOC	0	0	No
PM ₁₀	0	30,000	No
PM _{2.5}	0	20,000	No

Since none of the Federal Major Modification Thresholds are being surpassed with this project, this project does not constitute a Federal Major Modification and no further analysis is required.

9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix D.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following*:

- a. Any new emissions unit with a potential to emit exceeding 2.0 pounds per day,

- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding 2.0 pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding 2.0 pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

As discussed in Section I, the facility is proposing to install new emergency standby IC engine. Additionally, as determined in Sections VII.C.7 and VII.C.8, this project does not result in an SB288 Major Modification or a Federal Major Modification. Therefore, BACT can only be triggered if the daily emissions exceed 2.0 lb/day for any pollutant.

The daily emissions from the new engine is compared to the BACT threshold levels in the following table:

New Emissions Unit BACT Applicability				
Pollutant	Daily Emissions for each unit (lb/day)	BACT Threshold (lb/day)	SSPE2 (lb/yr)	BACT Triggered?
NO _x	226.7	> 2.0	n/a	Yes
SO _x	0.2	> 2.0	n/a	No
PM ₁₀	1.4	> 2.0	n/a	No
CO	21.9	> 2.0 and SSPE2 ≥ 200,000 lb/yr	142,406	No
VOC	0.5	> 2.0	n/a	No

As shown above, BACT will be required for the NO_x emissions from the engine in this project.

2. BACT Guideline

BACT Guideline 3.1.1, which appears in Appendix B of this report, covers diesel-fired emergency IC engines.

3. Top Down BACT Analysis

Per District Policy APR 1305, Section IX, "A top-down BACT analysis shall be performed as a part of the Application Review for each application subject to the BACT requirements pursuant to the District's NSR Rule for source categories or classes covered in the BACT Clearinghouse, relevant information under each of the

following steps may be simply cited from the Clearinghouse without further analysis.”

Pursuant to the attached Top-Down BACT Analysis, which appears in Appendix B of this report, BACT is satisfied with:

NO_x: Latest EPA Tier Certification level for applicable horsepower range

B. Offsets

Since emergency IC engines are exempt from the offset requirements of Rule 2201, per Section 4.6.2, offsets are not required for this engine, and no offset calculations are required.

C. Public Notification

1. Applicability

Public noticing is required for:

a. New Major Sources, SB288 Major Modifications, Federal Major Modifications

As shown in Sections VII.C.5, VII.C.7, and VII.C.8, this facility is not a new Major Source, not an SB 288 Major Modification, and not a Federal Major Modification.

b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant

As shown in Section VII.C.2, the daily emissions for NO_x from the engine will be greater than 100 lb/day. Therefore, a public notice is required.

c. Any project which results in the offset thresholds being surpassed

As shown in Section VII.C.4, an offset threshold will not be surpassed.

d. Any project with a Stationary Source Project Increase in Permitted Emissions (SSIPE) greater than 20,000 lb/year for any pollutant.

For this project, the proposed engine the only emissions sources that will generate an increase in Potential to Emit. Since the proposed engine emissions are below 20,000 lb/year for all pollutants (See Section VII.C.2), the SSIPE for this project will be below the public notice threshold.

e. Title V Significant Permit Modification

The installation of the proposed engine is not a Title V significant Modification, and therefore public noticing is not required.

2. Public Notice Action

As shown above, this project will require public noticing because the potential to emit of NO_x is greater than 100 lb/day for the new unit. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emissions Limits

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.16 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.16.1 and 3.16.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. Therefore, the following conditions will be listed on each ATC to ensure compliance:

- {4771} Emissions from this IC engine shall not exceed any of the following limits: 4.76 g-NO_x/bhp-hr, 0.46 g-CO/bhp-hr, or 0.01 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]
- {4772} Emissions from this IC engine shall not exceed 0.03 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 17 CCR 93115]
- {4258} Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required for emergency standby IC engines to demonstrate compliance with Rule 2201.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping requirements, in accordance with District Rule 4702, will be discussed in Section VIII, *District Rule 4702*, of this evaluation.

4. Reporting

No reporting is required to ensure compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to Appendix C of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO_x, CO, and SO_x. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO_x, CO, or SO_x.

The proposed location is in a non-attainment area for the state's PM₁₀ as well as federal and state PM_{2.5} thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM₁₀ and PM_{2.5}.

Rule 2520 Federally Mandated Operating Permits

The proposed permitting action is a Minor Title V permit modification. The applicant has proposed to receive the ATCs with Certificates of Conformity in accordance with the requirements of 40 CFR 70.6(c), 70.7 and 70.8. Therefore, the 45-day EPA comment period will be satisfied prior to the issuance of the ATCs. The following federally enforceable conditions will be placed on the Authorities to Construct:

- *This Authority to Construct serves as a written Certificate of Conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c).*
- *Prior to operating with the modifications authorized by this Authority to Construct, the facility shall submit an application for an Administrative Amendment to its Title V permit.*

Rule 4001 New Source Performance Standards (NSPS)

40 CFR Part 60 Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (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.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

- (i) 2007 or later, for engines that are not fire pump engines;
- (ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines (i.e., starting 2009 year model for $175 \leq \text{HP} \leq 750$).

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

- (i) Manufactured after April 1, 2006, and are not fire pump engines, or
- (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

The proposed engine meets the criteria in § 60.4200 (a)(2)(i). Therefore, this engine is subject to the requirements of this subpart.

§60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(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.

Section 62.4202(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.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) 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 for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) 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.

The proposed engine is rated at 900 bhp. Therefore, section 62.4202(a)(2) will apply.

40 CFR 89.112(a), Table 1 lists the following standards for engine rated greater than 560 kW (>724 hp) for model year 2006: 6.4 g/kW-hr (4.77 g/bhp-hr) for NMHC+NO_x, 3.5 g/kw-hr (2.6 g/bhp-hr) for CO and 0.2 g/kW-hr (0.149 g/bhp-hr) for PM.

Furthermore, 40 CFR 89.113 has smoke emission standard and requires that the exhaust opacity from CI non-road engine must not exceed 20% during the acceleration mode, 15% during the lugging mode, and 50% during the peaks in either the acceleration or lugging modes. These standards are presumed to be checked during engine certification process; therefore, continued compliance is expected, and no additional conditions are necessary in the permit.

The following condition will ensure compliance with this section:

- Emissions from this engine shall not exceed any of the following: 4.76 g-NO_x/bhp-hr, 0.46 g-CO/bhp-hr, 0.01 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR 60 Subpart IIII]

- PM₁₀ emissions shall not exceed 0.03 g/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR 60 Subpart III]

§60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(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 use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. 40 CFR 80.510(b) states that beginning June 1, 2010, except as otherwise 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 non-road diesel fuel.
- (ii) 500 ppm maximum for locomotive diesel fuel.

(2) Cetane index or aromatic content, as follows:

- (i) A minimum cetane index of 40; or
- (ii) A maximum aromatic content of 35 volume percent.

The engine will be required to use CARB certified diesel containing no more than 15 ppmv sulfur by weight. Further, the CARB diesel fuel specification requires no more than 10 v% of aromatic hydrocarbon content (<http://www.arb.ca.gov/enf/fuels/dieselspecs.pdf>). The following condition will ensure compliance with this section:

- Only CARB certified diesel fuel containing no more than 0.0015% sulfur by weight shall be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR 60 Subpart III]

§60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

- (a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.
- (b) If you are an owner or operator of a stationary CI internal combustion engine 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.

Instead of verifying whether or not emergency engines meets the standards applicable to non-emergency engines, the proposed engine will be required to be equipped with non-resettable hour meter. Note that the engines is not equipped with diesel particulate filter to comply with the emissions standards in this subpart.

The following condition will ensure compliance with this section:

- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rules 2201 and 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII]

§60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you 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 the 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 to you.

The following condition will ensure compliance with this section:

- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII]

- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you 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.

The equipment description of the engine lists tier of certification (e.g., Tier-2). Further, permit will contain the emission limits associated with the tier certification. Therefore, compliance is expected with this section.

- (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for 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. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local

standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the

engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

The proposed engine will be limited to operate for 16 hours per year during non-emergency situations. The following condition will ensure compliance with this section:

- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 16 hours per calendar year. [District Rules 4201 and 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII]

§60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, 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 non-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.

Instead of verifying whether or not emergency engines meets the standards applicable to non-emergency engines, each of the proposed engine will be required to keep records hours of operation during emergency and non-emergency scenarios. Therefore, compliance is expected with this section.

The following conditions ensure compliance with this section:

- The owner or operator shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Subpart IIII]

Compliance is expected with this regulation.

Rule 4002 National Emission Standards for Hazardous Air Pollutants

40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
§ 63.6585 Am I subject to this subpart?

This subpart applies to owners and operators of stationary reciprocating internal combustion engines (RICE) operated at a major or area source of Hazardous Air Pollutant (HAP) emissions.

- Section (b) states a major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.
- Section (c) states an area source of HAP emissions is a source that is not a major source.

Per Title V project S-1130176 , this facility is not a major source of HAP emissions. This facility is an area source for HAP emissions.

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *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.

(1) *Existing stationary RICE*

- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) New stationary RICE

- (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.
- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

The proposed engine meet the criteria under section 63.6590(a)(2)(iii) discussed above. Therefore, this engine is subject to the requirements of this subpart.

(c) Stationary RICE subject to Regulations under 40 CFR Part 60

An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII 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.

- (1) A new or reconstructed stationary RICE located at an area source;
- (2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

The engine is a new reciprocating internal combustion engines (RICE) that will be located at an area source for HAP emissions. The unit is subject to requirements in 40 CFR part 60 Subpart IIII (discussed previously). Therefore, the proposed engine is not subject to any additional requirements under this subpart.

Compliance is expected with this subpart.

Rule 4101 Visible Emissions

Rule 4101 states that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. Therefore, the following condition will be listed on the ATC to ensure compliance:

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

Rule 4102 Nuisance

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, the following condition will be listed on the ATC to ensure compliance:

- {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 - Risk Management Policy for Permitting New and Modified Sources (dated 3/2/01) specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite. Therefore, a risk management review (RMR) was performed for this project. The RMR results are summarized in the following table, and can be seen in detail in Appendix C.

RMR Results				
Unit	Acute Hazard Index	Chronic Hazard Index	Cancer Risk	T-BACT Required?
S-1346-28-0	N/A	N/A	2.6E-08 in a million	No

The following conditions will be listed on the ATC to ensure compliance with the RMR:

- {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- {4772} Emissions from this IC engine shall not exceed 0.03 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 17 CCR 93115]
- The engine shall be operated only for maintenance, testing and required regulatory purposes and during emergency situations. Operation of the engine for maintenance, testing and required regulatory purposes shall not exceed 16 hours per year. [District Rules 2201 and 4702 and 17 CCR 93115]

Rule 4201 Particulate Matter Concentration

Rule 4201 limits particulate matter emissions from any single source operation to 0.1 g/dscf, which, as calculated below, is equivalent to a PM₁₀ emission factor of 0.4 g-PM₁₀/bhp-hr.

$$0.1 \frac{\text{grain-PM}}{\text{dscf}} \times \frac{\text{g}}{15.43 \text{ grain}} \times \frac{1 \text{ Btu}_{in}}{0.35 \text{ Btu}_{out}} \times \frac{9,051 \text{ dscf}}{10^6 \text{ Btu}} \times \frac{2,542.5 \text{ Btu}}{1 \text{ bhp-hr}} \times \frac{0.96 \text{ g-PM}_{10}}{1 \text{ g-PM}} = 0.4 \frac{\text{g-PM}_{10}}{\text{bhp-hr}}$$

The new engine has a PM₁₀ emission factor less than 0.4 g/bhp-hr. Therefore, compliance is expected and the following condition will be listed on the ATC:

- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201].

Rule 4701 Internal Combustion Engines – Phase 1

The purpose of this rule is to limit the emissions of nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines. Except as provided in Section 4.0, the provisions of this rule apply to any internal combustion engine, rated greater than 50 bhp, that requires a PTO.

The proposed engine(s) are also subject to District Rule 4702, Internal Combustion Engines. Since emissions limits of District Rule 4702 and all other requirements are equivalent or more stringent than District Rule 4701 requirements, compliance with District Rule 4702 requirements will satisfy requirements of District Rule 4701.

Rule 4702 Internal Combustion Engines

The following table demonstrates how the proposed engine(s) will comply with the requirements of District Rule 4702.

District Rule 4702 Requirements Emergency Standby IC Engines	Proposed Method of Compliance with District Rule 4702 Requirements
Operation of emergency standby engines is limited to 100 hours or less per calendar year for non-emergency purposes, verified through the use of a non-resettable elapsed operating time meter.	The Air Toxic Control Measure for Stationary Compression Ignition Engines (Stationary ATCM) limits this engine maintenance and testing to 16 hours/year. Thus, compliance is expected.
Emergency standby engines cannot be used to reduce the demand for electrical power when normal electrical power line service has not failed, or to produce power for the electrical distribution system, or in conjunction with a voluntary utility demand reduction program or interruptible power contract.	<p>The following conditions will be included on the permit:</p> <ul style="list-style-type: none"> • {3807} An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] • {3808} This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]
The owner/operator must operate and maintain the engine(s) and any installed control devices according to the manufacturers written instructions.	A permit condition enforcing this requirement was shown earlier in the evaluation.
The owner/operator must monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier.	<p>The following condition will be included on the permit:</p> <ul style="list-style-type: none"> • {3478} During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
Records of the total hours of operation of the emergency standby engine, type of fuel used, purpose for operating the engine, all hours of non-emergency and emergency operation, and support	<p>The following conditions will be included on the permit:</p> <ul style="list-style-type: none"> • {3496} The permittee shall maintain monthly

<p>documentation must be maintained. All records shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request.</p>	<p>records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4701, 4702 and 17 CCR 93115]</p> <ul style="list-style-type: none"> • The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] • {3475} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701, 4702 and 17 CCR 93115]
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Rule 4801 . Sulfur Compounds

Rule 4801 requires that sulfur compound emissions (as SO₂) shall not exceed 0.2% by volume. Using the ideal gas equation, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = (n \times R \times T) \div P$$

n = moles SO₂

T (standard temperature) = 60 °F or 520 °R

$$R \text{ (universal gas constant)} = \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot \text{°R}}$$

$$\frac{0.000015 \text{ lb} - \text{S}}{\text{lb} - \text{fuel}} \times \frac{7.1 \text{ lb}}{\text{gal}} \times \frac{64 \text{ lb} - \text{SO}_2}{32 \text{ lb} - \text{S}} \times \frac{1 \text{ MMBtu}}{9,051 \text{ scf}} \times \frac{1 \text{ gal}}{0.137 \text{ MMBtu}} \times \frac{\text{lb} - \text{mol}}{64 \text{ lb} - \text{SO}_2} \times \frac{10.73 \text{ psi} - \text{ft}^3}{\text{lb} - \text{mol} - \text{°R}} \times \frac{520 \text{°R}}{14.7 \text{ psi}} \times 1,000,000 = 1.0 \text{ ppmv}$$

Since 1.0 ppmv is ≤ 2,000 ppmv, this engine is expected to comply with Rule 4801. Therefore, the following condition will be listed on the ATC to ensure compliance:

- {4258} Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]

California Health & Safety Code 42301.6 (School Notice)

The District has verified that the engine will not be located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

Title 17 California Code of Regulations (CCR), Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines

The following table demonstrates how the proposed engine(s) will comply with the requirements of Title 17 CCR Section 93115.

<p>Title 17 CCR Section 93115 Requirements for New Emergency IC Engines Powering Electrical Generators</p>	<p>Proposed Method of Compliance with Title 17 CCR Section 93115 Requirements</p>
<p>Emergency engine(s) must be fired on CARB diesel fuel, or an approved alternative diesel fuel.</p>	<p>The applicant has proposed the use of CARB certified diesel fuel. The proposed permit condition, requiring the use of CARB certified diesel fuel, was included earlier in this evaluation.</p>
<p>The engine(s) must emit diesel PM at a rate less than or equal to 0.15 g/bhp-</p>	<p>The applicant has proposed the use of engine(s) that are certified to the latest EPA Tier Certification level for the applicable horsepower range, guaranteeing compliance with the emission standards of this regulation. Additionally, the proposed diesel PM emissions rate is less than 0.15 g/bhp-hr.</p>
<p>The engine may not be operated more than 50 hours per year for maintenance and testing purposes.</p>	<p>The following condition will be included on the permit:</p> <ul style="list-style-type: none"> • This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 16 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
<p>Engines, with a PM10 emissions rate greater than 0.01 g/bhp-hr and located at schools, may not be operated for maintenance and testing whenever there is a school sponsored activity on the grounds. Additionally, engines located within 500 feet of school grounds may not be operated for maintenance and testing between 7:30 AM and 3:30 PM</p>	<p>The District has verified that this engine is not located within 500' of a school.</p>
<p>An owner or operator shall maintain monthly records of the following: emergency use hours of operation; maintenance and testing hours of</p>	<p>Permit conditions enforcing these requirements were shown earlier in the evaluation.</p>

operation; hours of operation for emission testing; initial start-up testing hours; hours of operation for all other uses; and the type of fuel used. All records shall be retained for a minimum of 36 months.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the project qualifies for ministerial approval under the District's Guideline for Expedited Application Review (GEAR). Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Pending a successful NSR Public Noticing period, issue Authority to Construct N-1346-28-0 with the conditions on the attached draft Authority to Construct in Appendix A.

X. Billing Information

Billing Schedule			
Permit Number	Fee Schedule	Fee Description	Fee Amount
S-1346-28-0	3020-10-E	900 bhp IC engine	\$602.00

Appendices

- A. Draft ATC
- B. BACT Guideline and BACT Analysis
- C. HRA Summary and AAQA
- D. QNEC Calculations
- E. SSPE1 Information

Appendix A Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-1346-28-0

LEGAL OWNER OR OPERATOR: CALIFORNIA DAIRIES, INC.
MAILING ADDRESS: 2000 N. PLAZA DRIVE
VISALIA, CA 93291-9258

LOCATION: 11894 AVENUE 120
TIPTON, CA 93272

EQUIPMENT DESCRIPTION:
900 BHP CATERPILLAR MODEL C18 TIER 2 DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

CONDITIONS

1. Upon the implementation of this Authority to Construct, Permit to Operate S-1346-23-4 shall be canceled. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
3. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
6. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjolle, Director of Permit Services

S-1346-28-0, Feb 5 2016 9:56AM - GILLR : Joint Inspection NOT Required

8. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
9. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed any of the following limits: 4.76 g-NO_x/bhp-hr, 0.46 g-CO/bhp-hr, or 0.01 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed 0.03 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201, 4102, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
12. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
13. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
14. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
15. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
16. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 16 hours per calendar year. [District Rules 4102, 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
17. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
18. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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8. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
9. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed any of the following limits: 4.76 g-NO_x/bhp-hr, 0.46 g-CO/bhp-hr, or 0.01 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed 0.03 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201, 4102, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
12. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
13. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
14. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
15. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
16. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 16 hours per calendar year. [District Rules 4102, 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
17. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
18. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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Appendix B
BACT Guideline and BACT Analysis

San Joaquin Valley Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.1.1
Last Update: 9/10/2013
Emergency Diesel IC Engine

Pollutant	Achieved in Practice or in the SIP	Technologically Feasible	Alternate Basic Equipment
CO	Latest EPA Tier Certification level for applicable horsepower range		
NOX	Latest EPA Tier Certification level for applicable horsepower range		
PM10	0.15 g/hp-hr or the Latest EPA Tier Certification level for applicable horsepower range, whichever is more stringent. (ATCM)		
SOX	Very low sulfur diesel fuel (15 ppmw sulfur or less)		
VOC	Latest EPA Tier Certification level for applicable horsepower range		

*Note: for emergency engines 50 <= bhp < 75, Tier 4 Interim certification is the requirement; for emergency engines 75 <= bhp <750 bhp, Tier 3 certification is the requirement; for emergency engines => 750 bhp, Tier 2 certification is the requirement.

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

Top Down BACT Analysis for the Emergency IC Engine(s)

BACT Guideline 3.1.1 (September 10, 2013) applies to emergency diesel IC engines. In accordance with the District BACT policy, information from that guideline will be utilized without further analysis.

1. BACT Analysis for NO_x Emissions:

a. Step 1 - Identify all control technologies

BACT Guideline 3.1.1 identifies only the following option:

- *Latest EPA Tier Certification level for applicable horsepower range*

To determine the latest applicable Tier level, the following EPA and state regulations were consulted:

- 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- 40 CFR Part 89 – Control of Emissions from New and In-Use Nonroad Compression – Ignition Engines
- 40 CFR Part 1039 – Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines
- Title 17 CCR, Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines

40 CFR Parts 89 and 1039, which apply only to nonroad engines, do not directly apply because the proposed emergency engine(s) do not meet the definition of a nonroad engine. Therefore, only Title 17 CCR, Section 93115 and 40 CFR Part 60 Subpart IIII apply directly to the proposed emergency engine(s).

Title 17 CCR, Section 93115.6(a)(3)(A) (CARB stationary diesel engine ATCM) applies to emergency standby diesel-fired engines and requires that such engines be certified to the emission levels in Table 1 (below). Please note that these levels are at least as stringent or more stringent than the emission levels in 40 CFR Subpart IIII.

Table 1: Emission Standards for New Stationary Emergency Standby Diesel-Fueled CI Engines g/bhp-hr (g/kW-hr)					
Maximum Engine Power	Tier	Model Year(s)	PM	NMHC+NOx	CO
50 ≤ HP < 75 (37 ≤ kW < 56)	2	2007	0.15 (0.20)	5.6 (7.5)	3.7 (5.0)
	4i	2008+		3.5 (4.7)	
75 ≤ HP < 100 (56 ≤ kW < 75)	2	2007	0.15 (0.20)	5.6 (7.5)	3.7 (5.0)
	3	2008+		3.5 (4.7)	
100 ≤ HP < 175 (75 ≤ kW < 130)	3	2007	0.15 (0.20)	3.0 (4.0)	3.7 (5.0)
		2008+			
175 ≤ HP < 300 (130 ≤ kW < 225)	3	2007	0.15 (0.20)	3.0 (4.0)	2.6 (3.5)
		2008+			
300 ≤ HP < 600 (225 ≤ kW < 450)	3	2007	0.15 (0.20)	3.0 (4.0)	2.6 (3.5)
		2008+			
600 ≤ HP ≤ 750 (450 ≤ kW ≤ 560)	3	2007	0.15 (0.20)	3.0 (4.0)	2.6 (3.5)
		2008+			
HP > 750 (kW > 560)	2	2007	0.15 (0.20)	4.8 (6.4)	2.6 (3.5)
		2008+			

Additionally, 40 CFR Subpart IIII establishes emission standards for emergency diesel IC engines. These emission standards are the same as those specified in the CARB ATCM, except for engines rated greater than or equal to 50 and less than 75 hp. For such IC engines, the CARB ATCM is more stringent.

Therefore, the most stringent applicable emission standards are those listed in the CARB ATCM (Table 1).

For IC engines rated greater than or equal to 50 hp and less than 75 hp the the highest Tier required is Tier 4i. For IC engines rated greater than or equal to 75 hp and less than 750 hp the highest Tier required is Tier 3. For engines rated equal to or greater than 750 hp the highest Tier required is Tier 2.

Also, please note that neither the state ATCM nor the Code of Federal Regulations require the installation of IC engines meeting a higher Tier standard than those listed above for emergency applications, due to concerns regarding the effectiveness of the exhaust emissions controls during periods of short-term operation (such as testing operational readiness of an emergency engine).

The proposed engine is rated at 900 hp. Therefore, the applicable control technology option is EPA Tier 2 certification.

b. Step 2 - Eliminate technologically infeasible options

The control option listed in Step 1 is not technologically infeasible.

c. Step 3 - Rank remaining options by control effectiveness

No ranking needs to be done because there is only one control option listed in Step 1.

d. Step 4 - Cost Effectiveness Analysis

The applicant has proposed the only control option remaining under consideration. Therefore, a cost effectiveness analysis is not required.

e. Step 5 - Select BACT

BACT for NO_x will be the use of an EPA Tier 2 certified engine. The applicant is proposing such a unit. Therefore, BACT will be satisfied.

Appendix C
HRA Summary and AAQA

**San Joaquin Valley Air Pollution Control District
Risk Management Review
REVISED**

To: Dan Klevann - Permit Services
 From: Cheryl Lawler - Permit Services
 Date: December 4, 2014
 Facility Name: California Dairies Inc.
 Location: 11894 Avenue 120, Tipton
 Application #(s): S-1346-28-0
 Project #: S-1144271

A. RMR SUMMARY

RMR Summary			
Categories	Emergency Diesel ICE (Unit 28-0)	Project Totals	Facility Totals
Prioritization Score	N/A ¹	N/A ¹	>1
Acute Hazard Index	N/A ²	N/A ²	0.00
Chronic Hazard Index	N/A ²	N/A ²	0.00
Maximum Individual Cancer Risk	2.60E-08	2.60E-08	7.44E-07
T-BACT Required?	No		
Special Permit Conditions?	Yes		

1. Prioritization for this unit was not conducted since it has been determined that all diesel-fired IC engines will result in a prioritization score greater than 1.0.
 2. Acute and Chronic Hazard Indices were not calculated since there is no risk factor, or the risk factor is so low that the risk has been determined to be insignificant for this type of unit.

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Unit 28-0

- The PM10 emissions rate shall not exceed **0.03 g/bhp-hr** based on US EPA certification using ISO 8178 test procedure. [District Rules 2201]
- {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] N
- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed **16 hours** per calendar year. [District Rule 4702 and 17 CCR 93115]

B. RMR REPORT

I. Project Description

Technical Services received a request on November 24, 2014, to perform an Ambient Air Quality Analysis (AAQA) and a Risk Management Review (RMR) for a 900 bhp emergency diesel IC engine powering an electrical generator. The unit will replace an existing diesel generator (Unit 23).

II. Analysis

Diesel exhaust emissions were calculated using the District approved DICE spreadsheet.

The following parameters were used for the review:

Analysis Parameters Unit 28-0			
PM ₁₀ g/bhp-hr	0.03	Source Type	Point
BHP	900	Stack Diameter (m)	0.15
Closest Receptor (m)	524	Stack Height (m)	1.83
Max Hours per Year	16	Stack Gas Temp. (K)	807
Location Type	Rural	Stack Gas Velocity (m/s)	123.8

Technical Services also performed modeling for criteria pollutants NO_x, SO_x, and PM₁₀; as well as the RMR for the engine. The emission rates used for criteria pollutant modeling were 183 lb/yr NO_x, 0 lb/yr SO_x, and 1 lb/yr PM₁₀.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Diesel ICE	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	NA ¹	X	NA ¹	X	X
NO _x	NA ¹	X	X	X	Pass
SO _x	NA ¹	NA ¹	X	NA ¹	Pass
PM ₁₀	X	X	X	NA ¹	Pass ²

*Results were taken from the attached PSD spreadsheet.

¹The project is an intermittent source as defined in APR-1920. In accordance with APR-1920, compliance with short-term (i.e., 1-hour, 3-hour, 8-hour, and 24-hour) standards is not required.

²The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

III. Conclusions

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

The Cancer Risk associated with the operation of the proposed diesel IC engine is less than 1.0 in a million. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on Page 1 of this report must be included for the proposed unit.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

Attachments

RMR Request Form & Attachments
DICE Spreadsheet
Stack Parameters Calculations
Risk Results
AAQA Results
Facility Summary
AERMOD Non-Regulatory Option Checklist

Appendix D

QNEC Calculations

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

$$\text{QNEC} = \text{PE2} - \text{PE1}, \text{ where:}$$

- QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr
- PE2 = Post-Project Potential to Emit for each emissions unit, lb/qtr
- PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr

Using the emission calculations in this evaluation, $\text{PE2}_{\text{quarterly}}$ and $\text{BE}_{\text{quarterly}}$ can be calculated as follows:

This calculation is required for application emission profile purposes. It is assumed that each unit's annual emissions are evenly distributed throughout the year as follows: ΔPE (lb/qtr) = PE (lb/yr) \div 4 qtr/yr

$$\begin{aligned} \Delta\text{PE}_{\text{NOx}} &= 151 \text{ lb-NOx/year} - 0 \text{ lb-NOx/year} &= 151 \text{ lb/year} \\ \Delta\text{PE}_{\text{CO}} &= 15 \text{ lb-CO/year} - 0 \text{ lb-CO/year} &= 15 \text{ lb/year} \\ \Delta\text{PE}_{\text{VOC}} &= 0 \text{ lb-VOC/year} - 0 \text{ lb-VOC/year} &= 0 \text{ lb/year} \\ \Delta\text{PE}_{\text{PM}_{10}} &= 1 \text{ lb-PM}_{10}\text{/year} - 0 \text{ lb-PM}_{10}\text{/year} &= 1 \text{ lb/year} \\ \Delta\text{PE}_{\text{SOx}} &= 0 \text{ lb-SOx/year} - 0 \text{ lb-SOx/year} &= 0 \text{ lb/year} \end{aligned}$$

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
NOx	37	38	38	38
CO	3	4	4	4
VOC	0	0	0	0
PM₁₀	0	0	0	1
SOx	0	0	0	0

Appendix E

SSPE1 Calculations Information

The total Post Project Stationary Source Potential to Emit (SSPE2_{total}) can be calculated by adding the Post Project Potential to Emit (PE2) from all units with valid ATCs or PTOs (SSPE2_{Permit Unit}) and the sum of the ERCs that have been banked at the source and which have not been used on-site (Total_{ERC}).

$$SSPE2_{Total} = SSPE2_{Permit\ Unit} + Total_{ERC}$$

Post-Project Stationary Source Potential to Emit [SSPE2] (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
S-1346-1-7	544	43	45	2,570	45
S-1346-2-4	544	524	45	2,570	45
S-1346-3-7	544	524	45	2,570	45
S-1346-4-7	9,100	140	9,965	62,076	420
S-1346-6-2	0	0	1,321*	0	0
S-1346-7-2	0	0	*	0	0
S-1346-8-2	0	0	*	0	0
S-1346-12-3	0	0	2,751	0	0
S-1346-13-2	648	16	27	153	48
S-1346-14-1	7,008	105	9,401	28,152	526
S-1346-15-1	0	0	*	0	0
S-1346-16-1	0	0	*	0	0
S-1346-17-1	0	0	*	0	0
S-1346-18-6 MOD.	181	65	172	1,678	125
S-1346-19-6 MOD.	181	65	172	1,678	125
S-1346-20-2	574	13	33	116	83
S-1346-21-2	714	18	6	10	13
S-1346-22-2	714	18	6	10	13
S-1346-23-2	53	2	1	4	2
S-1346-24-1	7,897	2,322	17,108	19,393	2,812
S-1346-25-0 NEW	6,939	1,946	14,338	21,415	2,729
S-1346-26-0 NEW					
Pre-Project SSPE (SSPE2 _{total})	35,641	5,801	55,436	142,395	7,031

*Units S-1346-25-0 and -26-0 are limited to a combined fuel use of 682,737 MMBtu/year.

5. Major Source Determination

Pursuant to Section 3.23 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.23.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site."