JUL 16 2015

Dan Sparks
Saint Agnes Medical Center
1303 E. Herndon Avenue
Fresno, CA 93720

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: C-1059
Project Number: C-1151927

Dear Mr. Sparks:

Enclosed for your review and comment is the District’s analysis of Saint Agnes Medical Center’s application for an Authority to Construct for the installation of a new 1,502 bhp diesel-fired emergency standby IC engine powering an electrical generator, and the creation of a Specific Limiting Condition (SLC) to limit the combined annual NOx emissions from units -3, -4, -5, -21, -22, -23, and -25, at 1303 E. Herndon Avenue, Fresno.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Derek Fukuda of Permit Services at (559) 230-5917.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:df

Enclosures

cc: Mike Tollstrup, CARB (w/ enclosure) via email
I. Proposal

Saint Agnes Medical Center (SAMC) is proposing to install a 1,502 bhp (intermittent) diesel-fired emergency standby internal combustion (IC) engine powering an electrical generator. SAMC is also proposing to establish a Specific Limiting Condition (SLC) to limit the combined annual NOx emissions of the new emergency IC engine and six existing emergency IC engines Permits to Operate (PTOs) C-1059-3, -4, -5, -21, -22, and -23 (see Appendix B). The proposed annual NOx SLC will be set equal to 7,232 lb-VOC/year as calculated in Section VII.C.2 of this evaluation. This limit will maintain SAMC's annual NOx emissions below the NOx Major Source threshold of 20,000 lb/year.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
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
III. Project Location

The equipment is located at 1303 E. Herndon Avenue in Fresno, CA.

The District has verified that the equipment is located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

The emergency standby engines power electrical generators. Other than emergency standby operation, the engines are limited to the annual operating times shown in the table in Section VII.A of this evaluation for maintenance and testing purposes.

V. Equipment Listing

Pre-Project Equipment Description:

C-1059-3-0:  749 BHP CATERPILLAR 3412 (S/N 81210682) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #4)

C-1059-4-0:  749 BHP CATERPILLAR 3412 (S/N 81210671) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #5)

C-1059-5-0:  2,847 BHP CATERPILLAR 3516 (S/N 4XF00332) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #3)

C-1059-21-0: 2,847 BHP CATERPILLAR MODEL 3516B DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

C-1059-22-0: 972 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
C-1059-23-0: 972 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

ATC Equipment Description:

C-1059-3-2: MODIFICATION OF 749 BHP CATERPILLAR 3412 (S/N 81210682) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #4): ESTABLISH AN ANNUAL NO₈ SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, and -25

C-1059-4-2: MODIFICATION OF 749 BHP CATERPILLAR 3412 (S/N 81210671) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #5): ESTABLISH AN ANNUAL NO₈ SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, and -25

C-1059-5-2: MODIFICATION OF 2,847 BHP CATERPILLAR 3516 (S/N 4XF00332) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #3): ESTABLISH AN ANNUAL NO₈ SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, and -25

C-1059-21-2: MODIFICATION OF 2,847 BHP CATERPILLAR MODEL 3516B DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR: ESTABLISH AN ANNUAL NO₈ SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, and -25

C-1059-22-2: MODIFICATION OF 972 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR: ESTABLISH AN ANNUAL NO₈ SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, and -25

C-1059-23-2: MODIFICATION OF 972 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR: ESTABLISH AN ANNUAL NO₈ SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, and -25

C-1059-25-0: 1,502 BHP (INTERMITTENT) CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

Post Project Equipment Description:

C-1059-3-2: 749 BHP CATERPILLAR 3412 (S/N 81210682) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #4)
C-1059-4-2: 749 BHP CATERPILLAR 3412 (S/N 81210671) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #5)

C-1059-5-2: 2,847 BHP CATERPILLAR 3516 (S/N 4XF00332) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #3)

C-1059-21-2: 2,847 BHP CATERPILLAR MODEL 3516B DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

C-1059-22-2: 972 BHP CATERPILLAR MODEL 3412 TIER 1 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

C-1059-23-2: 972 BHP CATERPILLAR MODEL 3412 TIER 1 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

C-1059-25-0: 1,502 BHP (INTERMITTENT) CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

VI. Emission Control Technology Evaluation

Existing ICEs (units -3, -4, and -5):

The emission control devices/technologies and their effect on diesel engine emissions are detailed below¹.

The turbocharger reduces the NO\textsubscript{X} emission rate from the engine by approximately 10% by increasing the efficiency and promoting more complete burning of the fuel.

The use of very low-sulfur diesel fuel (0.0015% by weight sulfur maximum) reduces SO\textsubscript{X} emissions by over 99% from standard diesel fuel.

Existing ICE (units -21, -22, and -23)

The emission control devices/technologies and their effect on diesel engine emissions are detailed below.

¹ From "Non-catalytic NO\textsubscript{X} Control of Stationary Diesel Engines", by Don Koeberlein, CARB.
The turbocharger reduces the NO\textsubscript{X} emission rate from the engine by approximately 10% by increasing the efficiency and promoting more complete burning of the fuel.

The intercooler/aftercooler functions in conjunction with the turbocharger to reduce the inlet air temperature. By reducing the inlet air temperature, the peak combustion temperature is lowered, which reduces the formation of thermal NO\textsubscript{X}. NO\textsubscript{X} emissions are reduced by approximately 15% with this control technology.

The PCV system reduces crankcase VOC and PM\textsubscript{10} emissions by at least 90% over an uncontrolled crankcase vent.

The use of very low-sulfur diesel fuel (0.0015% by weight sulfur maximum) reduces SO\textsubscript{X} emissions by over 99% from standard diesel fuel.

New ICE (unit -25):

The applicant has proposed to install a Tier 2 certified diesel-fired IC engine that is fired on very low-sulfur diesel fuel.

The proposed engine(s) meet the latest Tier Certification requirements; therefore, the engine(s) meets the latest ARB/EPA emissions standards for diesel particulate matter, hydrocarbons, nitrogen oxides, and carbon monoxide (see Appendix D for a copy of the emissions data sheet and/or the ARB/EPA executive order).

The use of very low-sulfur diesel fuel (0.0015% by weight sulfur maximum) reduces SO\textsubscript{X} emissions by over 99% from standard diesel fuel.

VII. General Calculations

A. Assumptions

<p>| Emergency operating schedule:            | 24 hours/day                        |
| 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%                      |
| PM\textsubscript{10} fraction of diesel exhaust: | 0.96 (CARB, 1988)            |
| Non-emergency operating schedule:        | 40 - 50 hours/year (based on table below) |</p>
<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>Annual Operating Limit (hr/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1059-3</td>
<td>40</td>
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<tr>
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<td>C-1059-5</td>
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<tr>
<td>C-1059-21</td>
<td>50</td>
</tr>
<tr>
<td>C-1059-22</td>
<td>50</td>
</tr>
<tr>
<td>C-1059-23</td>
<td>50</td>
</tr>
<tr>
<td>C-1059-25</td>
<td>50</td>
</tr>
</tbody>
</table>

Unit -25-0 has certified NO\textsubscript{X} + VOC emissions of 4.0 g/bhp-hr. It will be assumed the NO\textsubscript{X} + VOC emission factor is split 95% NO\textsubscript{X} and 5% VOC (per the Carl Moyer program).

B. Emission Factors

The modifications proposed in this project will not affect the emission factors of the existing engines in this project. Therefore, pre and post project emission factors for the existing engines will be equal. The emission factors for the existing engines were taken from their existing permits.

<table>
<thead>
<tr>
<th>Emission Factors</th>
<th>Existing Engines (units -3 and -4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hp-hr</td>
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<tr>
<td>NO\textsubscript{X}</td>
<td>0.013</td>
</tr>
<tr>
<td>*SO\textsubscript{X} (g/bhp-hr)</td>
<td>0.0051</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>0.0009</td>
</tr>
<tr>
<td>CO</td>
<td>0.0033</td>
</tr>
<tr>
<td>VOC</td>
<td>0.003</td>
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<table>
<thead>
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<th>Emission Factors</th>
<th>Existing Engine (unit -5)</th>
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<tr>
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<tr>
<td>PM\textsubscript{10}</td>
<td>0.0022</td>
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<tr>
<td>CO</td>
<td>0.0033</td>
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<tr>
<td>VOC</td>
<td>0.0025</td>
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### Emission Factors

#### Existing Engine (unit -21)

<table>
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<tr>
<th>Pollutant</th>
<th>g/hp-hr</th>
<th>Source</th>
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<tbody>
<tr>
<td>NO$_x$</td>
<td>5.46</td>
<td>Existing Permit</td>
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<td>*SO$_x$</td>
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<td>Mass Balance Equation Below</td>
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<tr>
<td>PM$_{10}$</td>
<td>0.103</td>
<td>Existing Permit</td>
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<td>Project C-1010890</td>
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<td>VOC</td>
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<td>Project C-1010890</td>
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#### Existing Engines (unit -22 and -23)

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<th>Source</th>
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<td>Existing Permit</td>
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<tr>
<td>*SO$_x$</td>
<td>0.0051</td>
<td>Mass Balance Equation Below</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.06</td>
<td>Existing Permit</td>
</tr>
<tr>
<td>CO</td>
<td>0.55</td>
<td>Existing Permit</td>
</tr>
<tr>
<td>VOC</td>
<td>0.04</td>
<td>Existing Permit</td>
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#### New Engine (unit -25)

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<th>Source</th>
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<tbody>
<tr>
<td>NO$_x$</td>
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<td>ARB Certification</td>
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<tr>
<td>*SO$_x$</td>
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<td>Mass Balance Equation Below</td>
</tr>
<tr>
<td>PM$_{10}$</td>
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<td>ARB Certification</td>
</tr>
<tr>
<td>CO</td>
<td>1.19</td>
<td>ARB Certification</td>
</tr>
<tr>
<td>VOC</td>
<td>0.20</td>
<td>ARB Certification</td>
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</tbody>
</table>

C. Calculations

1. **Pre-Project Emissions (PE)**

The daily and annual PE are calculated as follows:

Daily PE$_1$ (lb-pollutant/day) = EF (g-pollutant/bhp-hr) x rating (bhp) x operation (hr/day) / 453.6 g/lb

Annual PE$_1$ (lb-pollutant/yr) = EF (g-pollutant/bhp-hr) x rating (bhp) x operation (hr/yr) / 453.6 g/lb
Note: the conversion factor of 453.6 g/lb is not needed for the units with EF’s in units of lb-bhp-hr.

### PE1
**Existing Engines (units -3 and -4)**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF (lb/hp-hr)</th>
<th>Rating (bhp)</th>
<th>Daily Hours</th>
<th>Annual Hours</th>
<th>Daily PE (lb/day)</th>
<th>Annual PE (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>749</td>
<td>24</td>
<td>40</td>
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<td>389</td>
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<td>749</td>
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<td>40</td>
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<td>40</td>
<td>53.9</td>
<td>90</td>
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</table>

* SO<sub>x</sub> emission factor is in units of g/bhp-hr.

### PE1
**Existing Engine (unit -5)**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF (lb/hp-hr)</th>
<th>Rating (bhp)</th>
<th>Daily Hours</th>
<th>Annual Hours</th>
<th>Daily PE (lb/day)</th>
<th>Annual PE (lb/year)</th>
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</thead>
<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
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<td>40</td>
<td>2,118.2</td>
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<tr>
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<td>CO</td>
<td>0.0033</td>
<td>2,847</td>
<td>24</td>
<td>40</td>
<td>457.8</td>
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<td>VOC</td>
<td>0.0025</td>
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<td>24</td>
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<td>170.8</td>
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* SO<sub>x</sub> emission factor is in units of g/bhp-hr.

### PE1
**Existing Engine (unit -21)**

<table>
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<tr>
<th>Pollutant</th>
<th>EF (g/hp-hr)</th>
<th>Rating (bhp)</th>
<th>Daily Hours</th>
<th>Annual Hours</th>
<th>Daily PE (lb/day)</th>
<th>Annual PE (lb/year)</th>
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<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
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<td>2,847</td>
<td>24</td>
<td>50</td>
<td>52.7</td>
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<tr>
<td>VOC</td>
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<td>2,847</td>
<td>24</td>
<td>50</td>
<td>19.6</td>
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### PE1
**Existing Engines (units -22 and -23)**

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<thead>
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<th>EF (g/hp-hr)</th>
<th>Rating (bhp)</th>
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<th>Annual Hours</th>
<th>Daily PE (lb/day)</th>
<th>Annual PE (lb/year)</th>
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<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
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<td>50</td>
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<td>608</td>
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<td>971.6</td>
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<td>50</td>
<td>0.3</td>
<td>1</td>
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<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>0.06</td>
<td>971.6</td>
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<td>50</td>
<td>28.3</td>
<td>59</td>
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<tr>
<td>VOC</td>
<td>0.04</td>
<td>971.6</td>
<td>24</td>
<td>50</td>
<td>2.1</td>
<td>4</td>
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</tbody>
</table>
2. Post-Project PE (PE2)

The proposed modifications will not affect the potential emissions from existing engines in this project. Therefore PE2 = PE1 for all the existing engines in this project.

The daily and annual PE for the new engine is calculated as follows:

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

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

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF (g/hp-hr)</th>
<th>Rating (bhp)</th>
<th>Daily Hours</th>
<th>Annual Hours</th>
<th>Daily PE (lb/day)</th>
<th>Annual PE (lb/year)</th>
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<tbody>
<tr>
<td>NO\textsubscript{x}</td>
<td>3.83</td>
<td>1,502</td>
<td>24</td>
<td>50</td>
<td>304.4</td>
<td>634</td>
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<tr>
<td>*SO\textsubscript{2}</td>
<td>0.0051</td>
<td>1,502</td>
<td>24</td>
<td>50</td>
<td>0.4</td>
<td>1</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>0.10</td>
<td>1,502</td>
<td>24</td>
<td>50</td>
<td>7.9</td>
<td>17</td>
</tr>
<tr>
<td>CO</td>
<td>1.19</td>
<td>1,502</td>
<td>24</td>
<td>50</td>
<td>94.6</td>
<td>197</td>
</tr>
<tr>
<td>VOC</td>
<td>0.20</td>
<td>1,502</td>
<td>24</td>
<td>50</td>
<td>15.9</td>
<td>33</td>
</tr>
</tbody>
</table>

Establish SLC:

SAMC has proposed to establish an SLC for NO\textsubscript{x} emissions from emergency engines C-1059-3, -4, -5, -21, -22, -23, and -25. The SLC will be set equal to a value that maintains SAMC’s annual NO\textsubscript{x} emissions below the Major Source threshold of 20,000 lb/year. The SLC will be calculated by summing the annual NO\textsubscript{x} emissions from the units at the facility not included in this SLC and subtracting that amount from 19,999 lb-NO\textsubscript{x}/year.

\[
\text{NO\textsubscript{x} SLC (lb/year)} = 19,999 \text{ lb-NO\textsubscript{x}/year} - 12,767 \text{ lb-NO\textsubscript{x}/year} = 7,232 \text{ lb-NO\textsubscript{x}/year}
\]

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 SSPE was previously calculated in Project C-1110642. No emissions units at this facility have been modified to adjust emissions since this project. The SSPE2 from Project C-1110642 will be used as the SSPE1 for this project.

<table>
<thead>
<tr>
<th>Pre Project Stationary Source Potential to Emit [SSPE1] (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit Unit</td>
</tr>
<tr>
<td>SSPE1 Permit Unit</td>
</tr>
<tr>
<td>Total ERC</td>
</tr>
<tr>
<td>SSPE1</td>
</tr>
</tbody>
</table>

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.
SAMC has proposed to establish an SLC for NO\textsubscript{X} emissions from emergency engines C-1059-3, -4, -5, -21, -22, -23, and -25.

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NO\textsubscript{X}</th>
<th>SO\textsubscript{X}</th>
<th>PM\textsubscript{10}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1059-2-3\textsuperscript{1}</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C-1059-3-0 (project)</td>
<td>7,232</td>
<td>228</td>
<td>251</td>
<td>763</td>
<td>285</td>
</tr>
<tr>
<td>C-1059-4-0 (project)</td>
<td>2</td>
<td>32</td>
<td>110</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>C-1059-5-0 (project)</td>
<td>1</td>
<td>64</td>
<td>59</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>C-1059-25-0 (project)</td>
<td>1</td>
<td>17</td>
<td>197</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>C-1059-12-3</td>
<td>315</td>
<td>72</td>
<td>10</td>
<td>630</td>
<td>36</td>
</tr>
<tr>
<td>C-1059-17-0</td>
<td>166</td>
<td>0</td>
<td>12</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td>C-1059-18-1</td>
<td>24</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>C-1059-19-0</td>
<td>12,262</td>
<td>877</td>
<td>4,598</td>
<td>73,572</td>
<td>5,334</td>
</tr>
<tr>
<td>C-1059-20-0</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C-1059-24-0\textsuperscript{2}</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>SSPE2\textsubscript{Permit Unit}</td>
<td>19,999</td>
<td>1,182</td>
<td>5,103</td>
<td>75,632</td>
<td>5,933</td>
</tr>
<tr>
<td>ERC C-456-1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,637</td>
</tr>
<tr>
<td>ERC C-456-2</td>
<td>16,245</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>ERC C-456-3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>25,796</td>
<td>0</td>
</tr>
<tr>
<td>Total\textsubscript{ERC}</td>
<td>16,245</td>
<td>0</td>
<td>0</td>
<td>25,796</td>
<td>2,637</td>
</tr>
<tr>
<td>SSPE2</td>
<td>36,244</td>
<td>1,182</td>
<td>5,103</td>
<td>101,428</td>
<td>8,570</td>
</tr>
</tbody>
</table>

\textsuperscript{1} C-1059-2 is only operated when C-1059-19 and '-20 are down for maintenance or during breakdown of these units. Therefore, only the greater of the PE from either '-2 or '-19 and '-20 counts toward the SSPE since these units cannot all be operated simultaneously. Therefore the emissions from '-2 will not be used to calculate the SSPE.

\textsuperscript{2} C-1059-24 is only operated when C-1059-19 and '-20 are down for maintenance or during breakdown of these units. Therefore, only the greater of the PE from either '-24 or '-19 and '-20 counts toward the SSPE since these units cannot all be operated simultaneously. Therefore the emissions from '-24 will not be used to calculate the SSPE.

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
As seen in Section VII.C.3 & VII.C.4 above, this facility contains ERCs that have been banked at the source and which have not been used on-site; therefore, an adjusted Stationary Source Potential to Emit (SSPE_{\text{Permit Unit}}) will be used to determine major source status.

<table>
<thead>
<tr>
<th>Major Source Determination (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{X}</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>Adjusted SSPE\textsubscript{1}{\text{Permit Unit}}</td>
</tr>
<tr>
<td>Adjusted SSPE\textsubscript{2}{\text{Permit Unit}}</td>
</tr>
<tr>
<td>Major Source Threshold</td>
</tr>
<tr>
<td>Major Source?</td>
</tr>
</tbody>
</table>

As seen in the table above, the facility previously exceeded the Major Source threshold for NO\textsubscript{X} emissions; however the modification proposed in this project will result in a SSPE2 that is below the Major Source threshold for all criteria pollutants. Therefore, this facility is not a Major Source.

**Rule 2410 Major Source Determination:**

The facility is not an existing major source for PSD for at least one 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

As shown in Section VII.C.5 above, the facility is not a Major Source for any pollutant.

Therefore BE = PE\textsubscript{1}. 
As calculated in Section VII.C.1 above, PE1s are summarized in the following table:

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NO\textsubscript{X}</th>
<th>SO\textsubscript{X}</th>
<th>PM\textsubscript{10}</th>
<th>PM\textsubscript{2.5}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1059-3-2</td>
<td>389</td>
<td>0</td>
<td>27</td>
<td>27</td>
<td>99</td>
<td>90</td>
</tr>
<tr>
<td>C-1059-4-2</td>
<td>389</td>
<td>0</td>
<td>27</td>
<td>27</td>
<td>99</td>
<td>90</td>
</tr>
<tr>
<td>C-1059-5-2</td>
<td>3,530</td>
<td>228</td>
<td>251</td>
<td>251</td>
<td>763</td>
<td>285</td>
</tr>
<tr>
<td>C-1059-21-2</td>
<td>1,713</td>
<td>2</td>
<td>32</td>
<td>32</td>
<td>110</td>
<td>41</td>
</tr>
<tr>
<td>C-1059-22-2</td>
<td>608</td>
<td>1</td>
<td>64</td>
<td>64</td>
<td>59</td>
<td>4</td>
</tr>
<tr>
<td>C-1059-23-2</td>
<td>608</td>
<td>1</td>
<td>64</td>
<td>64</td>
<td>59</td>
<td>4</td>
</tr>
<tr>
<td>C-1059-25-0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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 facility is not a major source for any of the pollutants addressed in this project, this project does not constitute an SB 288 major modification.

8. Federal Major Modification

District Rule 2201, Section 3.18 states that Federal Major Modifications are the same as "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

Since this facility is not a Major Source for any pollutants, this project does not constitute a Federal Major Modification. Additionally, since the facility is not a major source for PM\textsubscript{10} (140,000 lb/year), it is not a major source for PM\textsubscript{2.5} (200,000 lb/year).

9. Rule 2410 - Prevention of Significant Deterioration (PSD) Applicability Determination

The project potential to emit, by itself, will not exceed any PSD major source thresholds. Therefore Rule 2410 is not applicable and no further discussion is required.
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 two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two 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.

a. New emissions units – PE > 2 lb/day

Unit -25-0:

As seen in Section VII.C.2 above, the applicant is proposing to install a new diesel-fired IC engine with a PE greater than 2 lb/day for NOX, PM10, CO, and VOC. BACT is triggered for NOX, PM10, and VOC only since the PEs are greater than 2 lb/day. However BACT is not triggered for CO since the SSPE2 for CO is not greater than 200,000 lb/year, as demonstrated in Section VII.C.5 above.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.
c. Modification of emissions units – AIPE > 2 lb/day

Units -3-2, -4-2, -5-2, -21-2, -22-2, and -23-2:

AIPE = PE2 – HAPE

Where,

\[ AIPE = \text{Adjusted Increase in Permitted Emissions, (lb/day)} \]
\[ PE2 = \text{Post-Project Potential to Emit, (lb/day)} \]
\[ HAPE = \text{Historically Adjusted Potential to Emit, (lb/day)} \]

\[ HAPE = PE1 \times \left( \frac{EF2}{EF1} \right) \]

Where,

\[ PE1 = \text{The emissions unit's PE prior to modification or relocation, (lb/day)} \]
\[ EF2 = \text{The emissions unit's permitted emission factor for the pollutant after modification or relocation. If } EF2 \text{ is greater than } EF1 \text{ then } EF2/EF1 \text{ shall be set to 1} \]
\[ EF1 = \text{The emissions unit's permitted emission factor for the pollutant before the modification or relocation} \]

\[ AIPE = PE2 - (PE1 \times \left( \frac{EF2}{EF1} \right)) \]

The proposed modifications to the existing engines in this project will not result in any changes to the daily and annual operating schedule, or the emission factor. Therefore AIPE will be equal to 0 for all existing engines in this project and BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 and/or Federal Major Modification for NO\textsubscript{x} emissions. Therefore BACT is not triggered for any pollutant.

2. BACT Guideline

Unit -25-0:

BACT Guideline 3.1.3, applies to the diesel-fired emergency IC engines greater than 400 horsepower. [Emergency Diesel I.C. Engine ≥ 400 hp] (See Appendix C)
3. Top-Down BACT Analysis

Unit -25-0:

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 C of this report, BACT is satisfied with:

- **NOx:** Latest Available Tier Certification level for applicable horsepower*
- **VOC:** Latest Available Tier Certification level for applicable horsepower*
- **PM$_{10}$:** 0.15 g/bhp-hr

*Note: The certification requirements for emergency engines are as follows: 50 ≤ bhp < 75 – Tier 4; 75 ≤ bhp < 750 – Tier 3; ≥ 750 bhp – Tier 2.

B. Offsets

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

C. Public Notification

1. Applicability

Public noticing is required for:

a. **New Major Sources, SB288 Major Modifications, and 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, respectively.

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

As calculated in Section VII.C.2, daily emissions for NOx and CO from the new engine (unit -25-0) are greater than 100 lb/day.
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 is the only emissions source that will generate an increase in Potential to Emit. Since the proposed engine emissions are well 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.

2. **Public Notice Action**

As demonstrated above, this project will require public noticing. 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 ATCs for the equipment in this project.

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 the ATCs to ensure compliance:

All engines in this project will be included in an annual NO\textsubscript{X} emission SLC of 7,232 lb-NO\textsubscript{X}/year. The following condition will be added to all engines in this project to ensure compliance:

- Combine annual NO\textsubscript{X} emissions from units -3, -4, -5, -21, -22, -23, and -25 shall not exceed 7,232 lb-NO\textsubscript{X}/year. [District Rule 2201]

**Existing Engines -3 and -4:**

- Emissions from this IC engine shall not exceed any of the following limits: 0.013 lb-NO\textsubscript{X}/bhp-hr, 0.0033 lb-CO/bhp-hr, or 0.003 lb-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

- Emissions from this IC engine shall not exceed 0.0009 lb-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rule 2201 and 17 CCR 93115]
Existing Engine -5:

- Emissions from this IC engine shall not exceed any of the following limits: 0.031 lb-NOx/bhp-hr, 0.0033 lb-CO/bhp-hr, or 0.0025 lb-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

- Emissions from this IC engine shall not exceed 0.0022 lb-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rule 2201 and 17 CCR 93115]

Existing Engine -21:

- Emissions from this IC engine shall not exceed any of the following limits: 5.46 g-NOx/bhp-hr, 0.35 g-CO/bhp-hr, or 0.13 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

- Emissions from this IC engine shall not exceed 0.103 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]

Existing Engines -22 and -23:

- Emissions from this IC engine shall not exceed any of the following limits: 5.68 g-NOx/bhp-hr, 0.55 g-CO/bhp-hr, or 0.04 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

- Emissions from this IC engine shall not exceed 0.06 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]

New Engine -25:

- Emissions from this IC engine shall not exceed any of the following limits: 3.83 g-NOx/bhp-hr, 1.19 g-CO/bhp-hr, or 0.20 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

- Emissions from this IC engine shall not exceed 0.10 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]
All engines in this project are required to only be fired on CARB certified diesel fuel containing no more than 0.0015% sulfur by weight. The following condition will be added to all engines in this project to ensure compliance.

- 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 is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions are listed on the permit to operate:

- The permittee shall maintain records of the combined annual NOX emissions of units -3, -4, -5, -21, -22, -23, and -25. [District Rule 2201]

- 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]

- The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

- 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]
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 E of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO\textsubscript{X}, CO, and SO\textsubscript{X}. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO\textsubscript{X}, CO, or SO\textsubscript{X}.

The proposed location is in a non-attainment area for the state's PM\textsubscript{10} as well as federal and state PM\textsubscript{2.5} thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM\textsubscript{10} and PM\textsubscript{2.5}.

Rule 2520  Federally Mandated Operating Permits

Since this facility's potential to emit does not exceed any major source thresholds of Rule 2201, this facility is not a major source, and Rule 2520 does not apply.

Rule 4001  New Source Performance Standards (NSPS)

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

The District has not been delegated the authority to implement Subpart III requirements for non-Major Sources; therefore, no requirements shall be included on the permit.
Rule 4002 National Emission Standards for Hazardous Air Pollutants


The District has not been delegated the authority to implement NESHAP regulations for Area Source requirements for non-Major Sources; therefore, no requirements shall be included on the permit.

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 ATCs 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 all ATCs 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 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.

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (Appendix E), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.
The cancer risk for this project is shown below:

<table>
<thead>
<tr>
<th>RMR Summary</th>
<th>Emergency Diesel ICE (Unit 25-0)</th>
<th>Project Totals</th>
<th>Facility Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prioritization Score</td>
<td>N/A^1</td>
<td>N/A^1</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Acute Hazard Index</td>
<td>N/A^2</td>
<td>N/A^2</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Chronic Hazard Index</td>
<td>N/A^2</td>
<td>N/A^2</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Maximum Individual Cancer Risk</td>
<td>3.75E-06</td>
<td>3.75E-06</td>
<td>&lt;20E-06</td>
</tr>
<tr>
<td>T-BACT Required?</td>
<td>Yes-PM10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Permit Conditions?</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 Hazard Index was 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.

**Discussion of T-BACT**

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is required for this project because the HRA indicates that the risk is above the District’s thresholds for triggering T-BACT requirements.

For this project T-BACT is triggered for PM\textsubscript{10}. T-BACT is satisfied with BACT for PM\textsubscript{10} (see Appendix C), which is PM\textsubscript{10} emissions of 0.15 g/bhp-hr or less; therefore, compliance with the District’s Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District’s significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 10 in a million). As outlined by the HRA Summary in Appendix E of this report, the emissions increases for this project was determined to be less than significant.

The following conditions will be added to permit unit -25-0 as a result of the RMR results:

- Emissions from this IC engine shall not exceed 0.10 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]
• {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]

• 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 50 hours per calendar year. [District Rules 4102, 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 $\text{PM}_{10}$ emission factor of 0.4 g-$\text{PM}_{10}$/bhp-hr.

\[
0.1 \frac{\text{grain}}{\text{dscf}} \times \frac{g}{15.43 \text{grain}} \times \frac{1 \text{Btu}_{\text{in}}}{0.35 \text{Btu}_{\text{out}}} \times \frac{9.05 \text{dscf}}{10^6 \text{Btu}} \times \frac{2.5425 \text{Btu}}{1 \text{bhp-hr}} \times \frac{0.96 \text{g} - \text{PM}_{10}}{1 \text{g} - \text{PM}} = 0.4 \frac{\text{g} - \text{PM}_{10}}{\text{bhp-hr}}
\]

The following table compares the $\text{PM}_{10}$ emission factors of the engines with the converted rule limit of 0.4 g-$\text{PM}_{10}$/bhp-hr.

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>$\text{PM}_{10}$ EF (lb/bhp-hr)</th>
<th>$\text{PM}_{10}$ EF (g/bhp-hr)</th>
<th>$\text{PM}_{10}$ EF &gt; than 0.4 g/bhp-hr?</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1059-3</td>
<td>0.0009</td>
<td>0.4</td>
<td>No</td>
</tr>
<tr>
<td>C-1059-4</td>
<td>0.0009</td>
<td>0.4</td>
<td>No</td>
</tr>
<tr>
<td>C-1059-5</td>
<td>0.0022</td>
<td>0.1</td>
<td>No</td>
</tr>
<tr>
<td>C-1059-21</td>
<td>--</td>
<td>0.103</td>
<td>No</td>
</tr>
<tr>
<td>C-1059-22</td>
<td>--</td>
<td>0.06</td>
<td>No</td>
</tr>
<tr>
<td>C-1059-23</td>
<td>--</td>
<td>0.06</td>
<td>No</td>
</tr>
<tr>
<td>C-1059-25</td>
<td>--</td>
<td>0.10</td>
<td>No</td>
</tr>
</tbody>
</table>

As shown in the table above, none of the engines in this project will exceed the PM concentration limit of this rule. The following condition will be added to the ATCs to ensure compliance with this rule.

• {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 (NOx), 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 engines in this project 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 for emergency engines, compliance with District Rule 4702 requirements will satisfy requirements of District Rule 4701.

Rule 4702 Internal Combustion Engines

The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SOx) from internal combustion engines. This rule applies to any internal combustion engine rated at 25 brake horsepower or greater.

The following summarizes District Rule 4702 Requirements for emergency standby IC engines:

1. Operation of emergency standby engines is limited to 100 hours or less per calendar year for non-emergency purposes. The Air Toxic Control Measure for Stationary Compression Ignition Engines (Stationary ATCM) limits the maintenance and testing of units -3, -4, -5, and -21 to 40 hours/year and units -22, -23, and -25 to 50 hours/year; therefore, compliance is expected. The following conditions will be included on the permits:

   Units -3, -4, -5, and -21:

   - 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 40 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]
Units -22, -23, and -25:

- 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 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

2. Properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier. The following condition will be included on the permits:

- {4261} 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]

3. Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier. The following condition will be included on the permits:

- {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]

4. Install and operate a nonresettable elapsed time meter. In lieu of installing a nonresettable elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA and is allowed by Permit-to-Operate condition. The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions.

The following condition shall be used:

- {4749} This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]
5. 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. The following conditions will be included on the permit:

- \(3807\) 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]

6. Records of the total hours of operation, type of fuel used, purpose for operating the engine, all hours of non-emergency and emergency operation, and other support 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. The following conditions will be included on the permits:

- \(3496\) 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]

- \(4263\) 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 Rule 4702 and 17 CCR 93115]
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:

\[
\text{Volume SO}_2 = \left( n \times R \times \frac{T}{P} \right) \text{ ft}^3
\]

\[
n = \text{moles SO}_2
\]

\[
T \text{ (standard temperature)} = 60 \, ^\circ\text{F} \text{ or } 520 \, ^\circ\text{R}
\]

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

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

Since 1.0 ppmv is ≤ 2,000 ppmv, this engines are 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 this engine is not 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 requirements apply to in-use engines (those installed before 1/1/05):

<table>
<thead>
<tr>
<th>Title 17 CCR Section 93115 Requirements for In-Use Emergency IC Engines Powering Electrical Generators</th>
<th>Proposed Method of Compliance with Title 17 CCR Section 93115 Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency engine(s) must be fired on CARB diesel fuel, or an approved alternative diesel fuel.</td>
<td>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.</td>
</tr>
</tbody>
</table>
40 annual hours of operation are allowed for maintenance and testing purposes at a health facility if the diesel PM emission rate is greater than 0.15 g/bhp-hr but less than or equal to 0.40 g/bhp-hr.

50 annual hours of operation are allowed for maintenance and testing purposes if the diesel PM emission rate is less than or equal to 0.15 g/bhp-hr.

The following conditions will be included on the permits depending on their PM\textsubscript{10} emission factor:

- \{4777\} 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 40 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

- \{4777\} 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 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

Engines, with a PM\textsubscript{10} 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.

The District has verified that this engine is not located within 500' of a school.

A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed upon engine installation, or by no later than January 1, 2005, on all engines subject to all or part of the requirements of sections 93115.6, 93115.7, or 93115.8(a) unless the District determines on a case-by-case basis that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history.

The following condition will be included on the permit:

- \{4749\} This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]
An owner or operator shall maintain monthly records of the following: emergency use hours of operation; maintenance and testing hours of 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.

Permit conditions enforcing these requirements were shown earlier in the evaluation.

The following requirements apply to new engines (those installed after 1/1/05):

<table>
<thead>
<tr>
<th>Title 17 CCR Section 93115 Requirements for New Emergency IC Engines Powering Electrical Generators</th>
<th>Proposed Method of Compliance with Title 17 CCR Section 93115 Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency engine(s) must be fired on CARB diesel fuel, or an approved alternative diesel fuel.</td>
<td>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.</td>
</tr>
<tr>
<td>The engine(s) must meet the emission standards in Table 1 of the ATCM for the specific power rating and model year of the proposed engine.</td>
<td>The applicant has proposed the use of engine(s) that are certified to the latest EPA Tier Certification standards for the applicable horsepower range, guaranteeing compliance with the emission standards of the ATCM. Additionally, the proposed diesel PM emissions rate is less than or equal to 0.15 g/bhp-hr.</td>
</tr>
<tr>
<td>The engine may not be operated more than 50 hours per year for maintenance and testing purposes.</td>
<td>The following condition will be included on the permit:</td>
</tr>
<tr>
<td>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</td>
<td>• {4777} 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 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]</td>
</tr>
</tbody>
</table>

The District has verified that this engine is not located within 500' of a school.
A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed upon engine installation, or by no later than January 1, 2005, on all engines subject to all or part of the requirements of sections 93115.6, 93115.7, or 93115.8(a) unless the District determines on a case-by-case basis that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator’s compliance history.

The following condition will be included on the permit:

- {4749} This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator’s compliance history. [District Rule 4702 and 17 CCR 93115]

An owner or operator shall maintain monthly records of the following: emergency use hours of operation; maintenance and testing hours of 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.

Permit conditions enforcing these requirements were shown earlier in the evaluation.

### California Environmental Quality Act (CEQA)

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 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; and
- 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.
Greenhouse Gas (GHG) Significance Determination

District is a Lead Agency & GHG emissions increases are from the combustion of fossil fuel other than jet fuels

It is determined that no other agency has prepared or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

On December 17, 2009, the District's Governing Board adopted a policy, APR 2005, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency, for addressing GHG emission impacts when the District is Lead Agency under CEQA and approved the District's guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. Under this policy, the District's determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change. Consistent with District Policy 2005, projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emission.

The California Air Resources Board (ARB) adopted a Cap-and-Trade regulation as part one of the strategies identified for AB 32. This Cap-and-Trade regulation is a statewide plan, supported by a CEQA compliant environmental review document, aimed at reducing or mitigating GHG emissions from targeted industries. Facilities subject to the Cap-and-Trade regulation are subject to an industry-wide cap on overall GHG emissions. Any growth in emissions must be accounted for under that cap such that a corresponding and equivalent reduction in emissions must occur to allow any increase. Further, the cap decreases over time, resulting in an overall decrease in GHG emissions.

Under District policy APR 2025, CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation, the District finds that the Cap-and-Trade is a regulation plan approved by ARB, consistent with AB32 emission reduction targets, and supported by a CEQA compliant environmental review document. As such, consistent with District Policy 2005, projects complying project complying with Cap-and-Trade requirements are determined to have a less than significant individual and cumulative impact for GHG emissions.

The GHG emissions increases associated with this project result from the combustion of fossil fuel(s), other than jet fuel, delivered from suppliers subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with
District Policies APR 2005 and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.

**District CEQA Findings**

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

**IX. Recommendation**

Pending a successful NSR Public Noticing period, issue Authority to Construct permits C-1059-3-2, -4-2, -5-2, -21-2, -22-2, -23-2, and -25-0 subject to the permit conditions on the attached draft Authority to Construct permits in Appendix A.

**X. Billing Information**

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Fee Schedule</th>
<th>Fee Description</th>
<th>Fee Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1059-3-2</td>
<td>3020-10-D</td>
<td>749 bhp IC engine</td>
<td>$502</td>
</tr>
<tr>
<td>C-1059-4-2</td>
<td>3020-10-D</td>
<td>749 bhp IC engine</td>
<td>$502</td>
</tr>
<tr>
<td>C-1059-5-2</td>
<td>3020-10-F</td>
<td>2,847 bhp IC engine</td>
<td>$785</td>
</tr>
<tr>
<td>C-1059-21-2</td>
<td>3020-10-F</td>
<td>2,847 bhp IC engine</td>
<td>$785</td>
</tr>
<tr>
<td>C-1059-22-2</td>
<td>3020-10-E</td>
<td>972 bhp IC engine</td>
<td>$631</td>
</tr>
<tr>
<td>C-1059-23-2</td>
<td>3020-10-E</td>
<td>972 bhp IC engine</td>
<td>$631</td>
</tr>
<tr>
<td>C-1059-25-0</td>
<td>3020-10-F</td>
<td>1,502 bhp IC engine</td>
<td>$785</td>
</tr>
</tbody>
</table>
Appendixes

A. Draft ATCs
B. Current PTOs
C. BACT Guideline and BACT Analysis
D. Emissions Data Sheet
E. RMR Summary and AAQA
Appendix A
Draft ATCs
AUTHORITY TO CONSTRUCT

PERMIT NO: C-1059-3-2

LEGAL OWNER OR OPERATOR: SAINT AGNES MEDICAL CENTER
MAILING ADDRESS: 1303 E HERNDON AVE
FRESNO, CA 93720

LOCATION: 1360 E HERNDON AVE
FRESNO, CA 93720

EQUIPMENT DESCRIPTION: MODIFICATION OF 749 BHP CATERPILLAR 3412 (S/N 81210682) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #4): ESTABLISH AN ANNUAL NOX SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, AND -25

CONDITIONS

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

2. 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]

3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

4. 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]

5. This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]

6. 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]

7. Combine annual NOx emissions from units -3, -4, -5, -21, -22, -23, and -25 shall not exceed 7,232 lb-NOx/year. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061
8. Emissions from this IC engine shall not exceed any of the following limits: 0.013 lb-NOx/bhp-hr, 0.0033 lb-CO/bhp-hr, or 0.003 lb-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

9. Emissions from this IC engine shall not exceed 0.0009 lb-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rule 2201 and 17 CCR 93115]

10. {4261} 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]

11. {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]

12. {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]

13. {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]

14. {3496} 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]

15. 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 40 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

16. The permittee shall maintain records of the combined annual NOx emissions of units -3, -4, -5, -21, -22, -23, and -25. [District Rule 2201]

17. {4263} The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

18. {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 Rule 4702 and 17 CCR 93115]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-1059-4-2
LEGAL OWNER OR OPERATOR: SAINT AGNES MEDICAL CENTER
MAILING ADDRESS: 1303 E HERNDON AVE
                  FRESNO, CA 93720
LOCATION: 1360 E HERNDON AVE
           FRESNO, CA 93720

EQUIPMENT DESCRIPTION:
MODIFICATION OF 749 BHP CATERPILLAR 3412 (S/N 81210671) DIESEL-FIRED EMERGENCY STANDBY IC ENGINE
POWERING AN ELECTRICAL GENERATOR (ENGINE #5): ESTABLISH AN ANNUAL NOX SLC CONSISTING OF
UNITS -3, -4, -5, -21, -22, -23, AND -25

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {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]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {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]
5. {4749} This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999
   hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is
   appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District
   Rule 4702 and 17 CCR 93115]
6. {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]
7. Combine annual NOx emissions from units -3, -4, -5, -21, -22, -23, and -25 shall not exceed 7,232 lb-NOx/year.
   [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 Marjollet - Director of Permit Services
C-1059-4-2 - Jul 14 2015 10:24AM - FUKUOAD - Joint Inspection NOT Required

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061
8. Emissions from this IC engine shall not exceed any of the following limits: 0.013 lb-NOx/bhp-hr, 0.0033 lb-CO/bhp-hr, or 0.003 lb-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

9. Emissions from this IC engine shall not exceed 0.0009 lb-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rule 2201 and 17 CCR 93115]

10. 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]

11. 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]

12. 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]

13. 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]

14. 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]

15. 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 40 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

16. The permittee shall maintain records of the combined annual NOx emissions of units -3, -4, -5, -21, -22, -23, and -25. [District Rule 2201]

17. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

18. 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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-1059-5-2

LEGAL OWNER OR OPERATOR: SAINT AGNES MEDICAL CENTER
MAILING ADDRESS:
1303 E HERNDON AVE
FRESNO, CA 93720

LOCATION: 1360 E HERNDON AVE
FRESNO, CA 93720

EQUIPMENT DESCRIPTION:
MODIFICATION OF 2,847 BHP CATERPILLAR 3516 (S/N 4XF00332) DIESEL-FIRED EMERGENCY STANDBY IC
ENGINE POWERING AN ELECTRICAL GENERATOR (ENGINE #3) : ESTABLISH AN ANNUAL NOX SLC CONSISTING
OF UNITS -3, -4, -5, -21, -22, -23, AND -25

CONDITIONS

1. (98) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. (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]
3. (14) Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. (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]
5. (4749) This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999
   hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is
   appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District
   Rule 4702 and 17 CCR 93115]
6. (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]
7. Combine annual NOx emissions from units -3, -4, -5, -21, -22, -23, and -25 shall not exceed 7,232 lb-NOx/year.
   [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 Marjollet, Director of Permit Services
C-1059-5-2 Jul 14 2015 10:24AM — FUKUDAD  Joint Inspection NOT Required

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061
8. Emissions from this IC engine shall not exceed any of the following limits: 0.031 lb-NOx/bhp-hr, 0.0033 lb-CO/bhp-hr, or 0.0025 lb-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

9. Emissions from this IC engine shall not exceed 0.0022 lb-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rule 2201 and 17 CCR 93115]

10. 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]

11. 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 emissions 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]

12. 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]

13. 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]

14. 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]

15. 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 40 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

16. The permittee shall maintain records of the combined annual NOx emissions of units -3, -4, -5, -21, -22, -23, and -25. [District Rule 2201]

17. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

18. 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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-1059-21-2
LEGAL OWNER OR OPERATOR: SAINT AGNES MEDICAL CENTER
MAILING ADDRESS: 1303 E HERNDON AVE
FRESNO, CA 93720

LOCATION: 1360 E HERNDON AVE
FRESNO, CA 93720

EQUIPMENT DESCRIPTION:
MODIFICATION OF 2,847 BHP CATERPILLAR MODEL 3516B DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR: ESTABLISH AN ANNUAL NOX SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, AND -25

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

2. {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]

3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

4. {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]

5. {4749} This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]

6. {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]

7. Combine annual NOx emissions from units -3, -4, -5, -21, -22, -23, and -25 shall not exceed 7,232 lb-NOx/year. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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
8. Emissions from this IC engine shall not exceed any of the following limits: 5.46 g-NOx/bhp-hr, 0.35 g-CO/bhp-hr, or 0.13 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

9. Emissions from this IC engine shall not exceed 0.103 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]

10. 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]

11. 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 emissions 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]

12. 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]

13. 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]

14. 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]

15. 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 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

16. The permittee shall maintain records of the combined annual NOx emissions of units -3, -4, -5, -21, -22, -23, and -25. [District Rule 2201]

17. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

18. 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]
San Joaquin Valley  
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-1059-22-2

LEGAL OWNER OR OPERATOR: SAINT AGNES MEDICAL CENTER
MAILING ADDRESS: 1303 E HERNDON AVE
                  FRESNO, CA 93720
LOCATION: 1360 E HERNDON AVE
           FRESNO, CA 93720

EQUIPMENT DESCRIPTION:
MODIFICATION OF 972 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR: ESTABLISH AN ANNUAL NOX SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, AND -25

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {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]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {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]
5. {4749} This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]
6. {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]
7. Combine annual NOx emissions from units -3, -4, -5, -21, -22, -23, and -25 shall not exceed 7,232 lb-NOx/year. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 Marjollet, Director of Permit Services
C-1059-22-2: Jul 14 2015 10:24AM - FUKUDAD - Joint Inspection NOT Required
8. Emissions from this IC engine shall not exceed any of the following limits: 5.68 g-NOx/bhp-hr, 0.55 g-CO/bhp-hr, or 0.04 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

9. Emissions from this IC engine shall not exceed 0.06 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]

10. 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]

11. 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 emissions 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]

12. 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]

13. 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]

14. 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]

15. 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 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

16. The permittee shall maintain records of the combined annual NOx emissions of units -3, -4, -5, -21, -22, -23, and -25. [District Rule 2201]

17. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

18. 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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-1059-23-2

LEGAL OWNER OR OPERATOR: SAINT AGNES MEDICAL CENTER
MAILING ADDRESS: 1303 E HERNDON AVE
                 FRESNO, CA 93720

LOCATION: 1360 E HERNDON AVE
           FRESNO, CA 93720

EQUIPMENT DESCRIPTION:
MODIFICATION OF 972 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE
POWERING AN ELECTRICAL GENERATOR: ESTABLISH AN ANNUAL NOX SLC CONSISTING OF UNITS -3, -4, -5, -21, -22, -23, AND -25

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. 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]
5. This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]
6. 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]
7. Combine annual NOx emissions from units -3, -4, -5, -21, -22, -23, and -25 shall not exceed 7,232 lb-NOx/year. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 Marjollet, Director of Permit Services
C-1059-23-2 Jul 14 2015 10:24AM - FUKAIADJoint Inspection NOT Required
Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061
8. Emissions from this IC engine shall not exceed any of the following limits: 5.68 g-NOx/bhp-hr, 0.55 g-CO/bhp-hr, or 0.04 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

9. Emissions from this IC engine shall not exceed 0.06 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]

10. 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]

11. 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]

12. 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]

13. 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]

14. 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]

15. 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 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

16. The permittee shall maintain records of the combined annual NOx emissions of units -3, -4, -5, -21, -22, -23, and -25. [District Rule 2201]

17. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

18. 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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-1059-25-0
LEGAL OWNER OR OPERATOR: SAINT AGNES MEDICAL CENTER
MAILING ADDRESS: 1303 E HERNDON AVE
                  FRESNO, CA 93720
LOCATION: 1360 E HERNDON AVE
           FRESNO, CA 93720

EQUIPMENT DESCRIPTION:
1,502 BHP (INTERMITTENT) CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY
IC ENGINE POWERING AN ELECTRICAL GENERATOR

CONDITIONS

1. (98) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. (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]
3. (14) Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. (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]
5. (4749) This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999
   hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is
   appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District
   Rule 4702 and 17 CCR 93115]
6. (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]
7. Combine annual NOx emissions from units -3, -4, -5, -21, -22, -23, and -25 shall not exceed 7,232 lb-NOx/year.
   [District Rule 2201]
8. Emissions from this IC engine shall not exceed any of the following limits: 3.83 g-NOx/bhp-hr, 1.19 g-CO/bhp-hr, or
   0.20 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 Marjollek, Director of Permit Services
Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061
9. Emissions from this IC engine shall not exceed 0.10 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]

10. 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]

11. 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]

12. 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]

13. 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]

14. 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]

15. 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 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

16. The permittee shall maintain records of the combined annual NOx emissions of units -3, -4, -5, -21, -22, -23, and -25. [District Rule 2201]

17. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

18. 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]
Appendix B
Current PTOs
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

2. 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]

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

4. 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]

5. 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]

6. 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]

7. Emissions from the engine shall not exceed any of the following levels: 0.0015 lb SOx/hp-hr, 0.013 lb NOx/hp-hr, or 0.0033 lb CO/hp-hr. [District Rule 2201]

8. 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 40 hours per calendar year. [District Rule 4702 and 17 CCR 93115]

9. 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]

10. 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]

11. 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]

12. 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]

13. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]
14. If this engine is located on the grounds of a K-12 school, or if this engine is located within 500 feet of the property boundary of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, between 7:30 a.m. and 3:30 p.m. on days when school is in session. [17 CCR 93115]

15. If this engine is located on the grounds of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, whenever there is a school sponsored activity. [17 CCR 93115]

16. 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]

These terms and conditions are part of the Facility-wide Permit to Operate.
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

2. 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]

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

4. 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]

5. 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]

6. 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]

7. Emissions from the engine shall not exceed any of the following levels: 0.0015 lb SOx/hp-hr, 0.013 lb NOx/hp-hr, or 0.0033 lb CO/hp-hr. [District NSR Rule]

8. 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 40 hours per calendar year. [District Rule 4702 and 17 CCR 93115]

9. 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]

10. 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]

11. 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]

12. 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]

13. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]
14. If this engine is located on the grounds of a K-12 school, or if this engine is located within 500 feet of the property boundary of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, between 7:30 a.m. and 3:30 p.m. on days when school is in session. [17 CCR 93115]

15. If this engine is located on the grounds of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, whenever there is a school sponsored activity. [17 CCR 93115]

16. 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]

These terms and conditions are part of the Facility-wide Permit to Operate.
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

2. 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]

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

4. 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]

5. 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]

6. 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]

7. Emissions from the engine shall not exceed any of the following limits: 0.0022 lb PM10/hp-hr, 0.0020 lb SOx/hp-hr, 0.031 lb NOx/hp-hr, 0.0067 lb CO/hp-hr, or 0.0025 lb VOC/hp-hr. [District NSR Rule]

8. 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 40 hours per calendar year. [District Rule 4702 and 17 CCR 93115]

9. 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]

10. 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]

11. 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]

12. 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]

13. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]
14. If this engine is located on the grounds of a K-12 school, or if this engine is located within 500 feet of the property boundary of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, between 7:30 a.m. and 3:30 p.m. on days when school is in session. [17 CCR 93115]

15. If this engine is located on the grounds of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, whenever there is a school sponsored activity. [17 CCR 93115]

16. 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]
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

2. 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]

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

4. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]

5. 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]

6. 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]

7. 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]

8. 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]

9. NOx emissions shall not exceed 5.46 g/hp-hr. [District Rule 2201]

10. The PM10 emissions rate shall not exceed 0.103 g/hp-hr. [District Rule 4102]

11. 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 50 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart III]

12. 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]

13. 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]

14. 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]
15. 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]

16. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

17. If this engine is located on the grounds of a K-12 school, or if this engine is located within 500 feet of the property boundary of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, between 7:30 a.m. and 3:30 p.m. on days when school is in session. [17 CCR 93115]

18. If this engine is located on the grounds of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, whenever there is a school sponsored activity. [17 CCR 93115]

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]
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. 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]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
5. 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]
6. 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]
7. 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]
8. 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]
9. Emissions from this engine shall not exceed any of the following limits: 5.68 g-NOx/hp-hr, 0.55 g-CO/hp-hr, or 0.04g-VOC/hp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
10. The PM10 emissions rate shall not exceed 0.06 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
11. 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 50 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart III]
12. 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]
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14. 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]
15. 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]

16. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

17. 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]
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1059-23-0
EXPIRATION DATE: 04/30/2018

EQUIPMENT DESCRIPTION:
972 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. 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]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
5. 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]
6. 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]
7. 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]
8. 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]
9. Emissions from this engine shall not exceed any of the following limits: 5.68 g-NOx/hp-hr, 0.55 g-CO/hp-hr, or 0.04 g-VOC/hp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
10. The PM10 emissions rate shall not exceed 0.06 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
11. 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 50 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart III]
12. 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]
13. 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]
14. 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]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.
15. 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]

16. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

17. 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]
Appendix C
BACT Guideline and BACT Analysis
### San Joaquin Valley Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 3.1.1**  
**Last Update: 7/10/2009**  
**Emergency Diesel IC Engine**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Latest EPA Tier Certification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>level for applicable horsepower range*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOX</td>
<td>Latest EPA Tier Certification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>level for applicable horsepower range*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM10</td>
<td>0.15 g/bhp-hr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOX</td>
<td>Very low sulfur diesel fuel (15 ppmw sulfur or less)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>Latest EPA Tier Certification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>level for applicable horsepower range*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: The certification requirements are as follows: for emergency engines $50 \leq bhp < 75$ - Tier 4 Interim; for emergency engines $75 \leq bhp < 750$ - Tier 3; for emergency engines $750 \leq bhp$ - Tier 2.

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.
Unit C-1059-25-0:

Top Down BACT Analysis for the Emergency IC Engine

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\textsubscript{x}, VOC, and CO 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 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 applies 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).
Table 1: Emission Standards for New Stationary Emergency Standby Diesel-Fueled CI Engines g/bhp-hr (g/kW-hr)

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Tier</th>
<th>Model Year(s)</th>
<th>PM</th>
<th>NMHC+NOx</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 ≤ HP &lt; 75</td>
<td>2</td>
<td>2007</td>
<td>0.15 (0.20)</td>
<td>5.6 (7.5)</td>
<td>3.7 (5.0)</td>
</tr>
<tr>
<td>(37 ≤ kW &lt; 56)</td>
<td>4i</td>
<td>2008+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 ≤ HP &lt; 100</td>
<td>2</td>
<td>2007</td>
<td>0.15 (0.20)</td>
<td>5.6 (7.5)</td>
<td>3.7 (5.0)</td>
</tr>
<tr>
<td>(56 ≤ kW &lt; 75)</td>
<td>3</td>
<td>2008+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 ≤ HP &lt; 175</td>
<td>3</td>
<td>2007</td>
<td>0.15 (0.20)</td>
<td>3.0 (4.0)</td>
<td>3.7 (5.0)</td>
</tr>
<tr>
<td>(75 ≤ kW &lt; 130)</td>
<td></td>
<td>2008+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>175 ≤ HP &lt; 300</td>
<td>3</td>
<td>2007</td>
<td>0.15 (0.20)</td>
<td>3.0 (4.0)</td>
<td>2.6 (3.5)</td>
</tr>
<tr>
<td>(130 ≤ kW &lt; 225)</td>
<td></td>
<td>2008+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300 ≤ HP &lt; 600</td>
<td>3</td>
<td>2007</td>
<td>0.15 (0.20)</td>
<td>3.0 (4.0)</td>
<td>2.6 (3.5)</td>
</tr>
<tr>
<td>(225 ≤ kW &lt; 450)</td>
<td></td>
<td>2008+</td>
<td></td>
<td></td>
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<tr>
<td>600 ≤ HP &lt; 750</td>
<td>3</td>
<td>2007</td>
<td>0.15 (0.20)</td>
<td>3.0 (4.0)</td>
<td>2.6 (3.5)</td>
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<tr>
<td>(450 ≤ kW &lt; 560)</td>
<td></td>
<td>2008+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP &gt; 750</td>
<td>2</td>
<td>2007</td>
<td>0.15 (0.20)</td>
<td>4.8 (6.4)</td>
<td>2.6 (3.5)</td>
</tr>
<tr>
<td>(kW &gt; 560)</td>
<td></td>
<td>2008+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 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 1,502 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 NOx, VOC, and CO will be the use of an EPA Tier 2 certified engine. The applicant is proposing such a unit. Therefore, BACT will be satisfied.
2. BACT Analysis for PM$_{10}$ Emissions:

a. Step 1 - Identify all control technologies

BACT Guideline 3.1.1 identifies only the following option:

- 0.15 g/bhp-hr or the Latest EPA Tier Certification level for applicable horsepower range, whichever is more stringent. (ATCM)

The latest EPA Tier Certification level for an engine of the proposed model year and horsepower rating is Tier 2. Refer to the Top-Down BACT analysis for NOx for a discussion regarding the determination of the EPA Tier level to be considered.

Please note Tier 2, 3, or 4i IC engines do not have a PM emission standard that is more stringent than 0.15 g/hp-hr. Additionally, the ATCM requires a PM emission standard of 0.15 g/hp-hr for all new emergency diesel IC engines.

Therefore, a PM/PM10 emission standard of 0.15 g/hp-hr is required as BACT.

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 PM10 is emissions of 0.15 g/hp-hr or less. The applicant is proposing an engine that meets this requirement. Therefore, BACT will be satisfied.
Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

<table>
<thead>
<tr>
<th>MODEL YEAR</th>
<th>ENGINE FAMILY</th>
<th>DISPLACEMENT (liters)</th>
<th>FUEL TYPE</th>
<th>USEFUL LIFE (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>ACPX3L32.0ESW</td>
<td>32.0</td>
<td>Diesel</td>
<td>8000</td>
</tr>
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</table>

**SPECIAL FEATURES & EMISSION CONTROL SYSTEMS**

Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module

**TYPICAL EQUIPMENT APPLICATION**

Generator and Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, 13 CCR Section 2423):

<table>
<thead>
<tr>
<th>RATED POWER CLASS</th>
<th>EMISSION STANDARD CATEGORY</th>
<th>EXHAUST (g/kw-hr)</th>
<th>OPACITY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW &gt; 560 Tier 2</td>
<td>STD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>FEL</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>CERT</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**BE IT FURTHER RESOLVED:** That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 23 day of October 2009.

Annette Hebert, Chief
Mobile Source Operations Division
<table>
<thead>
<tr>
<th>Engine Family</th>
<th>1. Engine Code</th>
<th>2. Engine Model</th>
<th>(SAE Gross)</th>
<th>(for diesel only)</th>
<th>(SAE Gross)</th>
<th>torque</th>
<th>(lbft/hr)</th>
<th>peak torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACPXL32.0ESW</td>
<td>1 C32</td>
<td>133001500</td>
<td>462</td>
<td>466</td>
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<td>NA</td>
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<td>NA</td>
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<td>NA</td>
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<td>Engine Family</td>
<td>1. Engine Code</td>
<td>2. Engine Model</td>
<td>3. BHP@RPM (SAE Gross)</td>
<td>4. Fuel Rate: mm/stroke @ peak HP (for diesel only)</td>
<td>5. Fuel Rate: lbs/hr @ peak HP (for diesels only)</td>
<td>6. Torque @ RPM (SEA Gross)</td>
<td>7. Fuel Rate: mm/stroke@peak torque</td>
<td>8. Fuel Rate: lbs/hr@peak torque</td>
</tr>
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Appendix E
HRA Summary and AAQA
A. RMR SUMMARY

<table>
<thead>
<tr>
<th>Categories</th>
<th>Emergency Diesel ICE (Unit 25-0)</th>
<th>Project Totals</th>
<th>Facility Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritization Score</td>
<td>N/A(^1)</td>
<td>N/A(^1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Acute Hazard Index</td>
<td>N/A(^2)</td>
<td>N/A(^2)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Chronic Hazard Index</td>
<td>N/A(^2)</td>
<td>N/A(^2)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Maximum Individual Cancer Risk</td>
<td>3.75E-06</td>
<td>3.75E-6</td>
<td>&lt;20E-06</td>
</tr>
<tr>
<td>T-BACT Required?</td>
<td>Yes-PM10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Permit Conditions?</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 Hazard Index was 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 2-0**

1. The PM10 emissions rate shall not exceed 0.1 g/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201]
2. 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]
3. 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 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
B. RMR REPORT

I. Project Description

Technical Services received a request on June 29, 2015 to perform an Ambient Air Quality Analysis (AAQA) and a Risk Management Review (RMR) for one 1,502 bhp emergency diesel IC engine powering an electrical generator.

II. Analysis

Technical Services performed a screening level health risk assessment using the District’s Diesel Exhaust Risk Screening spreadsheet.

The following parameters were used for the review:

<table>
<thead>
<tr>
<th>Analysis Parameters (Unit 25-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Type</td>
</tr>
<tr>
<td>Stack Height (m)</td>
</tr>
<tr>
<td>Stack Diameter (m)</td>
</tr>
<tr>
<td>Stack Exit Velocity (m/s)</td>
</tr>
<tr>
<td>Stack Exit Temperature (K)</td>
</tr>
</tbody>
</table>

The 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.

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 3.75E-6; which is greater than 1.0 in a million. In accordance with the District's Risk Management Policy, the project is approved with Toxic Best Available Control Technology (T-BACT) for PM10.
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.

IV. Attachments

A. RMR request from the project engineer
B. Additional information from the applicant/project engineer
C. Stack Parameter Worksheet
D. DICE Screening Risk Tool
E. Facility Summary
F. AAQA Summary
G. AAQA Parameter Summary