



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

July 11, 2012

Mr. Gerardo Rios
Chief – Permits Office
U. S. EPA, Region IX
75 Hawthorne Street, Air 3
San Francisco, CA 94105

Dear Mr. Rios:

**Subject: San Antonio Community Hospital (ID 14437) – Title V Permit
Revision**

San Antonio Community Hospital (ID 14437) has proposed to revise their Title V permit under Application No. 529900 by the addition of a boiler and two emergency internal combustion engines. This is a hospital (SIC 8062) located at 999 San Bernardino Road, Upland, CA 91786. This proposed permit revision is considered as a “de minimis significant permit revision” to their Title V permit. Attached for your review are the evaluations and permits for the proposed revision. With your expected receipt of the proposed Title V permit revision today, we will note that the EPA 45-day review period begins on July 11, 2012.

If you have any questions or need additional information regarding the proposed permit revision, please call Vicky Lee of my staff at (909) 396-2284.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Brian L. Yeh', is written over a diagonal line.

Brian L. Yeh
Senior Manager
General Commercial and Energy Team
Engineering and Compliance

BLY:AYL:RGC:VL
Attachments

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

Facility Equipment and Requirements (Section D)

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Construct and Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.

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PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AND PERMITS TO OPERATE AT THIS FACILITY:

Application number	Permit to Operate number	Equipment description
00180B	E1867B	I C E (>500 HP) EM ELEC GEN DIESEL
00181B	E1868B	I C E (>500 HP) EM ELEC GEN DIESEL
01410E	E03670	I C E (>500 HP) EM ELEC GEN DIESEL
316290	D99731	I C E (>500 HP) EM ELEC GEN DIESEL
515684	G14079	I C E (>500 HP) EM ELEC GEN DIESEL
405718	F54693	SPRAY BOOTH PAINT AND SOLVENT
516182	G14080	BOILER (>20-50 MMBTU/HR) COMB GAS-DISTIL
516183	G14081	BOILER (>20-50 MMBTU/HR) COMB GAS-DISTIL
515682	G14077	I C E (>500 HP) N-EM STAT NAT GAS ONLY
457742	F85021	I C E (>500 HP) N-EM STAT NAT GAS ONLY
515685	G14078	I C E (>500 HP) N-EM STAT NAT GAS ONLY
529897	???	BOILER (5-20 MMBTU/HR) NAT GAS ONLY
529898	???	I C E (>500 HP) EM ELEC GEN DIESEL
529899	???	I C E (>500 HP) EM ELEC GEN DIESEL
517738	Rev 7—To be determined when P/O is issued.	BOILER (>20-50 MMBTU/HR) COMB GAS-DISTIL

NOTE: EQUIPMENT LISTED ABOVE THAT HAS NO CORRESPONDING PERMITS TO OPERATE NUMBER ARE ISSUED PERMITS TO CONSTRUCT. THE ISSUANCE OR DENIAL OF THEIR PERMITS TO OPERATE IS SUBJECT TO ENGINEERING FINAL REVIEW. ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.

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FACILITY WIDE CONDITION(S)

Condition(s):

1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:
 - A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGELMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
 - B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION.
[RULE 401]
2. THE OPERATOR SHALL NOT USE FUEL OIL CONTAINING SULFUR COMPOUNDS IN EXCESS OF 0.05 PERCENT BY WEIGHT.
[RULE 431.2]
3. AFTER JUNE 1, 2004, THE OPERATOR SHALL NOT PURCHASE ANY DIESEL FUEL UNLESS THE FUEL IS LOW SULFUR DIESEL FOR WHICH THE SULFUR CONTENT SHALL NOT EXCEED 15 PPM BY WEIGHT AS SUPPLIED BY THE SUPPLIER.
[RULE 431.2]
4. THE OPERATOR SHALL NOT USE NATURAL GAS CONTAINING SULFUR COMPOUNDS, CALCULATED AS H₂S, IN EXCESS OF 16 PARTS PER MILLION BY VOLUME (PPMV). THE OPERATOR SHALL NOT USE OTHER GASEOUS FUELS CONTAINING SULFUR COMPOUNDS, CALCULATED AS H₂S, IN EXCESS OF 40 PPMV AS MEASURED OVER 4 HOURS AVERAGING PERIOD.
[RULE 431.1]

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PERMIT TO OPERATE

Permit No. E1867B
A/N 00180B

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, DIESEL-FUELED, MODEL NO. 91237305, SERIAL NO. 12E0002607, RATED AT 800 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

[RULE 204]

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

[RULE 204]

3. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

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

4. AN ENGINE OPERATING LOG SHALL BE MAINTAINED WHICH ON A MONTHLY BASIS SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:

A. EMERGENCY USE HOURS OF OPERATION

B. MAINTENANCE AND TESTING HOURS

C. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION)

IN ADDITION, EACH TIME THE ENGINE IS STATED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION THE LOG SHALL BE KEPT FOR A MINIMUM OF THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.

[RULE 1303(b)(2)-OFFSET, RULE 1470]

5. OPERATION BEYOND THE 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30

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MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.

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

6. THIS ENGINE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF AN INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO DO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1470]

Periodic Monitoring:

8. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 3004 (A)(4)]

Emissions and Requirements:

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1470

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PERMIT TO OPERATE

Permit No. E1868B
A/N 00181B

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, DIESEL-FUELED, MODEL NO. 91237305, SERIAL NO. 12E0002606, RATED AT 800 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a)-MODELING AND OFFSET, RULE 1470]
4. AN ENGINE OPERATING LOG SHALL BE MAINTAINED WHICH ON A MONTHLY BASIS SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:
 - A. EMERGENCY USE HOURS OF OPERATION
 - B. MAINTENANCE AND TESTING HOURS
 - C. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION)

IN ADDITION, EACH TIME THE ENGINE IS STATED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION THE LOG SHALL BE KEPT FOR A MINIMUM OF THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.
[RULE 1303(b)(2)-OFFSET, RULE 1470]
5. OPERATION BEYOND THE 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION

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COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.

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

6. THIS ENGINE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF AN INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO DO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1470]

Periodic Monitoring:

8. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 3004 (A)(4)]

Emissions and Requirements:

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1470

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PERMIT TO OPERATE

Permit No. E03670
A/N 01410E

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, DIESEL-FUELED, MODEL NO. 91237305, SERIAL NO. 12E0005466, RATED AT 800 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

[RULE 204]

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

[RULE 204]

3. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

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

4. AN ENGINE OPERATING LOG SHALL BE MAINTAINED WHICH ON A MONTHLY BASIS SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:

A. EMERGENCY USE HOURS OF OPERATION

B. MAINTENANCE AND TESTING HOURS

C. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION)

IN ADDITION, EACH TIME THE ENGINE IS STARTED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION THE LOG SHALL BE KEPT FOR A MINIMUM OF THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.

[RULE 1303(b)(2)-OFFSET, RULE 1470]

5. OPERATION BEYOND THE 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION

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COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.

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

6. THIS ENGINE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF AN INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO DO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1470]

Periodic Monitoring:

8. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 3004 (A)(4)]

Emissions and Requirements:

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1470

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PERMIT TO OPERATE

Permit No. D99731
A/N 316290

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, 12 CYLINDERS, TURBOCHARGED, AFTERCOOLED, MODEL NO. 8123-7416 (12V-92TA), 947 BHP, DIESEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. A TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, RULE 1470, RULE 1303(a)(1)-BACT, RULE 1304(a)(4)]
4. THE OPERATING TIME OF THIS ENGINE SHALL NOT EXCEED 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING AND NO MORE THAN 2.5 HOURS IN ANY ONE MONTH FOR MAINTENANCE AND TESTING.
[RULE 1304(a)-MODELING AND OFFSET, RULE 1470]
5. OPERATING BEYOND THE 30 HOURS PER YEAR ALLOTTED FOR MAINTENANCE AND TESTING PURPOSES SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
[RULE 1470]
6. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1303(b)(2)-OFFSET, RULE 1470]

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7. SULFUR CONTENT OF FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 0.05% BY WEIGHT.
[RULE 431.2]

8. THE FUEL INJECTION TIMING OF THIS ENGINE SHALL BE SET AND MAINTAINED AT 1.7 DEGREES RETARDED RELATIVE TO PRODUCTION TIMING AS ESTABLISHED BY DETROIT DIESEL IN PRODUCT ANNOUNCEMENT "INJECTION TIMING RETARD INSTRUCTIONS FOR CONFORMANCE WITH THE SCAQMD'S GENERAL PERMIT REGISTRATION PROGRAM 12V-92TA GENERATOR SET ENGINE MODEL 8123-7416."
[[RULE 1303(a)(1)-BACT]

Emissions and Requirements:

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1470

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PERMIT TO OPERATE

Permit No. G14079
A/N 515684

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, MODEL NO. 8123-7416, DIESEL FUELED, 12 CYLINDERS, TURBOCHARGED AND AFTERCOOLED, 947 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR (GENERATOR SET MODEL NO. DASE 0418600).

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

[RULE 204]

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

[RULE 204]

3. THE OPERATOR SHALL ONLY USE DIESEL FUEL WITH A SULFUR CONTENT THAT DOES NOT EXCEED 15 PPM BY WEIGHT.

[RULE 1470]

4. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

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

5. AN ENGINE OPERATING LOG SHALL BE MAINTAINED WHICH ON A MONTHLY BASIS SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:

A. EMERGENCY USE HOURS OF OPERATION

B. MAINTENANCE AND TESTING HOURS

C. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION)

IN ADDITION, EACH TIME THE ENGINE IS STARTED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION THE LOG SHALL BE KEPT FOR A MINIMUM OF FIVE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.

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[RULE 1303(b)(2)-OFFSET, RULE 1470]

6. OPERATION BEYOND THE 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.

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

7. THIS ENGINE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 1470]
8. THIS ENGINE SHALL NOT BE USED AS PART OF AN INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO DO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1470]

Periodic Monitoring:

9. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 3004 (A)(4)]

Emissions and Requirements:

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1470

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Permit No. F54693
A/N 405718

Equipment Description:

SPRAY BOOTH, BLEEKER, MODEL NO. 3C412A, 10' - 4" W. X 13' - 6" L. X 7' - 6" H., WITH TWENTY EXHAUST FILTERS, EACH 20' - 0" H. X 20' - 0" L., AND A 1.5 H.P. EXHAUST FAN.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS SPRAY BOOTH SHALL ONLY BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. A GAUGE SHALL BE INSTALLED AND MAINTAINED TO INDICATE, IN INCHES OF WATER, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE EXHAUST FILTERS. IN OPERATION, THE PRESSURE DIFFERENTIAL SHALL NOT EXCEED 0.25 INCHES OF WATER.
[RULE 1303(a)(1)-BACT]
5. THE SPRAY BOOTH SHALL NOT BE OPERATED UNLESS THE EXHAUST AIR PASSES THROUGH THE FILTER MEDIA WHICH IS AT LEAST 2 INCHES THICK.
[RULE 1303(a)(1)-BACT]
6. COATING, CLEAN-UP SOLVENTS AND ANY OTHER MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC CONTAMINANTS IN RULE 1401.
[RULE 1401]
7. MATERIAL SAFETY DATA SHEETS FOR ALL COATINGS AND SOLVENTS USED AT THIS FACILITY SHALL BE KEPT CURRENT AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 109, RULE 1136, RULE 1171]
8. THE TOTAL QUANTITY OF VOC EMISSIONS FROM THIS FACILITY SHALL BE LESS THAN 667 POUNDS IN ANY CALENDAR MONTH.
[RULE 1303(b)(2)-OFFSET]

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9. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH DISTRICT RULES 1107, 1136, AND 1171.
[RULE 1107, RULE 1136, RULE 1171]
10. THE OPERATOR OF THIS EQUIPMENT SHALL RETAIN RECORDS TO VERIFY DAILY USAGE AND DAILY VOC EMISSIONS.
[RULE 109, RULE 1303(b)(2)-OFFSET]
11. THE OPERATOR SHALL KEEP RECORDS IN ACCORDANCE WITH THE REQUIREMENTS OF RULE 109 (RECORDKEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS) AND SUCH RECORDS SHALL BE RETAINED FOR A PERIOD OF FIVE YEARS.
[RULE 109]
12. WITHIN 14 CALENDAR DAYS AFTER THE END OF EACH MONTH, THE OPERATOR SHALL TOTAL AND RECORD VOC EMISSIONS FOR THE MONTH FROM ALL PERMITTED EQUIPMENT COVERED BY THE MONTHLY LIMIT. THE RECORD SHALL INCLUDE ANY PROCEDURES USED TO ACCOUNT FOR CONTROL DEVICE EFFICIENCIES AND/OR WASTE DISPOSAL. IT SHALL BE SIGNED AND CERTIFIED FOR ACCURACY BY THE HIGHEST RANKING MANAGEMENT OFFICIAL RESPONSIBLE FOR COMPLIANCE WITH DISTRICT RULES.
[RULE 109, RULE 1303(b)(2)-OFFSET]
13. THE OPERATOR SHALL MAINTAIN A SINGLE LIST WHICH INCLUDES ONLY THE NAME AND ADDRESS OF EACH PERSON FROM WHOM THE FACILITY ACQUIRED VOC-CONTAINING MATERIAL REGULATED BY THE DISTRICT THAT WAS USED OR STORED AT THE FACILITY DURING THE PRECEDING 12 MONTHS.
[RULE 109]
14. THE OPERATOR SHALL RETAIN ALL PURCHASE INVOICES FOR ALL VOC-CONTAINING MATERIAL USED OR STORED AT THE FACILITY, AND ALL WASTE MANIFESTS FOR ALL WASTE VOC-CONTAINING MATERIAL REMOVED FROM THE FACILITY, FOR FIVE YEARS.
[RULE 109]
15. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED AT THE FACILITY FOR FIVE YEARS, AND SHALL BE MADE AVAILABLE TO ANY DISTRICT REPRESENTATIVE UPON REQUEST.
[RULE 109, RULE 1303(b)(2)-OFFSET]

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Periodic Monitoring:

16. THE OPERATOR SHALL PERFORM A WEEKLY INSPECTION OF THE EQUIPMENT AND FILTER MEDIA FOR LEAKS, BROKEN OR TORN FILTER MEDIA AND IMPROPERLY INSTALLED FILTER MEDIA. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
- A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE FILTER MEDIA;
 - B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND
THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.
- [RULE 3004 (a)(4)]
17. THE OPERATOR SHALL DETERMINE AND RECORD THE PRESSURE DROP ACROSS THE FILTER ONCE EVERY WEEK.
- [RULE 3004(a)(4)]

Emissions and Requirements:

18. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
- PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 - PM: RULE 481
 - VOC: RULE 109
 - VOC: RULE 442
 - VOC: RULE 1107, SEE APPENDIX B FOR EMISSION LIMITS
 - VOC: RULE 1136, SEE APPENDIX B FOR EMISSION LIMITS
 - VOC: RULE 1151, SEE APPENDIX B FOR EMISSION LIMITS
 - VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

SEE PERMIT TO CONSTRUCT FOR APPL. NO. 517738 FOR BURNER MODIFICATION.

PERMIT TO OPERATE

Permit No. G14080
A/N 516182

Equipment Description:

BOILER, TRANE-MURRAY, WATER TUBE TYPE, MODEL MCF 2-40, SERIAL NO. 10548, WITH A COEN BURNER, MODEL NO. SDAF-17, 31,000,000 BTU PER HOUR, NATURAL GAS, METHANOL, PROPANE, OR OIL-FIRED, AND A FLUE GAS RECIRCULATION SYSTEM WITH A 15 HP FORCED DRAFT FAN.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE AMOUNT OF FLUE GAS RECIRCULATED BACK TO THE BURNER SHALL AUTOMATICALLY REGULATE THE COMBUSTION AIR AND FUEL TO THE BURNER.
[RULE 1303(a)(1)-BACT, RULE 1146]
4. WHENEVER THE BOILER IS IN OPERATION, THE FLUE GAS RECIRCULATION SHALL BE AUTOMATICALLY REGULATED SO THAT AT LEAST 15% OF THE FLUE GAS SHALL RETURN BACK TO THE BURNER WHEN THE BOILER IS OPERATING AT FULL LOAD.
[RULE 1303(a)(1)-BACT, RULE 1146]
5. THIS BOILER SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF RULE 1146.
[RULE 1146]
6. ON OR BEFORE JANUARY 1, 2013, THIS BOILER SHALL NOT EMIT MORE THAN 9 PPM OF OXIDES OF NITROGEN (NOX), CALCULATED AS NO₂, MEASURED BY VOLUME ON A DRY BASIS AT 3% O₂.
[RULE 1146]

Periodic Monitoring:

7. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) BY CONDUCTING A TEST AT LEAST ONCE EVERY YEAR USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD OR, IF NOT AVAILABLE, A NON- AQMD APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATION

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LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]

8. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) BY CONDUCTING A TEST AT LEAST ONCE EVERY YEAR USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD OR , IF NOT AVAILABLE, A NON-AQMD APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]

9. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSION FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THIS EQUIPMENT HAS COMBUSTED ONE MILLION GALLONS OF DIESEL FUEL, TO BE COUNTED CUMULATIVELY OVER A FIVE YEAR PERIOD. THE INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE HOUR, THE OPERATOR SHALL EITHER:
 - A. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN THE SAME FASHION AS DEVIATIONS ARE REQUIRED TO BE REPORTED IN SECTION K OF THIS PERMIT; OR

 - B. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.IN ADDITION, THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:
 - A. STACK OR EMISSION POINT IDENTIFICATION;
 - B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
 - C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
 - D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.[RULE 3004 (a)(4)]

Emissions and Requirements:

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
 - CO: 400 PPM, RULE 1146
 - CO: 2000 PPM, RULE 407
 - PM: 0.1 GR/SCF, RULE 409
 - NOx: 30 PPM FOR GASEOUS FUELS, RULE 1146
 - NOx: 40 PPM FOR NON-GASEOUS FUELS, RULE 1146

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PERMIT TO OPERATE

Permit No. G14081
A/N 516183

Equipment Description:

BOILER, CLEAVER BROOKS, WATER TUBE TYPE, MODEL D-34, SERIAL NO. WL-3264, 28,375,000 BTU PER HOUR, WITH A CLEAVER BROOKS, MODEL NO. WT 200X-BR-1 BURNER (GAS OR OIL).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE FUEL USAGE OF THIS EQUIPMENT SHALL NOT EXCEED 90,000 THERMS IN ANY CONTINUOUS 12-MONTH PERIOD.
[RULE 1146]
4. A NON-RESETTABLE TOTALIZING FUEL METER FOR EACH FUEL SHALL BE MAINTAINED IN GOOD OPERATING CONDITION FOR THIS EQUIPMENT.
[RULE 1146]
5. THE OPERATOR SHALL MAINTAIN A FUEL USE LOG FOR EACH PRIMARY AND STANDBY FUEL METER WHICH INCLUDES:
 - A) THE PERMIT NUMBER OR APPLICATION NUMBER OF THE BOILER SERVED BY THE PRIMARY AND STANDBY FUEL METERS.
 - B) THE METER READINGS AND MONTHLY FUEL USAGE RECORDED BY THE PRIMARY AND STANDBY FUEL METERS.
 - C) THE TOTAL MONTHLY HEAT INPUT IN BTUS OR THERMS BASED ON THE FUEL USAGES DETERMINED IN B).
 - D) THE TOTAL HEAT INPUT FOR EACH CALENDAR YEAR BASED ON THE MONTHLY HEAT INPUT DETERMINED IN C).[RULE 1146]
6. THE EQUIPMENT SHALL COMPLY WITH THE TUNE-UP REQUIREMENTS OF RULE 1146. RECORDS SHALL BE MAINTAINED OF THE DATE OF EACH TUNE-UP, THE COMPANY PERFORMING THE TUNE-UP, AND THE TUNE-UP CO AND O2 RESULTS.

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- [RULE 1146]
7. ALL RECORDS REQUIRED BY THIS PLAN SHALL BE MAINTAINED IN A FORMAT APPROVED BY THE DISTRICT. THE RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1146]
8. THIS BOILER SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF RULE 1146.
[RULE 1146]
9. ON OR BEFORE JANUARY 1, 2015, THIS BOILER SHALL NOT EMIT MORE THAN 30 PPM OF OXIDES OF NITROGEN (NOX), CALCULATED AS NO₂, MEASURED BY VOLUME ON A DRY BASIS AT 3% O₂.
[RULE 1146]

Emissions and Requirements:

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
- CO: 400 PPM, RULE 1146
CO: 2000 PPM, RULE 407
PM: 0.1 GR/SCF, RULE 409

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

PERMIT TO OPERATE

Permit No. G14077
A/N 515682

Equipment Description:

COGENERATION SYSTEM NO. 1 CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE, WAUKESHA, SPARK IGNITION, FOUR STROKE, TURBO CHARGED INTERCOOLED, V-12 TYPE, MODEL NO. L5790GSI, 1269 H.P., NATURAL GAS FIRED, DRIVING A 900 KW GENERATOR.
2. CATALYTIC CONVERTER, JOHNSON MATTHEY, DeNOX MODEL NO. ES-SSA, THREE-WAY CATALYTIC REDUCTION.
3. AIR FUEL RATIO CONTROL, WAUKESHA, MODEL TM.
4. LOW PRESSURE STEAM SEPARATOR FOR ENGINE WATER JACKET SYSTEM, MAXIM, MODEL NO. HSS-40, 2915 LB/HR AT 15 PSIG.
5. EXHAUST HEAT RECOVERY SILENCERS, MAXIM, MODEL NO. MFT1070-14, 1426 LB/HR AT 125 PSIG.
6. HIGH PRESSURE STEAM SEPARATOR, MAXIM, MODEL NO. HSS-40, 2852 LB/HR AT 125 PSIG, COMMON TO COGENERATION SYSTEM NO. 2.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 1110.2.
[RULE 1110.2]
4. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF FIVE YEARS AND BE MADE AVAILABLE TO THE SCAQMD PERSONNEL UPON REQUEST.
[RULE 1303 (b)(2), RULE 1110.2]
5. THE CATALYST SHALL BE CLEANED OR REPLACED WHEN THE REDUCTION EFFICIENCY OF THE FOLLOWING GASEOUS EMISSIONS ARE NOT MET

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- A. LESS THAN 90% FOR OXIDES OF NITROGEN AFTER INSTALLATION OR REPLACEMENT, AND BY AT LEAST 80% THEREAFTER.
- B. LESS THAN 70% FOR CARBON MONOXIDE.
- C. LESS THAN 50% FOR TOTAL HYDROCARBONS.
[RULE 1303(a)(1)-BACT, RULE 1110.2]

6. THE O₂ SENSOR ASSOCIATED WITH THE AIR/FUEL RATIO CONTROLLER SHALL BE INSPECTED AND CLEANED OR REPLACED EVERY 125 DAYS OF OPERATION. RECORDS OF MAINTENANCE SHALL BE MAINTAINED AND KEPT ON FILE.
[RULE 1303(a)(1)-BACT, RULE 1110.2]

7. THE EMISSIONS FROM THE INTERNAL COMBUSTION ENGINE SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	NATURAL GAS FUEL
TOTAL HYDROCARBONS (AS CH ₄)	67 LB/DAY
NITROGEN OXIDES (AS NO ₂)	47
SULFUR DIOXIDE	1
PARTICULATE MATTER	1
CARBON MONOXIDE	134

[RULE 1303(b)(2)-OFFSET]

8. A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) APPROVED BY THE DISTRICT PER RULE 218, 218.1 AND 1110.2 SHALL BE INSTALLED, MAINTAINED AND OPERATED. THE CEMS SHALL UNDERGO A SERIES OF CERTIFICATION TESTS WITHIN 90 DAYS OF ITS INSTALLATION IN ACCORDANCE WITH RULE 218(C)(1)(A). THE CONTINUOUS EMISSIONS MONITORING SYSTEM SHALL MEASURE AND RECORD OVER A FIFTEEN-MINUTE AVERAGE TIME PERIOD, THE NOX AND O₂ CONCENTRATIONS, ON A DRY BASIS, OF THE INTERNAL COMBUSTION EXHAUST, MEASURED AT THE OUTLET OF THE CONTROL SYSTEM. THE SYSTEM SHALL ALSO CONVERT THE ACTUAL NOX CONCENTRATIONS TO A CORRECTED CONCENTRATION AT 15% OXYGEN, ON A DRY BASIS, AND CONTINUOUSLY RECORD THE CORRECTED STACK NOX CONCENTRATIONS. THIS MONITORING SYSTEM SHALL BE CERTIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF RULES 218 AND 218.1.
[RULE 1110.2]

9. A DATA GATHERING AND RETRIEVAL SYSTEM SHALL BE INSTALLED AND MAINTAINED AS PER RULE 1110.2.
[RULE 1110.2]

10. THE CEMS SHALL BE EQUIPPED WITH A WARNING DEVICE THAT IS ACTIVATED WHEN THE NOX CONCENTRATION, AVERAGED OVER FIFTEEN MINUTES, EXCEEDS THE EMISSION LIMIT SPECIFIED IN RULE 1110.2.
[RULE 1110.2]

11. THIS EQUIPMENT SHALL COMPLY WITH MONITORING AND RECORD KEEPING REQUIREMENTS OF RULE 1110.2 AS OUTLINED BELOW:

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- A. THE ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER (DISPLAY READING SHALL BE READILY AVAILABLE) TO DETERMINE THE ENGINE ELAPSED OPERATING TIME.
- B. EFFECTIVE AUGUST 1, 2008, CONDUCT SOURCE TESTING FOR NO_x, VOC REPORTED AS CARBON, AND CO CONCENTRATIONS (CONCENTRATIONS IN PPM BY VOLUME, CORRECTED TO 15 PERCENT OXYGEN ON DRY BASIS) AT LEAST ONCE EVERY TWO YEARS, OR EVERY 8760 OPERATING HOURS, WHICHEVER OCCURS FIRST. RELATIVE ACCURACY TESTS REQUIRED BY RULE 218.1 WILL SATISFY THIS REQUIREMENT FOR THOSE POLLUTANTS MONITORED BY A CEMS. THE SOURCE TEST FREQUENCY MAY BE REDUCED TO ONCE EVERY THREE YEARS IF THE ENGINE HAS OPERATED LESS THAN 2,000 HOURS SINCE THE LAST SOURCE TEST. IF THE ENGINE HAS NOT BEEN OPERATED WITHIN THREE MONTHS OF THE DATE A SOURCE TEST IS REQUIRED, THE SOURCE TEST SHALL BE CONDUCTED WHEN THE ENGINE RESUMES OPERATION FOR A PERIOD LONGER THAN EITHER SEVEN CONSECUTIVE DAYS OR 15 CUMULATIVE DAYS OF OPERATION. THE OPERATOR OF THE ENGINE SHALL KEEP SUFFICIENT OPERATING RECORDS TO DEMONSTRATE THAT IT MEETS THE REQUIREMENTS FOR EXTENSION OF THE SOURCE TESTING DEADLINES.
- C. MAINTAIN A MONTHLY OPERATING ENGINE LOG THAT INCLUDES:
- (i) TOTAL HOURS OF OPERATION.
 - (ii) TYPE OF LIQUID AND/OR TYPE OF GASEOUS FUEL,
 - (iii) FUEL CONSUMPTION (CUBIC FEET OF GAS OR GALLONS OF LIQUID), AND
 - (iv) CUMULATIVE HOURS OF OPERATION SINCE THE LAST SOURCE TEST REQUIRED IN SUBPARAGRAPH (f)(1)(C) OF RULE 1110.2.

THE LOG SHALL BE MADE AVAILABLE FOR INSPECTION ANY TIME.
[RULE 1110.2]

12. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED AT THE FACILITY FOR 5 YEARS, AND SHALL BE MADE AVAILABLE TO ANY DISTRICT REPRESENTATIVE UPON REQUEST.
[RULE 1110.2]
13. THIS EQUIPMENT SHALL BE TUNED UP AND MAINTAINED ACCORDING TO THE MANUFACTURER'S RECOMMENDED PROCEDURES. RECORDS OF SUCH TUNE-UPS AND MAINTENANCE SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1110.2]

Periodic Monitoring:

14. THIS ENGINE SHALL NOT BE OPERATED WITHOUT THE USE OF AN AUTOMATIC AIR TO FUEL RATIO CONTROLLER WHICH SHALL BE MAINTAINED AND KEPT IN PROPER OPERATING CONDITIONS AT ALL TIMES AS SPECIFIED BY THE MANUFACTURER.
[RULE 3004 (a)(4)]

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Emissions and Requirements:

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

NOX: 11 PPM, [RULE 1110.2]
VOC: 30 PPM, [RULE 1110.2]
CO: 250 PPM, [RULE 1110.2]

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

PERMIT TO OPERATE

Permit No. F85021
A/N 457742

Equipment Description:

COGENERATION SYSTEM NO. 2 CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE, WAUKESHA, SPARK IGNITION, FOUR STROKE, TURBO CHARGED INTERCOOLED, V-12 TYPE, MODEL NO. VHP5900GSI, 1269 H.P., NATURAL GAS FIRED, DRIVING A 900 KW GENERATOR.
2. CATALYTIC CONVERTER, JOHNSON MATTHEY, DeNOX MODEL NO. ES-SSA, THREE-WAY CATALYTIC REDUCTION.
3. AIR FUEL RATIO CONTROL, WAUKESHA, MODEL TM
4. LOW PRESSURE STEAM SEPARATOR FOR ENGINE WATER JACKET SYSTEM, MAXIM, MODEL NO. HSS-40, 2915 LB/HR AT 15 PSIG.
5. EXHAUST HEAT RECOVERY SILENCERS, MAXIM, MODEL NO. MFT1070-14, 1426 LB/HR AT 125 PSIG.
6. HIGH PRESSURE STEAM SEPARATOR, MAXIM, MODEL NO. HSS-40, 2852 LB/HR AT 125 PSIG, COMMON TO COGENERATION SYSTEM NO. 1.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 1110.2.
[RULE 1110.2]
4. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF FIVE YEARS AND BE MADE AVAILABLE TO THE SCAQMD PERSONNEL UPON REQUEST.
[RULE 1303 (b)(2), RULE 1110.2]
5. THE CATALYST SHALL BE CLEANED OR REPLACED WHEN THE REDUCTION EFFICIENCY OF THE FOLLOWING GASEOUS EMISSIONS ARE NOT MET

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- A. LESS THAN 90% FOR OXIDES OF NITROGEN AFTER INSTALLATION OR REPLACEMENT, AND BY AT LEAST 80% THEREAFTER.
- B. LESS THAN 70% FOR CARBON MONOXIDE.
- C. LESS THAN 50% FOR TOTAL HYDROCARBONS.
[RULE 1303(a)(1)-BACT, RULE 1110.2]

6. THE O₂ SENSOR ASSOCIATED WITH THE AIR/FUEL RATIO CONTROLLER SHALL BE INSPECTED AND CLEANED OR REPLACED EVERY 125 DAYS OF OPERATION. RECORDS OF MAINTENANCE SHALL BE MAINTAINED AND KEPT ON FILE.
[RULE 1303(a)(1)-BACT, RULE 1110.2]

7. THE EMISSIONS FROM THE INTERNAL COMBUSTION ENGINE SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	NATURAL GAS FUEL
TOTAL HYDROCARBONS (AS CH ₄)	67 LB/DAY
NITROGEN OXIDES (AS NO ₂)	47
SULFUR DIOXIDE	1
PARTICULATE MATTER	1
CARBON MONOXIDE	134

[RULE 1303(b)(2)-OFFSET]

8. A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) APPROVED BY THE DISTRICT PER RULE 218, 218.1 AND 1110.2 SHALL BE INSTALLED, MAINTAINED AND OPERATED. THE CEMS SHALL UNDERGO A SERIES OF CERTIFICATION TESTS WITHIN 90 DAYS OF ITS INSTALLATION IN ACCORDANCE WITH RULE 218(C)(1)(A). THE CONTINUOUS EMISSIONS MONITORING SYSTEM SHALL MEASURE AND RECORD OVER A FIFTEEN-MINUTE AVERAGE TIME PERIOD, THE NO_X AND O₂ CONCENTRATIONS, ON A DRY BASIS, OF THE INTERNAL COMBUSTION EXHAUST, MEASURED AT THE OUTLET OF THE CONTROL SYSTEM. THE SYSTEM SHALL ALSO CONVERT THE ACTUAL NO_X CONCENTRATIONS TO A CORRECTED CONCENTRATION AT 15% OXYGEN, ON A DRY BASIS, AND CONTINUOUSLY RECORD THE CORRECTED STACK NO_X CONCENTRATIONS. THIS MONITORING SYSTEM SHALL BE CERTIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF RULES 218 AND 218.1.
[RULE 1110.2]

9. A DATA GATHERING AND RETRIEVAL SYSTEM SHALL BE INSTALLED AND MAINTAINED AS PER RULE 1110.2.
[RULE 1110.2]

10. THE CEMS SHALL BE EQUIPPED WITH A WARNING DEVICE THAT IS ACTIVATED WHEN THE NO_X CONCENTRATION, AVERAGED OVER FIFTEEN MINUTES, EXCEEDS THE EMISSION LIMIT SPECIFIED IN RULE 1110.2.
[RULE 1110.2]

11. THIS EQUIPMENT SHALL COMPLY WITH MONITORING AND RECORD KEEPING REQUIREMENTS OF RULE 1110.2 AS OUTLINED BELOW:

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- A. THE ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER (DISPLAY READING SHALL BE READILY AVAILABLE) TO DETERMINE THE ENGINE ELAPSED OPERATING TIME.
- B. EFFECTIVE AUGUST 1, 2008, CONDUCT SOURCE TESTING FOR NO_x, VOC REPORTED AS CARBON, AND CO CONCENTRATIONS (CONCENTRATIONS IN PPM BY VOLUME, CORRECTED TO 15 PERCENT OXYGEN ON DRY BASIS) AT LEAST ONCE EVERY TWO YEARS, OR EVERY 8760 OPERATING HOURS, WHICHEVER OCCURS FIRST. RELATIVE ACCURACY TESTS REQUIRED BY RULE 218.1 WILL SATISFY THIS REQUIREMENT FOR THOSE POLLUTANTS MONITORED BY A CEMS. THE SOURCE TEST FREQUENCY MAY BE REDUCED TO ONCE EVERY THREE YEARS IF THE ENGINE HAS OPERATED LESS THAN 2,000 HOURS SINCE THE LAST SOURCE TEST. IF THE ENGINE HAS NOT BEEN OPERATED WITHIN THREE MONTHS OF THE DATE A SOURCE TEST IS REQUIRED, THE SOURCE TEST SHALL BE CONDUCTED WHEN THE ENGINE RESUMES OPERATION FOR A PERIOD LONGER THAN EITHER SEVEN CONSECUTIVE DAYS OR 15 CUMULATIVE DAYS OF OPERATION. THE OPERATOR OF THE ENGINE SHALL KEEP SUFFICIENT OPERATING RECORDS TO DEMONSTRATE THAT IT MEETS THE REQUIREMENTS FOR EXTENSION OF THE SOURCE TESTING DEADLINES.
- C. MAINTAIN A MONTHLY OPERATING ENGINE LOG THAT INCLUDES:
- (i) TOTAL HOURS OF OPERATION.
 - (ii) TYPE OF LIQUID AND/OR TYPE OF GASEOUS FUEL,
 - (iii) FUEL CONSUMPTION (CUBIC FEET OF GAS OR GALLONS OF LIQUID), AND
 - (iv) CUMULATIVE HOURS OF OPERATION SINCE THE LAST SOURCE TEST REQUIRED IN SUBPARAGRAPH (f)(1)(C) OF RULE 1110.2.

THE LOG SHALL BE MADE AVAILABLE FOR INSPECTION ANY TIME.
[RULE 1110.2]

12. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED AT THE FACILITY FOR 5 YEARS, AND SHALL BE MADE AVAILABLE TO ANY DISTRICT REPRESENTATIVE UPON REQUEST.
[RULE 1110.2]
13. THIS EQUIPMENT SHALL BE TUNED UP AND MAINTAINED ACCORDING TO THE MANUFACTURER'S RECOMMENDED PROCEDURES. RECORDS OF SUCH TUNE-UPS AND MAINTENANCE SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1110.2]

Periodic Monitoring:

14. THIS ENGINE SHALL NOT BE OPERATED WITHOUT THE USE OF AN AUTOMATIC AIR TO FUEL RATIO CONTROLLER WHICH SHALL BE MAINTAINED AND KEPT IN PROPER OPERATING CONDITIONS AT ALL TIMES AS SPECIFIED BY THE MANUFACTURER.
[RULE 3004 (a)(4)]

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

Emissions and Requirements:

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

NOX: 11 PPM, [RULE 1110.2]
VOC: 30 PPM, [RULE 1110.2]
CO: 250 PPM, [RULE 1110.2]

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

PERMIT TO OPERATE

**Permit No. G14078
A/N 515685**

Equipment Description:

COGENERATION SYSTEM NO. 3 CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE, WAUKESHA, MODEL NO. L5790GSI, NATURAL GAS FIRED, TURBOCHARGED, AFTERCOOLED, 1200 BHP, DRIVING A 900 KW ELECTRIC GENERATOR.
2. NON-SELECTIVE CATALYTIC CONVERTER, JOHNSON MATTHEY DENOX MODEL.
3. A WASTE HEAT BOILER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE AFTER CONTROL EMISSIONS FROM THIS ENGINE SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	GRAMS/BHP
CO	0.6
NOX	0.15
ROG	0.15

[RULE 1303(b)(2)-OFFSET]

4. THIS ENGINE SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AN AIR POLLUTION CONTROL DEVICE.
[RULE 1303(a)(1)-BACT, RULE 1110.2]
5. THIS ENGINE SHALL COMPLY WITH ALL THE APPLICABLE REQUIREMENTS OF RULE 1110.2.
[RULE 1110.2]
6. A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) APPROVED BY THE DISTRICT PER RULE 218, 218.1 AND 1110.2 SHALL BE INSTALLED, MAINTAINED AND OPERATED. THE CEMS SHALL UNDERGO A SERIES OF CERTIFICATION TESTS WITHIN 90 DAYS OF ITS INSTALLATION IN ACCORDANCE WITH RULE 218(C)(1)(A). THE CONTINUOUS EMISSIONS MONITORING SYSTEM SHALL MEASURE AND RECORD OVER A FIFTEEN-MINUTE AVERAGE

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TIME PERIOD, THE NOX AND O2 CONCENTRATIONS, ON A DRY BASIS, OF THE INTERNAL COMBUSTION EXHAUST, MEASURED AT THE OUTLET OF THE CONTROL SYSTEM. THE SYSTEM SHALL ALSO CONVERT THE ACTUAL NOX CONCENTRATIONS TO A CORRECTED CONCENTRATION AT 15% OXYGEN, ON A DRY BASIS, AND CONTINUOUSLY RECORD THE CORRECTED STACK NOX CONCENTRATIONS. THIS MONITORING SYSTEM SHALL BE CERTIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF RULES 218 AND 218.1.

[RULE 1110.2]

7. A DATA GATHERING AND RETRIEVAL SYSTEM SHALL BE INSTALLED AND MAINTAINED AS PER RULE 1110.2.
[RULE 1110.2]
8. THE CEMS SHALL BE EQUIPPED WITH A WARNING DEVICE THAT IS ACTIVATED WHEN THE NOX CONCENTRATION, AVERAGED OVER FIFTEEN MINUTES, EXCEEDS THE EMISSION LIMIT SPECIFIED IN RULE 1110.2.
[RULE 1110.2]
9. THIS EQUIPMENT SHALL COMPLY WITH MONITORING AND RECORD KEEPING REQUIREMENTS OF RULE 1110.2 AS OUTLINED BELOW:
 - A. THE ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER (DISPLAY READING SHALL BE READILY AVAILABLE) TO DETERMINE THE ENGINE ELAPSED OPERATING TIME.
 - B. EFFECTIVE AUGUST 1, 2008, CONDUCT SOURCE TESTING FOR NO_x, VOC REPORTED AS CARBON, AND CO CONCENTRATIONS (CONCENTRATIONS IN PPM BY VOLUME, CORRECTED TO 15 PERCENT OXYGEN ON DRY BASIS) AT LEAST ONCE EVERY TWO YEARS, OR EVERY 8760 OPERATING HOURS, WHICHEVER OCCURS FIRST. RELATIVE ACCURACY TESTS REQUIRED BY RULE 218.1 WILL SATISFY THIS REQUIREMENT FOR THOSE POLLUTANTS MONITORED BY A CEMS. THE SOURCE TEST FREQUENCY MAY BE REDUCED TO ONCE EVERY THREE YEARS IF THE ENGINE HAS OPERATED LESS THAN 2,000 HOURS SINCE THE LAST SOURCE TEST. IF THE ENGINE HAS NOT BEEN OPERATED WITHIN THREE MONTHS OF THE DATE A SOURCE TEST IS REQUIRED, THE SOURCE TEST SHALL BE CONDUCTED WHEN THE ENGINE RESUMES OPERATION FOR A PERIOD LONGER THAN EITHER SEVEN CONSECUTIVE DAYS OR 15 CUMULATIVE DAYS OF OPERATION. THE OPERATOR OF THE ENGINE SHALL KEEP SUFFICIENT OPERATING RECORDS TO DEMONSTRATE THAT IT MEETS THE REQUIREMENTS FOR EXTENSION OF THE SOURCE TESTING DEADLINES.
 - C. MAINTAIN A MONTHLY OPERATING ENGINE LOG THAT INCLUDES:
 - (i) TOTAL HOURS OF OPERATION.
 - (ii) TYPE OF LIQUID AND/OR TYPE OF GASEOUS FUEL,
 - (iii) FUEL CONSUMPTION (CUBIC FEET OF GAS OR GALLONS OF LIQUID), AND
 - (iv) CUMULATIVE HOURS OF OPERATION SINCE THE LAST SOURCE TEST REQUIRED IN SUBPARAGRAPH (f)(1)(C) OF RULE 1110.2.

THE LOG SHALL BE MADE AVAILABLE FOR INSPECTION ANY TIME.
[RULE 1110.2]

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10. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED AT THE FACILITY FOR 5 YEARS, AND SHALL BE MADE AVAILABLE TO ANY DISTRICT REPRESENTATIVE UPON REQUEST.
[RULE 1110.2]
11. THIS EQUIPMENT SHALL BE TUNED UP AND MAINTAINED ACCORDING TO THE MANUFACTURER'S RECOMMENDED PROCEDURES. RECORDS OF SUCH TUNE-UPS AND MAINTENANCE SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1110.2]

Periodic Monitoring:

12. THIS ENGINE SHALL NOT BE OPERATED WITHOUT THE USE OF AN AUTOMATIC AIR TO FUEL RATIO CONTROLLER WHICH SHALL BE MAINTAINED AND KEPT IN PROPER OPERATING CONDITIONS AT ALL TIMES AS SPECIFIED BY THE MANUFACTURER.
[RULE 3004 (a)(4)]

Emissions and Requirements:

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

NOX: 11 PPM, [RULE 1110.2]
VOC: 30 PPM, [RULE 1110.2]
CO: 250 PPM, [RULE 1110.2]

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

PERMIT TO CONSTRUCT/OPERATE

Permit No. ?????
A/N 529897

Equipment Description:

BOILER, CLEAVER BROOKS, MODEL FLX700-1450-150ST, WATERTUBE TYPE, RATED AT 15,000,000 BTU/HR, NATURAL GAS-FIRED, WITH LOW NOX BURNER, INDUSTRIAL COMBUSTION, MODEL MTH147NGX-09-6, AND 20 HP COMBUSTION BLOWER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS BOILER SHALL BE FIRED ON NATURAL GAS ONLY.
[RULE 1303(a)-BACT/LAER; RULE 1303(b)(2)-OFFSETS]
4. THIS BOILER SHALL NOT EMIT MORE THAN 9 PPM OF OXIDES OF NITROGEN (NOX), CALCULATED AS NO₂, MEASURED BY VOLUME ON A DRY BASIS AT 3% O₂.
[RULE 1146]
5. THIS BOILER SHALL NOT EMIT MORE THAN 50 PPM OF CARBON MONOXIDE (CO), MEASURED BY VOLUME ON A DRY BASIS AT 3% O₂.
[RULE 1303(a)-BACT/LAER]
6. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL CONDUCT SOURCE TESTS ON THE EQUIPMENT UNDER THE FOLLOWING CONDITIONS:
 - A. SOURCE TESTING SHALL BE CONDUCTED WITHIN 60 DAYS AFTER INITIAL START-UP OR WITHIN 60 DAYS AFTER RECEIPT OF THIS PERMIT TO CONSTRUCT/OPERATE, UNLESS OTHERWISE APPROVED IN WRITING BY THE EXECUTIVE OFFICER.
 - B. THE SOURCE TESTS SHALL BE PERFORMED TO VERIFY COMPLIANCE WITH THE NOX AND CO EMISSION LIMITS SPECIFIED IN CONDITION NOS. 4 AND 5, RESPECTIVELY.
 - C. THE SOURCE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH SCAQMD METHOD 100.1.
 - D. THE TESTS SHALL BE CONDUCTED WHILE THE BOILER IS OPERATING AT MAXIMUM, MINIMUM, AND NORMAL FIRING RATES. THE SAMPLING TIMES SHALL BE AT LEAST 15 CONSECUTIVE MINUTES FOR MAXIMUM AND MINIMUM LOADS AND AT LEAST ONE

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HOUR FOR NORMAL OPERATING LOAD.

- E. WRITTEN NOTICE OF THE SOURCE TESTS SHALL BE SUBMITTED TO THE DISTRICT (ADDRESSED TO ATTN: VICKY LEE, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, P.O. BOX 4941, DIAMOND BAR, CA 91765) AT LEAST 14 DAYS PRIOR TO TESTING SO THAT AN OBSERVER MAY BE PRESENT.

- F. TWO COMPLETE COPIES OF THE SOURCE TEST REPORTS SHALL BE SUBMITTED TO THE DISTRICT (ADDRESSED TO ATTN: VICKY LEE, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, P.O. BOX 4941, DIAMOND BAR, CA 91765), REFERENCING APPLICATION NO. 529897, WITHIN 45 DAYS AFTER THE TEST IS COMPLETED. THE REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO EMISSIONS RATES IN POUNDS PER HOUR AND CONCENTRATIONS IN PPMV AT THE OUTLET OF THE BOILER, MEASURED ON A DRY BASIS AT 3% OXYGEN. THE FOLLOWING OPERATING DATA SHALL ALSO BE INCLUDED FOR EACH FIRING RATE:
 - I. THE EXHAUST FLOW RATES, IN ACTUAL CUBIC FEET PER MINUTE (ACFM),
 - II. THE FIRING RATES, IN BTU PER HOUR,
 - III. THE EXHAUST TEMPERATURE, IN DEGREES F,
 - IV. THE OXYGEN CONTENT OF THE EXHAUST GASES, IN PERCENT,
AND
 - V. THE FUEL FLOW RATE.

[RULE 1146, RULE 1303(a)-BACT/LAER]

- 7. A CONTRACTOR APPROVED UNDER THE DISTRICT LABORATORY APPROVAL PROGRAM IN THE REQUIRED TEST METHODS FOR CRITERIA POLLUTANTS TO BE MEASURED, AND IN COMPLIANCE WITH RULE 304 (NO CONFLICT OF INTEREST) SHALL CONDUCT THE TESTS.
[RULE 304, RULE 1146]

- 8. SAMPLING FACILITIES SHALL COMPLY WITH THE DISTRICT GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES, PURSUANT TO RULE 217.
[RULE 217]

- 9. THIS BOILER SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF RULE 1146.
[RULE 1146]

- 10. THIS BOILER SHALL BE EQUIPPED WITH A NON-RESETTABLE, TOTALIZING FUEL FLOW METER.
[40 CFR 60.48c(g)(2)]

- 11. THE OPERATOR SHALL RECORD AND MAINTAIN THE AMOUNT OF ALL FUEL COMBUSTED DURING EACH CALENDAR MONTH. THE FUEL USAGE RECORDS SHALL BE KEPT FOR A PERIOD OF FIVE YEARS AND ALL RECORDS SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[40 CFR 60.48c(g)(2)]

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12. THE OPERATOR SHALL MAINTAIN ADEQUATE RECORDS TO VERIFY COMPLIANCE WITH ALL CONDITIONS SPECIFIED IN THIS PERMIT. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED AT THE FACILITY FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 3004]

Emissions and Requirements:

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

NO_x: 9 PPMV, RULE 1146
CO: 50 PPMV, RULE 1303(a)-BACT/LAER
CO: 2000 PPMV, RULE 407
SO_x: 500 PPMV, RULE 407
PM: 0.1 GR/SCF, RULE 409

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

PERMIT TO CONSTRUCT/OPERATE

Permit No. ?????
A/N 529898

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 1, CATERPILLAR, MODEL NO. 3512C, DIESEL- FUELED, FOUR-CYCLE, TWELVE CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 2206 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR, 1500 KW

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 431.2 AND RULE 1470.
[RULE 431.2, RULE 1470]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING, NO MORE THAN 4.2 HOURS IN ANY ONE MONTH FOR MAINTENANCE AND TESTING, AND NO MORE THAN 2.5 HOURS IN ANY ONE DAY FOR TESTING AND MAINTENANCE.
[RULE 1110.2, RULE 1303(a)(1)-BACT, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1401, RULE 1470, 40 CFR 60.4211(f)]
5. OPERATING BEYOND THE 50 HOURS PER YEAR ALLOTTED FOR MAINTENANCE AND TESTING PURPOSES SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
[RULE 1303(a)(1)-BACT, RULE 1470]
6. AN OPERATIONAL NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, RULE 1303(a)(1)-BACT, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1401, RULE 1470, 40 CFR 60.4209(a)]

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7. AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED, DOCUMENTING THE TOTAL TIME THE ENGINE IS OPERATED EACH MONTH AND SPECIFIC REASON FOR OPERATION AS:
- A. EMERGENCY USE.
 - B. MAINTENANCE AND TESTING.
 - C. OTHER (DESCRIBE THE REASON FOR OPERATING).

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

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

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

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

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

9. THE SULFUR CONTENT OF DIESEL FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 15 PPM BY WEIGHT.
[RULE 1303(a), 40 CFR 60.4207(b)]
10. THE OPERATOR SHALL OPERATE AND MAINTAIN THE STATIONARY ENGINE ACCORDING TO THE MANUFACTURER'S WRITTEN EMISSION-RELATED INSTRUCTIONS (OR PROCEDURES DEVELOPED BY THE OPERATOR THAT ARE APPROVED BY THE ENGINE MANUFACTURER), CHANGE ONLY THOSE EMISSION-RELATED SETTINGS THAT ARE PERMITTED BY THE MANUFACTURER, AND MEET THE REQUIREMENTS OF 40 CFR 89, 94 AND/OR 1068, AS THEY APPLY.
[40 CFR 60.4211(a)]
11. THE OPERATOR SHALL COMPLY WITH THE EMISSION STANDARDS SPECIFIED IN 40 CFR 60.4205(b) BY PURCHASING AN ENGINE CERTIFIED TO THE EMISSION STANDARDS IN 40 CFR 60.4205(b), AS APPLICABLE, FOR THE SAME MODEL YEAR AND MAXIMUM ENGINE POWER. THE ENGINE MUST BE INSTALLED AND CONFIGURED ACCORDING TO THE MANUFACTURER'S EMISSION-RELATED SPECIFICATIONS.
[40 CFR 60.4211(c)]

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Emissions and Requirements:

12. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1470
NOX + NMHC: 4.8 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
CO: 2.6 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
PM: 0.15 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)

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PERMIT TO CONSTRUCT/OPERATE

Permit No. ?????
A/N 529899

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 2, CATERPILLAR, MODEL NO. 3512C, DIESEL- FUELED, FOUR-CYCLE, TWELVE CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 2206 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR, 1500 KW

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 431.2 AND RULE 1470.
[RULE 431.2, RULE 1470]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING, NO MORE THAN 4.2 HOURS IN ANY ONE MONTH FOR MAINTENANCE AND TESTING, AND NO MORE THAN 2.5 HOURS IN ANY ONE DAY FOR TESTING AND MAINTENANCE.
[RULE 1110.2, RULE 1303(a)(1)-BACT, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1401, RULE 1470, 40 CFR 60.4211(f)]
5. OPERATING BEYOND THE 50 HOURS PER YEAR ALLOTTED FOR MAINTENANCE AND TESTING PURPOSES SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
[RULE 1303(a)(1)-BACT, RULE 1470]
6. AN OPERATIONAL NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, RULE 1303(a)(1)-BACT, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1401, RULE 1470, 40 CFR 60.4209(a)]

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7. AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED, DOCUMENTING THE TOTAL TIME THE ENGINE IS OPERATED EACH MONTH AND SPECIFIC REASON FOR OPERATION AS:
- A. EMERGENCY USE.
 - B. MAINTENANCE AND TESTING.
 - C. OTHER (DESCRIBE THE REASON FOR OPERATING).

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

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

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

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

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

9. THE SULFUR CONTENT OF DIESEL FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 15 PPM BY WEIGHT.
- [RULE 1303(a), 40 CFR 60.4207(b)]

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

[40 CFR 60.4211(a)]

11. THE OPERATOR SHALL COMPLY WITH THE EMISSION STANDARDS SPECIFIED IN 40 CFR 60.4205(b) BY PURCHASING AN ENGINE CERTIFIED TO THE EMISSION STANDARDS IN 40 CFR 60.4205(b), AS APPLICABLE, FOR THE SAME MODEL YEAR AND MAXIMUM ENGINE POWER. THE ENGINE MUST BE INSTALLED AND CONFIGURED ACCORDING TO THE MANUFACTURER'S EMISSION-RELATED SPECIFICATIONS.
- [40 CFR 60.4211(c)]

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Emissions and Requirements:

12. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1470
NOX + NMHC: 4.8 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
CO: 2.6 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
PM: 0.15 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

PERMIT TO CONSTRUCT

Permit No. TBD
A/N 517738

Equipment Description:

ALTERATION OF A BOILER, PERMIT NO. G14080 (APPL. NO. 516182), BY THE REMOVAL OF A LOW NOX BURNER, COEN, MODEL NO. SDAF-17, 31,000,000 BTU PER HOUR, NATURAL GAS, METHANOL, PROPANE, OR OIL-FIRED; FLUE GAS RECIRCULATION SYSTEM, AND 15 H.P. COMBUSTION AIR BLOWER; AND THE ADDITION OF A LOW NOX BURNER, POWER FLAME, MODEL CSB310-GO-30, NATURAL GAS FIRED, WITH FUEL OIL STAND-BY, RATED AT 31,000,000 BTU/HR AND A 40 H.P. COMBUSTION AIR BLOWER.

AFTER THE MODIFICATION, THE PERMIT WILL READ AS FOLLOWS:

BOILER, TRANE-MURRAY, WATER TUBE TYPE, MODEL MCF 2-40, SERIAL NO. 10548, WITH A LOW NOX BURNER, POWER FLAME, MODEL NO. CSB310-GO-30, NATURAL GAS FIRED, WITH FUEL OIL STAND-BY, RATED AT 31,000,000 BTU/HR, AND A 40 HP COMBUSTION AIR BLOWER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS BOILER SHALL BE FIRED ON NATURAL GAS ONLY, EXCEPT DURING PERIODS OF NATURAL GAS CURTAILMENT, MAINTENANCE TESTING NOT TO EXCEED 30 MINUTES PER MONTH OR COMPLIANCE TESTING WITH FUEL OIL.
[RULE 1146]
4. THE FUEL OIL SUPPLIED TO THE BURNER SHALL BE NO. 2 OR LIGHTER GRADE AS DESCRIBED BY THE LATEST ASTM SPECIFICATIONS.
[RULE 1146]
5. WHEN FIRING ON NATURAL GAS, THIS BOILER SHALL NOT EMIT MORE THAN 9 PPM OF OXIDES OF NITROGEN (NOX), CALCULATED AS NO₂, AND 400 PPM OF CARBON MONOXIDE (CO), BOTH MEASURED BY VOLUME ON A DRY BASIS AT 3% O₂.

WHEN FIRING ON FUEL OIL, THIS BOILER SHALL NOT EMIT MORE THAN 40 PPM OF OXIDES OF NITROGEN (NOX), CALCULATED AS NO₂, AND 400 PPM OF CARBON MONOXIDE (CO), BOTH MEASURED BY VOLUME ON A DRY BASIS AT 3% O₂.

[RULE 1146]

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6. THE OPERATOR SHALL KEEP A MONTHLY LOG OF USAGE THAT SHALL LIST AND DOCUMENT THE NATURE OF USE IN EACH OF THE FOLLOWING AREAS:
 - A. DATE AND TIME OF OPERATION ON FUEL OIL;
 - B. HOURS OF OPERATION ON FUEL OIL; AND
 - C. REASON FOR OPERATION ON FUEL OIL.[RULE 1146]

7. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL CONDUCT SOURCE TESTS ON THE EQUIPMENT UNDER THE FOLLOWING CONDITIONS:
 - A. SOURCE TESTING SHALL BE CONDUCTED WITHIN 60 DAYS AFTER INITIAL START-UP OR WITHIN 60 DAYS AFTER RECEIPT OF THIS PERMIT, UNLESS OTHERWISE APPROVED IN WRITING BY THE EXECUTIVE OFFICER.
 - B. THE SOURCE TESTS SHALL BE PERFORMED TO VERIFY COMPLIANCE WITH THE NOX AND CO EMISSION LIMITS FOR NATURAL GAS AND FUEL OIL SPECIFIED IN CONDITION NO. 5.
 - C. THE SOURCE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH SCAQMD METHOD 100.1.
 - D. THE TESTS SHALL BE CONDUCTED WHILE THE BOILER IS OPERATING AT MAXIMUM, MINIMUM, AND NORMAL FIRING RATES. THE SAMPLING TIMES SHALL BE AT LEAST 15 CONSECUTIVE MINUTES FOR EACH LOAD.
 - E. WRITTEN NOTICE OF THE SOURCE TESTS SHALL BE SUBMITTED TO THE DISTRICT (ADDRESSED TO ATTN: VICKY LEE, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, P.O. BOX 4941, DIAMOND BAR, CA 91765) AT LEAST 14 DAYS PRIOR TO TESTING SO THAT AN OBSERVER MAY BE PRESENT.
 - F. TWO COMPLETE COPIES OF THE SOURCE TEST REPORTS SHALL BE SUBMITTED TO THE DISTRICT (ADDRESSED TO ATTN: VICKY LEE, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, P.O. BOX 4941, DIAMOND BAR, CA 91765), REFERENCING APPLICATION NO. 517738, WITHIN 45 DAYS AFTER THE TEST IS COMPLETED. THE REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO EMISSIONS RATES IN POUNDS PER HOUR AND CONCENTRATIONS IN PPMV AT THE OUTLET OF THE BOILER, MEASURED ON A DRY BASIS AT 3% OXYGEN. THE FOLLOWING OPERATING DATA SHALL ALSO BE INCLUDED FOR EACH FIRING RATE:
 - I. THE EXHAUST FLOW RATES, IN ACTUAL CUBIC FEET PER MINUTE (ACFM),
 - II. THE FIRING RATES, IN BTU PER HOUR,
 - III. THE EXHAUST TEMPERATURE, IN DEGREES F,
 - IV. THE OXYGEN CONTENT OF THE EXHAUST GASES, IN PERCENT, AND
 - V. THE FUEL FLOW RATE.

[RULE 1146, RULE 1303(a)(1)-BACT]

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

8. A CONTRACTOR APPROVED UNDER THE DISTRICT LABORATORY APPROVAL PROGRAM IN THE REQUIRED TEST METHODS FOR CRITERIA POLLUTANTS TO BE MEASURED, AND IN COMPLIANCE WITH RULE 304 (NO CONFLICT OF INTEREST) SHALL CONDUCT THE TESTS.
[RULE 304, RULE 1146]
9. SAMPLING FACILITIES SHALL COMPLY WITH THE DISTRICT GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES, PURSUANT TO RULE 217.
[RULE 217]
10. THIS BOILER SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.1, 431.2, AND 1146.
[RULE 1146]
11. THE OPERATOR SHALL MAINTAIN ADEQUATE RECORDS TO VERIFY COMPLIANCE WITH ALL CONDITIONS SPECIFIED IN THIS PERMIT. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED AT THE FACILITY FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 3004]

Emissions and Requirements:

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

NO_x: 9 PPMV FOR GASEOUS FUELS, RULE 1146
NO_x: 40 PPMV FOR NON-GASEOUS FUELS, RULE 1146
CO: 400 PPMV, RULE 1146
CO: 2000 PPMV, RULE 407
SO_x: 500 PPMV, RULE 407
PM: 0.1 GR/SCF, RULE 409

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

Periodic Monitoring:

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

[RULE 3004 (a) (4)]

Emissions and Requirements:

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, BOILER, > 400,000 BTU/HR BUT < 2 MMBTU/HR.

Emissions and Requirements:

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

PM: 0.1 gr/scf, RULE 409
NOx: 30 PPMV, RULE 1146.2
CO: 400 PPMV, RULE 1146.2
CO: 2000 PPMV, RULE 407

FACILITY PERMIT TO OPERATE SAN ANTONIO COMMUNITY HOSPITAL

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATION.

Emissions and Requirements:

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

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

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SAN ANTONIO COMMUNITY HOSPITAL
999 SAN BERNARDINO RD
UPLAND, CA 917886-4992

Facility ID 14437

Equipment Location: Same

PERMIT TO CONSTRUCT/OPERATE

A/N 529900—Title V Revision

Rev. 8—De Minimis Significant Title V revision.

This revision consists of the addition of a boiler (A/N 529897) and two emergency internal combustion engines (A/N 529898, 529899).

A/N 529897—Boiler

BOILER, CLEAVER BROOKS, MODEL FLX700-1450-150ST, WATERTUBE TYPE, RATED AT 15,000,000 BTU/HR, NATURAL GAS-FIRED, WITH LOW NOX BURNER, INDUSTRIAL COMBUSTION, MODEL MTH147NGX-09-6, AND 20 HP COMBUSTION BLOWER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS BOILER SHALL BE FIRED ON NATURAL GAS ONLY.
[RULE 1303(a)-BACT/LAER; RULE 1303(b)(2)-OFFSETS]
4. THIS BOILER SHALL NOT EMIT MORE THAN 9 PPM OF OXIDES OF NITROGEN (NOX), CALCULATED AS NO2, MEASURED BY VOLUME ON A DRY BASIS AT 3% O2.
[RULE 1146]
5. THIS BOILER SHALL NOT EMIT MORE THAN 50 PPM OF CARBON MONOXIDE (CO), MEASURED BY VOLUME ON A DRY BASIS AT 3% O2.
[RULE 1303(a)-BACT/LAER]
6. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL CONDUCT SOURCE TESTS ON THE EQUIPMENT UNDER THE FOLLOWING CONDITIONS:
 - A. SOURCE TESTING SHALL BE CONDUCTED WITHIN 60 DAYS AFTER INITIAL START-UP OR WITHIN 60 DAYS AFTER RECEIPT OF THIS PERMIT TO

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CONSTRUCT/OPERATE, UNLESS OTHERWISE APPROVED IN WRITING BY THE EXECUTIVE OFFICER.

- B. THE SOURCE TESTS SHALL BE PERFORMED TO VERIFY COMPLIANCE WITH THE NOX AND CO EMISSION LIMITS SPECIFIED IN CONDITION NOS. 4 AND 5, RESPECTIVELY.
- C. THE SOURCE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH SCAQMD METHOD 100.1.
- D. THE TESTS SHALL BE CONDUCTED WHILE THE BOILER IS OPERATING AT MAXIMUM, MINIMUM, AND NORMAL FIRING RATES. THE SAMPLING TIMES SHALL BE AT LEAST 15 CONSECUTIVE MINUTES FOR MAXIMUM AND MINIMUM LOADS AND AT LEAST ONE HOUR FOR NORMAL OPERATING LOAD.
- E. WRITTEN NOTICE OF THE SOURCE TESTS SHALL BE SUBMITTED TO THE DISTRICT (ADDRESSED TO ATTN: VICKY LEE, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, P.O. BOX 4941, DIAMOND BAR, CA 91765) AT LEAST 14 DAYS PRIOR TO TESTING SO THAT AN OBSERVER MAY BE PRESENT.
- F. TWO COMPLETE COPIES OF THE SOURCE TEST REPORTS SHALL BE SUBMITTED TO THE DISTRICT (ADDRESSED TO ATTN: VICKY LEE, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, P.O. BOX 4941, DIAMOND BAR, CA 91765), REFERENCING APPLICATION NO. 529897, WITHIN 45 DAYS AFTER THE TEST IS COMPLETED. THE REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO EMISSIONS RATES IN POUNDS PER HOUR AND CONCENTRATIONS IN PPMV AT THE OUTLET OF THE BOILER, MEASURED ON A DRY BASIS AT 3% OXYGEN. THE FOLLOWING OPERATING DATA SHALL ALSO BE INCLUDED FOR EACH FIRING RATE:
 - I. THE EXHAUST FLOW RATES, IN ACTUAL CUBIC FEET PER MINUTE (ACFM),
 - II. THE FIRING RATES, IN BTU PER HOUR,
 - III. THE EXHAUST TEMPERATURE, IN DEGREES F,
 - IV. THE OXYGEN CONTENT OF THE EXHAUST GASES, IN PERCENT, AND
 - V. THE FUEL FLOW RATE.

[RULE 1146, RULE 1303(a)-BACT/LAER]

Note: Since this permit will be issued P/C-P/O, I will forward the source test reports to the Compliance Dept for their submittal to AQMD Source Test Engineering Dept for evaluation. The source test reports are required to be evaluated by Source Test Engineering to support the new LAER of 50 ppmv for watertube boilers.

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7. A CONTRACTOR APPROVED UNDER THE DISTRICT LABORATORY APPROVAL PROGRAM IN THE REQUIRED TEST METHODS FOR CRITERIA POLLUTANTS TO BE MEASURED, AND IN COMPLIANCE WITH RULE 304 (NO CONFLICT OF INTEREST) SHALL CONDUCT THE TESTS.
[RULE 304, RULE 1146]
8. SAMPLING FACILITIES SHALL COMPLY WITH THE DISTRICT GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES, PURSUANT TO RULE 217.
[RULE 217]
9. THIS BOILER SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF RULE 1146.
[RULE 1146]
10. THIS BOILER SHALL BE EQUIPPED WITH A NON-RESETTABLE, TOTALIZING FUEL FLOW METER.
[40 CFR 60.48c(g)(2)]
11. THE OPERATOR SHALL RECORD AND MAINTAIN THE AMOUNT OF ALL FUEL COMBUSTED DURING EACH CALENDAR MONTH. THE FUEL USAGE RECORDS SHALL BE KEPT FOR A PERIOD OF FIVE YEARS AND ALL RECORDS SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[40 CFR 60.48c(g)(2)]
12. THE OPERATOR SHALL MAINTAIN ADEQUATE RECORDS TO VERIFY COMPLIANCE WITH ALL CONDITIONS SPECIFIED IN THIS PERMIT. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED AT THE FACILITY FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 3004]

Emissions and Requirements:

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

NO_x: 9 PPMV, RULE 1146
CO: 50 PPMV, RULE 1303(a)-BACT/LAER
CO: 2000 PPMV, RULE 407
SO_x: 500 PPMV, RULE 407
PM: 0.1 GR/SCF, RULE 409

BACKGROUND

San Antonio Community Hospital ("SACH") (ID 14437) is a premier acute health care facility that provides a comprehensive range of medical services. The facility is a Title V facility, but not RECLAIM. The Title V renewal facility permit was issued on 11/1/11, under A/N 521403.

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SACH is in the process of expanding its facility. On 12/1/11, on behalf of SACH, Advanced Environmental Controls ("AEC") submitted the following applications.

Appl No.	Description
529897	P/C-P/O for new Cleaver Brooks boiler, rated at 15 MMBTU/hr
529898	P/C-P/O for Caterpillar emergency ICE, rated at 2206 bhp
529899	P/C-P/O for identical Caterpillar emergency ICE, rated at 2206 bhp
529900	De minimis significant Title V permit revision
529901	Rule 1472 compliance plan application to update plan approved under A/N 517719 on 4/26/11— <i>A/N 529901 approved on 6/27/12.</i>

This evaluation is for the boiler (A/N 529897), which is being simultaneously evaluated with A/N 529898 & 529899 for the emergency ICEs. See separate evaluations for the other applications.

PROCESS DESCRIPTION

The new boiler will be a Cleaver Brooks, Model FLX700-1450-150ST, rated at 15,000,000 BTU/hr, with low NOx burner, Industrial Combustion, Model MTH147NGX-09-6. The entire assembly (boiler plus burner) is coming from Cleaver-Brooks, but the burner manufacturer is Industrial Combustion. The nameplate affixed to the burner housing will identify the burner manufacturer as Industrial Combustion. The use of back-up fuel is not requested.

EMISSIONS CALCULATIONS

A/N 529897—New Cleaver Brooks Boiler, 15 MMBtu/hr

Operating Schedule: 52 wk/yr, 7 days/wk, 24 hr/day

CO: 50 ppmv per pending LAER for watertube

R.F. MacDonald Technical Data Sheet indicates 100 ppm (minor source BACT for watertube).

In response to my request for 50 ppm (pending LAER for watertube), an e-mail dated 6/20/12 from Robin Bradshaw, Advanced Environmental Controls, indicated Anthony Feliz at Central Boiler Sales & Engineering, Santa Fe Springs, CA, stated burner can achieve 50 ppm.

NOx: 9 ppmv per Rule 1146 (R.F. MacDonald Technical Data Sheet)

ROG, PM, SOx: AER default emission factors for natural gas fired boiler.

$$\begin{aligned}
\text{CO, lbs/hr} &= (15,000,000 \text{ Btu/hr}) (8710 \text{ dscf}/10^6 \text{ Btu}) (50 \text{ ppm CO per LAER}/10^6) \\
&\quad (20.9/(20.9-3.0)) (28 \text{ lbs CO}/379 \text{ scf}) = 0.56 \text{ lb/hr} \\
\text{lbs/day} &= (0.56 \text{ lb/hr}) (24 \text{ hr/day}) = 13.44 \text{ lb/day} \\
30 \text{ DA} &= 13.44 \text{ lb/day}
\end{aligned}$$

$$\begin{aligned}
\text{NOx, lbs/hr} &= (15,000,000 \text{ Btu/hr}) (8710 \text{ dscf}/10^6 \text{ Btu}) (9 \text{ ppm per Rule 1146}/10^6) \\
&\quad (20.9/(20.9-3.0)) (46 \text{ lbs NOx}/379 \text{ scf}) = 0.17 \text{ lb/hr}
\end{aligned}$$

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$$\text{lbs/day} = (0.17 \text{ lb/hr})(24 \text{ hr/day}) = 4.08 \text{ lb/day}$$

$$30 \text{ DA} = 4.08 \text{ lb/day}$$

For combustion emissions, the standard assumption is $\text{PM}_{10} = \text{PM}$.

$$\text{PM}_{10}, \text{ lbs/hr} = (15,000,000 \text{ Btu/hr}) (\text{cf}/1050 \text{ Btu}) (7.6 \text{ lb PM AER}/10^6 \text{ cf}) = 0.11 \text{ lb/hr}$$

$$\text{lbs/day} = (0.11 \text{ lb/hr})(24 \text{ hr/day}) = 2.64 \text{ lb/day}$$

$$30 \text{ DA} = 2.64 \text{ lb/day}$$

$$\text{ROG}, \text{ lbs/hr} = (15,000,000 \text{ Btu/hr}) (\text{cf}/1050 \text{ Btu}) (5.5 \text{ lb ROG AER}/10^6 \text{ cf}) = 0.08 \text{ lb/hr}$$

$$\text{lbs/day} = (0.08 \text{ lb/hr})(24 \text{ hr/day}) = 1.92 \text{ lb/day}$$

$$30 \text{ DA} = 1.92 \text{ lb/day}$$

$$\text{SOx}, \text{ lbs/hr} = (15,000,000 \text{ Btu/hr}) (\text{cf}/1050 \text{ Btu}) (0.6 \text{ lb SOx AER}/10^6 \text{ cf}) = 0.01 \text{ lb/hr}$$

$$\text{lbs/day} = (0.01 \text{ lb/hr})(24 \text{ hr/day}) = 0.24 \text{ lb/day}$$

$$30 \text{ DA} = 0.24 \text{ lb/day}$$

EVALUATION OF COMPLIANCE WITH MAJOR RULES

The operation of the boiler is expected to comply with all applicable SCAQMD rules and regulations as follows:

District Rules and Regulations

Rule 212—Standards for Approving Permits

Public notice is not required for the installation of the new boiler, as discussed below:

(c)(1)-- Public notice is required for any new or modified equipment under Regulation XXX (Title V) that may emit air contaminants located within 1000 feet from the outer boundary of a school. Greatschools.org shows that the Gospel Restoration Academy, 640 East F St, Upland, CA 91786, is located 0.3 miles (1584 ft) from the facility. AEC was requested to determine whether this is a school because I was only able to reach a recording, and to provide a more accurate distance. AEC states the school has 20 students from kindergarten through grade 12, and the distance is 1,244 ft from the boiler stack to the outer boundary of the school. Since the distance is greater than 1000 ft, public notice is not required.

(c)(2)— Public notice is required for any new or modified facility which has on-site emission increases exceeding any of the daily maximums specified in subdivision (g) of this rule. This subsection does not require public notice because the on-site emission increases from this project, consisting of the addition of a new boiler and two emergency ICEs, will not exceed any of the daily maximum thresholds set forth in subdivision (g).

	VOC	NOx	PM ₁₀	SOx	CO	Lead
Project Emissions, lb/day	2.74	9.28	2.76	0.244	14.54	0
Rule 212 Daily Maximum, lbs/day	30	40	30	60	220	3

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(c)(3)—Public notice is required for any new or modified equipment under Regulation XXX with increases in emissions of toxic contaminants for which a person may be exposed to a maximum individual cancer risk greater than, or equal to one in a million during a lifetime (70 years) for facilities with more than one permitted unit, unless the applicant demonstrates to the satisfaction of the Executive Officer that the total facility-wide maximum individual cancer risk is below ten in a million using the risk assessment procedures and toxic air contaminants specified under Rule 1402. As indicated in the Rule 1401 risk assessment below, the MICR will not exceed 1 in a million.

Rule 401—Visible Emissions

With proper operation and maintenance, visible emissions are not expected from the operation of the boiler.

Rule 402—Nuisance

With proper operation and maintenance, the boilers are not likely to create a public nuisance. A search of the District’s complaints database for the last five years indicates no public complaints have been filed.

Rule 407—Liquid and Gaseous Air Contaminants

The boilers are expected to comply with the pending BACT/LAER limit of 50 ppmv CO, which supersedes the CO concentration limit of 2000 ppmv required by this rule. See BACT discussion, below.

Rule 409—Combustion Contaminants

With the use of natural gas, the operation of the boiler is anticipated to comply with the limit of 0.1 grains per cubic foot of gas corrected to 12 percent of carbon dioxide.

Rule 431.1—Sulfur Content of Gaseous Fuels

With the use of natural gas, compliance is anticipated as the facility purchases natural gas from a gas utility required to sell natural gas with less than 16 ppmv of sulfur compounds calculated as H₂S.

Rule 1146—Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters

Paragraph (a)—This rule is applicable to boilers of equal to or greater than 5 MMBtu/hr rated heat input capacity. This is applicable to the two existing boilers (G14080 and G14081) and the proposed Cleaver Brooks boiler under evaluation.

Paragraph (b)(7)--“Group II Unit” means “any unit burning gaseous fuels, excluding digester and landfill gases, with a rated heat input less than 75 million Btu per hour down to and including 20 million Btu per hour, excluding thermal fluid heaters.” The two existing boilers are Group II units: (1) G14080, Trane-Murray, 31 MMBtu/hr, and (2) G14081, Cleaver Brooks, 32 MMBtu/hr.

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Paragraph (b)(8)—"Group III Unit" means any unit burning gaseous fuels, excluding digester and landfill gases, with a rated heat input less than 20 MMBtu/hr down to and including 5 MMBtu/hr. The proposed Cleaver Brooks boiler (A/N 529897), rated at 15 MMBtu/hr, is a Group III unit.

Subparagraph (c)(1)(G)--Subparagraph (c)(1)(G) is applicable to Group II units, 75% or more of units (by heat input).

The requirements for (c)(1)(G) are summarized below:

Rule Reference	Category	Limit	Submit Compliance Plan on or before	Submit Application for Permit to Construct on or before	Unit Shall be in Full Compliance on or before
(c)(1)(G)	Group II Units 75% or more of units (by heat input)	9 ppm or 0.011 lbs/10 ⁶ Btu	January 1, 2010	January 1, 2011	January 1, 2012

On 12/18/09, SACH filed A/N 504687, a Rule 1146 Compliance Plan application, for the two existing boilers at the facility. The boilers are: (1) G14080, Trane-Murray, 31 MMBtu/hr, and (2) G14081, Cleaver Brooks, 32 MMBtu/hr. On 3/5/10, the District approved the compliance plan application. The compliance plan was approved based on SACH's proposal that both boilers would meet the requirements of Rule 1146(e)(5). The full compliance date for the two boilers was extended from January 1, 2012, the Rule 1146(c)(1)(G) compliance date, to January 1, 2013, pursuant to Rule 1146(e)(5). Subpart (e)(5) provides an exemption for earthquake damaged facilities that meet certain requirements.

On 11/17/10, SACH submitted A/N 516275, a compliance plan application to amend the plan approved under A/N 506487, because the facility realized belatedly that the Cleaver Brooks boiler was permitted as a low usage boiler. On 1/13/11, the District approved the compliance plan based on the facility coming into compliance with an oxides of nitrogen (NO₂) limit of 9 ppm or less on or before January 1, 2013 for the Trane-Murray boiler (Permit No. G14080), and an oxides of nitrogen (NO₂) limit of 30 ppm or less on or before January 1, 2015 for the Cleaver Brooks boiler (Permit No. G14081) per Rule 1146(e)(3). The Cleaver Brooks boiler is already in compliance with the 30 ppm NO_x limit.

On 1/4/11, A/N 517738 was submitted for a Permit to Construct to retrofit the Trane-Murray boiler (Permit No. G14080) with a new Power Flame burner to meet the 9 ppm NO_x limit by 1/1/13. On 4/5/12, the proposed permit was submitted to EPA for the 45-day review for a minor Title V revision. As the review period was completed on 5/21/12, the P/C for the Trane-Murray boiler retrofit was issued on 6/28/12 as Rev. 7 of the facility permit.

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Subparagraph (c)(1)(I)--Subparagraph (c)(1)(I) is applicable to Group III units, 75% or more of units (by heat input).

The requirements for (c)(1)(I) are summarized below:

Rule Reference	Category	Limit	Submit Compliance Plan on or before	Submit Application for Permit to Construct on or before	Unit Shall be in Full Compliance on or before
(c)(1)(I)	Group III Units 75% or more of units (by heat input)	9 ppm or 0.011 lbs/10 ⁶ Btu	January 1, 2011	January 1, 2012	January 1, 2013

The proposed Cleaver Brooks boiler, a Group III unit, is expected to meet the 9 ppm NO_x limit pursuant to the R.F. MacDonald "Flexible Tube Steam Boiler Technical Data Sheet." Condition no. 4 will limit NO_x to 9 ppmv, and condition no. 6 will require an initial source test.

Paragraph (c)(4)—The CO limit is 400 ppmv, corrected to 3% O₂. The R.F. MacDonald "Flexible Tube Steam Boiler Technical Data Sheet" indicates the CO emissions will meet the 100 ppm minor BACT limit for watertube boilers. An e-mail dated 6/20/12 from Robin Bradshaw, Advanced Environmental Controls, indicated Anthony Feliz at Central Boiler Sales & Engineering, Santa Fe Springs, CA, stated burner can achieve 50 ppm (the pending LAER limit for watertube). (See BACT/LAER discussion below.) Thus, condition no. 5 will limit CO to 50 ppmv. Condition no. 6 will require an initial source test to demonstrate compliance.

Paragraph (c)(9)—This paragraph sets forth the requirements for the Rule 1146 compliance plan application. As discussed above, SACH is in compliance with these requirements.

Paragraph (d)(3)—All parts per million emission limits specified in subdivision (c) are referenced at 3 percent volume stack gas oxygen on a dry basis averaged over a period of 15 consecutive minutes. Condition no. 6 for the initial source test requires the sampling times to be at least 15 consecutive minutes for maximum and minimum loads. BACT requires 1 hr for normal load.

Paragraph (d)(4)—Compliance with the NO_x and CO emission requirements of paragraph (c)(1) shall be determined using a District approved contractor under the Laboratory Approval Program according to the following procedures:

- (A) District Source Test Method 100.1—Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling (March 1989), or

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Condition no. 6 requires the use of Method 100.1, and condition no. 7 requires a LAP-approved contractor.

Paragraph (d)(6)—Compliance with the NOx emission requirements in paragraph (d)(4) shall be conducted once:

- (A) every three years for units with a rated heat input greater than or equal to 10 million Btu per hour, except for units subject to paragraph (c)(6) (CEMS).

Condition no. 9 requires compliance with Rule 1146.

Paragraph (d)(8)—Any owner or operator of units subject to this rule shall check NOx emissions with a portable NOx, CO and oxygen analyzer according to the Protocol for the Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Units Subject to South Coast Air Quality Management District Rules 1146 and 1146.1 according to the following schedule:

- (A) On or after July 1, 2009, the owner or operator of units subject to paragraph (c)(1) shall check NOx emissions at least monthly or every 750 unit operating hours, whichever occurs later.

Condition no. 9 requires compliance with Rule 1146.

Paragraph (d)(9)—An owner or operator shall opt to comply with the requirements as applied to CO emissions specified in paragraph (d)(8) or subparagraph:

- (A) (d)(6)(A) for units greater than or equal to 10 mmbtu/hr.

Condition no. 9 requires compliance with Rule 1146. The facility may opt to perform testing with a portable analyzer pursuant to Rule 1146(d)(8), or perform source testing pursuant to (d)(6)(A).

Regulation XIII—New Source Review

- Rule 1303(a)—BACT
Minor Source BACT

Part D—BACT Guidelines for Non-Major Polluting Facilities sets forth BACT guidelines for Boilers, dated 10-3-2008 Rev. 1, for natural gas fired boilers. As shown below, the boiler is anticipated to comply with minor source BACT requirements.

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	NO_x¹⁾	SO_x	CO	PM₁₀
BACT-- Natural Gas or Propane Fired, < 20 MM Btu/Hr	≤ 12 ppmv dry corrected to 3% O ₂	Natural Gas	≤ 100 ppmv for water tube type, dry corrected to 3% O ₂	Natural Gas
R.F. MacDonald Co. Technical Data Sheet	9 ppmv corrected to 3% O ₂	Natural Gas	100 ppmv, corrected to 3% O ₂	Natural Gas
Anthony Feliz at Central Boiler Sales & Engineering, Santa Fe Springs, CA			50 ppmv, corrected to 3% O ₂	

Footnote 1) to the BACT Guidelines recognizes that the NO_x limits required by Rules 1146 and 1146.1 may be more stringent by stating these rules require boilers rated >2 and < 75 MMBtu/hr to meet 9 ppm NO_x beginning 1/1/2012 for some categories. As discussed above, Rule 1146(c)(1)(I) requires a NO_x emission level of 9 ppm by January 1, 2013, which supersedes the 12 ppmv BACT limit.

LAER

Rule 1302(h) defines BACT as “the most stringent emission limitation or control technique which:

- (1) has been achieved in practice [AIP] for such category or class of source; or
- (2) is contained in any state implementation plan (SIP) approved by the United States Environmental Protection Agency (EPA) approved by the United States Environmental Protection Agency (EPA) for such category or class of source. A specific limitation or control technique shall not apply if the owner or operator of the proposed source demonstrates to the satisfaction of the Executive Officer or designee that such limitation or control technique is not presently achievable; or
- (3) is any other emission limitation or control technique, found by the Executive officer or designee to be technologically feasible for such class or category of sources or for a specific source, and cost-effective as compared to measures as listed in the Air Quality Management Plan (AQMP) or rules adopted by the District Governing Board.”

Rule 1303(a)(2) provides that BACT for sources located at major polluting facilities shall be at least as stringent as Lowest Achievable Emissions Rate (LAER) as defined in the federal Clean Air Act Section 171(3). For major polluting facilities, the lowest achievable emission rate (LAER) are determined on a permit-by-permit basis. For practical purposes, nearly all AQMD LAER determinations will be based on AIP LAER because it is generally more stringent than LAER based on SIP, and because state law constrains the District from using the third approach.

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- Carbon Monoxide

Although not listed in the BACT clearinghouse, California State University, San Bernardino (ID 23043) installed in 2011 three watertube boilers that meet 50 ppmv CO, corrected to 3% O₂, as demonstrated by the source test reports.

The permit nos. and boiler descriptions are listed in the table below.

Permit No. (A/N)	Boiler Description
G18604 (A/N 522992)	BOILER NO. 1, GROUPE SIMONEAU, WATERTUBE TYPE, MODEL AQT-800, SERIAL NO. 4599, WITH A LOW NOX BURNER, POWER FLAME, MODEL NO. NVC13-G-30, NATURAL GAS FIRED, RATED AT 32.0 MMBTU PER HOUR, AND A 40 HP COMBUSTION AIR BLOWER.
G18603 (A/N 522993)	BOILER NO. 2, GROUPE SIMONEAU, WATERTUBE TYPE, MODEL AQT-800, SERIAL NO. 4600, WITH A LOW NOX BURNER, POWER FLAME, MODEL NO. NVC13-G-30, NATURAL GAS FIRED, RATED AT 32.0 MMBTU PER HOUR, AND A 40 HP COMBUSTION AIR BLOWER.
G18602 (A/N 522995)	BOILER NO. 3, GROUPE SIMONEAU, WATERTUBE TYPE, MODEL AQT-300, SERIAL NO. 4596, WITH A LOW NOX BURNER, POWER FLAME, MODEL NO. NVC8-G-30, NATURAL GAS FIRED, RATED AT 12.0 MMBTU PER HOUR, AND A 15 HP COMBUSTION AIR BLOWER.

The evaluation of the source test reports (R12189), dated 5/1/2012, stated all reported concentration emissions may be used for compliance determination and emission calculations. (Corrected concentration emissions by Source Testing Engineer Ron Lem are almost identical to reported values.) The corrected results from pg 4 – 6 of the source test report evaluation are summarized in the table below. The measured CO emissions levels are less than 11 ppm, corrected to 3% O₂, well under 50 ppm.

CORRECTED RESULTS @ 3% O₂

Load	Boiler No. 1		Boiler No. 2		Boiler No. 3	
	NOx, ppm	CO, ppm	NOx, ppm	CO, ppm	NOx, ppm	CO, ppm
Normal	7.08	10.37	4.93	<7.34	7.18	<7.05
Minimum	7.17	<7.12	5.15	<7.47	4.85	<7.55
Maximum	7.72	<6.80	8.23	7.78	6.63	<6.81
Emission Limits	9	100	9	100	9	100

Therefore, the pending LAER limit is 50 ppm CO, corrected to 3% O₂.

NO_x and NH₃ Emissions

Rule 1146 provides the basis for requiring an SCR as LAER for Group II units (20 MMBtu/hr up to less than 75 MMBtu/hr) to achieve 5 ppm NO_x, corrected to 3% O₂, with 5 ppm NH₃. However, the proposed boiler is rated at 15 MMBtu/hr.

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Two BACT/LAER determinations from the AQMD BACT Guidelines, Section B – LAER/BACT Determinations for Major Polluting Facilities, Section III – Other Technologies support SCR as LAER for firetube boilers.

- Allstyle Dyeing & Finishing, A/N 376152, Sellers Model SH-LN-90, firetube, 16.5 MMBtu/hr, dated 8/29/02, for NOx 5 ppm, CO 50 ppm, NH₃ 10 ppm, with use of SCR.
- Y2K Textile, Inc, A/N 362616, Superior Model 6X-2000-S150-LNDG210P-20, firetube, 16.4 MMBtu/hr, dated 11/15/02, for NOx 11 ppm, CO 50 ppm, NH₃ 5 ppm, with use of SCR.

On 7/6/12, Sr. Manager Brian Yeh determined these LAER/BACT for firetube boilers are not applicable to the watertube boiler under evaluation. Further, the cost effectiveness study to support technology transfer from firetube to watertube would not be undertaken at this time. Thus an SCR is not required for the proposed boiler.

Permit Condition Limits

Condition no. 4 limits the NOx to 9 ppmv pursuant to Rule 1146 (not BACT), and condition no. 5 limits the CO to 50 ppmv pursuant to pending LAER (not Rule 1146). The R.F. MacDonald “Flexible Tube Steam Boiler Technical Data Sheet” indicates the NOx and CO emissions will meet 9 ppm NOx and 100 ppm CO. An e-mail dated 6/20/12 from Robin Bradshaw, Advanced Environmental Controls, indicated Anthony Feliz at Central Boiler Sales & Engineering, Santa Fe Springs, CA, stated burner can achieve 50 ppm. Condition no. 6 will require an initial source test to demonstrate compliance.

Averaging Period

An e-mail, dated 8/7/07, from then Assistant DEO Mohsen Nazemi to E & C Managers stated: “BACT emission limits on new permits for combustion equipment shall be imposed on a one hour averaging period. A different averaging period (shorter or longer) may be used as permit conditions and for purposes of compliance determination for other applicable rules and regulations (i.e. 15 minute average for Regulations IV, XI, XX, or monthly limits for offsets, etc.)” In accordance with this e-mail, condition no. 6 requires a one-hour test for normal load for the initial source test to demonstrate compliance with the BACT limits. The maximum and minimum load tests may also be required to be one-hour tests, but generally are required to be 15 minutes, pursuant to Rule 1146(d)(3), which specifies that all parts per million emission limits specified in subdivision (c) are referenced at 3 percent volume stack gas oxygen on a dry basis averaged over a period of 15 consecutive minutes.

- Rule 1303(b)(1)—Modeling

Rule 1303(b)(1) requires the applicant to substantiate with modeling that the facility modification will not cause a violation, or make significantly worse an existing violation according to Appendix A of the rule or other analysis approved by the Executive Officer or

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designee, of any state or national ambient air quality standards at any receptor location in the District.

The boiler will be in compliance with the modeling requirements because the CO and PM₁₀ emissions levels are below the screening threshold set forth in Rule 1303, Table A-1.

	Heat Input Capacity > 10 < 20 mmBtu/hr		
	NOx, lb/hr	CO, lb/hr	PM ₁₀ , lb/hr
Emissions Calculations	0.17 based on 9 ppm	0.56 based on 50 ppm	0.11
Rule 1303 Table A-1 Limits	0.86	47.3	5.2

- **Rule 1303(b)(2)--Offsets**

Rule 1303(b)(2)(A) provides that unless exempt from offsets requirements pursuant to Rule 1304, emission increases shall be offset by Emission Reduction Credits (ERCs). Offset ratios shall be 1.0-to-1.0 for allocations from the Priority Reserve. Rule 1304(d)(2) provides that any modified facility that has a post-modification potential to emit equal to or more than the amounts in Table A shall be required to obtain offsets for the corresponding emissions increase. The thresholds listed in Table A are 4 tpy (21 lb/day) for VOC, SOx, and PM₁₀. The threshold of 29 tpy CO is no longer applicable because it is an attainment pollutant.

The following table presents the current facility potentials to emit for the criteria pollutants per the NSR database, the changes in emissions resulting from the installation of the new boiler, the PTEs after boiler installation, and the offsets required from the Priority Reserve.

	CO, lb/day	NOx lb/day	PM ₁₀ , lb/day	ROG, lb/day	SOx, lb/day
Current Facility PTEs	555	197	12	57	3
A/N 529897—Increase in emissions from new boiler	13.44	4.08	2.64	1.92	0.24
Facility PTEs after Permit Approval	568.44	201.08	14.64	58.92	3.24
Offsets Required from Priority Reserve	-	4	0	2	0

Rule 1401—New Source Review of Toxic Air Contaminants

Rule 1401 specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units that emit toxic air contaminants. A Tier II screening risk assessment is required to be performed for the new boiler to determine compliance with Rule 1401.

The risk assessment input and results are summarized below.

- **Input**

Operating Schedule: 52 wk/yr, 7 day/wk, 24 hr/day

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T-BACT: No.

Distance to nearest residential or sensitive receptor: 112 meters (368 ft from residence at 807 North 10th Ave, Upland, CA 91786)

Distance to nearest offsite worker receptor: 176 meters (579 ft from the business office suites, The Upland - San Antonio Medical Bldg. at 811 East 11th St, Upland, CA 91786).

Stack height: 25 ft from ground to the top of the stack.

Nearest meteorological station: Upland

- Results

The Tier 2 risk assessment indicates each boiler will be in compliance with Rule 1401. The results are summarized below.

Health Risk Index	Residential/ Sensitive Receptor Risk	Commercial Receptor Risk	Rule 1401 Standard (no T-BACT)	Complies?
Maximum Individual Cancer (MICR)	9.85×10^{-8}	6.59×10^{-9}	1×10^{-6}	Yes
HIA	1.33×10^{-3}	8.68×10^{-4}	1	Yes
HIC	1.34×10^{-3}	8.68×10^{-4}	1	Yes

Regulation XXX—Title V Permits

- Rule 3003—Applications

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

Rule 3000(b)(6) defines a “de minimis significant permit revision” as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants (HAPs) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NO _x	40
PM ₁₀	30
SO _x	60
CO	220

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To determine if a project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project will be the second permit revision to the Title V renewal permit issued to this facility on November 1, 2011. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

Facility Permit Rev No	Revision	HAP	VOC	NOx	PM ₁₀	SOx	CO
6	Title V Renewal, issued 11/1/11						
7	First Permit Revision, A/N 518430—Retrofit Trane-Murray Boiler under A/N 517738, issued 6/28/12.	0	0	-18.84	0	0	0
8	Proposed Second Permit Revision, A/N 529900: Addition of new equipment.						
	A/N 529897—Boiler	0	1.92	4.08	2.64	0.24	13.44
	A/N 529898—Emergency ICE	0	0.41	2.6	0.06	0.002	0.55
	A/N 529899—Emergency ICE	0	0.41	2.6	0.06	0.002	0.55
	Cumulative Total	0	2.74	-9.56	2.76	0.244	14.54
	Maximum Daily	30	30	40	30	60	220

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a “de minimis significant permit revision”.

This proposed project will be issued as Revision No. 8 of the Title V facility permit.

Federal Regulations

40 CFR Part 60, Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

§60.40c Applicability and delegation of authority

The affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and has a maximum design input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. This subpart is applicable to the proposed 15 MMBtu/hr boiler.

§60.42c Standard for sulfur dioxide (SO₂)

Affected facilities that combust coal, oil, or coal and oil with any other fuel are subject to this standard. Thus the proposed natural gas-fired boiler, with no backup fuel, is not subject to this section and the subsequent sections related to this SO₂ standard.

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§60.43c Standard for particulate matter (PM)
Affected facilities that combust coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with other fuels are subject to this standard. Thus the proposed natural gas-fired boiler, with no backup fuel, is not subject to this section and the subsequent sections related to this PM standard.

§60.48c Reporting and recordkeeping requirements

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(g)(2) As an alternative to meeting the requirements of (g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(g)(3) As an alternative to meeting the requirements of (g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

*****To comply with (g)(2), condition no. 10 requires a non-resettable, totalizing fuel flow meter, and condition no. 11 requires recordkeeping for the monthly fuel usage.

40 CFR Part 63, Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

§63.11195 The types of boilers listed in paragraphs (a) through (g) of this section are not subject to this subpart and to any requirements in this subpart.

(e) A gas-fired boiler as defined in this subpart.

§63.11237 “Gas-fired boiler” includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

*****Thus the proposed natural gas-fired boiler, with no backup fuel, is not subject to this subpart.

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RECOMMENDATION

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “de minimis significant permit revision,” it is exempt from the public participation requirements under Rule 3006(b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V permit will be issued to this facility.

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SAN ANTONIO COMMUNITY HOSPITAL
999 SAN BERNARDINO RD
UPLAND, CA 917886-4992

Facility ID 14437

Equipment Location: Same

PERMITS TO CONSTRUCT/OPERATE

A/N 529900—Title V Revision

Rev. 8—De Minimis Significant Title V revision.

This revision consists of the addition of a boiler (A/N 529897) and two emergency internal combustion engines (A/N 529898, 529899).

A/N 529898—Emergency ICE

INTERNAL COMBUSTION ENGINE, NO. 1, CATERPILLAR, MODEL NO. 3512C, DIESEL-FUELED, FOUR-CYCLE, TWELVE CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 2206 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR, 1500 KW

A/N 529899—Emergency ICE

INTERNAL COMBUSTION ENGINE, NO. 2, CATERPILLAR, MODEL NO. 3512C, DIESEL-FUELED, FOUR-CYCLE, TWELVE CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 2206 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR, 1500 KW

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 431.2 AND RULE 1470.
[RULE 431.2, RULE 1470]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING, NO MORE THAN 4.2 HOURS IN ANY ONE MONTH FOR MAINTENANCE

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AND TESTING, AND NO MORE THAN 2.5 HOURS IN ANY ONE DAY FOR TESTING AND MAINTENANCE.

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

5. OPERATING BEYOND THE 50 HOURS PER YEAR ALLOTTED FOR MAINTENANCE AND TESTING PURPOSES SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
[RULE 1303(a)(1)-BACT, RULE 1470]

6. AN OPERATIONAL NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, RULE 1303(a)(1)-BACT, RULE 1304(a)-MODELING AND OFFSET EXEMPTIONS, RULE 1401, RULE 1470, 40 CFR 60.4209(a)]

7. AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED, DOCUMENTING THE TOTAL TIME THE ENGINE IS OPERATED EACH MONTH AND SPECIFIC REASON FOR OPERATION AS:
 - A. EMERGENCY USE.
 - B. MAINTENANCE AND TESTING.
 - C. OTHER (DESCRIBE THE REASON FOR OPERATING).

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

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

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

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

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

9. THE SULFUR CONTENT OF DIESEL FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 15 PPM BY WEIGHT.
[RULE 1303(a), 40 CFR 60.4207(b)]

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

[40 CFR 60.4211(a)]

11. THE OPERATOR SHALL COMPLY WITH THE EMISSION STANDARDS SPECIFIED IN 40 CFR 60.4205(b) BY PURCHASING AN ENGINE CERTIFIED TO THE EMISSION STANDARDS IN 40 CFR 60.4205(b), AS APPLICABLE, FOR THE SAME MODEL YEAR AND MAXIMUM ENGINE POWER. THE ENGINE MUST BE INSTALLED AND CONFIGURED ACCORDING TO THE MANUFACTURER'S EMISSION-RELATED SPECIFICATIONS.
[40 CFR 60.4211(c)]

Emissions and Requirements:

12. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
 PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 PM: RULE 1470
 NOX + NMHC: 4.8 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
 CO: 2.6 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)
 PM: 0.15 G/BHP-HR, RULE 1303(a), 40 CFR 60.4205(b)

BACKGROUND

San Antonio Community Hospital ("SACH") (ID 14437) is a premier acute health care facility that provides a comprehensive range of medical services. The facility is a Title V facility, but not RECLAIM. The Title V renewal facility permit was issued on 11/1/11, under A/N 521403.

SACH is in the process of expanding its facility. On 12/1/11, on behalf of SACH, Advanced Environmental Controls ("AEC") submitted the following applications.

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Appl No.	Description
529897	P/C-P/O for new Cleaver Brooks boiler, rated at 15 MMBTU/hr
529898	P/C-P/O for Caterpillar emergency ICE, rated at 2206 bhp
529899	P/C-P/O for identical Caterpillar emergency ICE, rated at 2206 bhp
529900	De minimis significant Title V permit revision
529901	Rule 1472 compliance plan application to update plan approved under A/N 517719-- A/N 529901 approved on 6/27/12.

This evaluation is for the two ICEs (A/N 529898, 529899) which are being simultaneously evaluated with A/N 529897 for the boiler. See separate evaluations for the other applications.

Note: A/N 529898 is the master file for these engine applications.

PROCESS DESCRIPTION

The emergency ICEs--Caterpillar, Model No. 3512C, rated at 2206 bhp--is AQMD-certified as a Tier 2 engine (A/N 471081), with an expiration date of 12/31/2012. A permit, instead of registration, is required because this is a Title V facility.

The applications originally indicated an oxidation catalyst would be installed on each engine. Follow-up indicated the reason for the inclusion was that a GT Exhaust Systems Inc catalytic silencer would be provided for each engine for future installation of an owner furnished catalytic (oxidation type) elements. As AEC confirmed that an oxidation catalyst would not be included with the installation of either engine, the permits will not include an oxidation catalyst.

EMISSIONS CALCULATIONS

The AQMD certification application for the engine, A/N 449987, was reviewed for emission factors, which are reflected on the AQMD website for Certified Internal Combustion Engines – Emergency Electrical Generators Only.

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

NO_x

NO_x, lb/hr = (2206 bhp) (3.74 g/bhp-hr per AQMD certification) (lb/454 g) = 18.17 lb/hr

lb/day = (18.17 lb/hr) (1 hr/day) = 18.17 lb/day

30 DA = (18.17 lb/day) (1 day/wk 4.3 /30 days) = 2.63 lb/day

CO

CO, lb/hr = (2206 bhp) (0.79 g/bhp-hr per AQMD certification) (lb/454 g) = 3.84 lb/hr

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$$\text{lb/day} = (3.84 \text{ lb/hr}) (1 \text{ hr/day}) = 3.84 \text{ lb/day}$$

$$30 \text{ DA} = (3.84 \text{ lb/day}) (1 \text{ day/wk} \times 4.3 / 30 \text{ days}) = 0.56 \text{ lb/day}$$

VOC

$$\text{VOC, lb/hr} = (2206 \text{ bhp}) (0.59 \text{ g/bhp-hr per AQMD certification}) (\text{lb}/454 \text{ g}) = 2.87 \text{ lb/hr}$$

$$\text{lb/day} = (2.87 \text{ lb/hr}) (1 \text{ hr/day}) = 2.87 \text{ lb/day}$$

$$30 \text{ DA} = (2.87 \text{ lb/day}) (1 \text{ day/wk} \times 4.3 / 30 \text{ days}) = 0.42 \text{ lb/day}$$

SO_x

$$\text{SO}_x \text{ lb/hr} = (2206 \text{ bhp}) (0.0049 \text{ g/bhp-hr for 15 ppmw fuel}) (\text{lb}/454 \text{ g}) = 0.02 \text{ lb/hr}$$

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

$$30 \text{ DA} = (0.02 \text{ lb/day}) (1 \text{ day/wk} \times 4.3 / 30 \text{ days}) = 0.002 \text{ lb/day}$$

PM₁₀

$$\text{PM}_{10} \text{ lb/hr} = (2206 \text{ bhp}) (0.084 \text{ g/bhp-hr PM per AQMD certification})$$

$$(0.96 \text{ PM}_{10}/\text{PM}) (\text{lb}/454 \text{ g}) = 0.39 \text{ lb/hr}$$

$$\text{lb/day} = (0.39 \text{ lb/hr}) (1 \text{ hr/day}) = 0.39 \text{ lb/day}$$

$$30 \text{ DA} = (0.39 \text{ lb/day}) (1 \text{ day/wk} \times 4.3 / 30 \text{ days}) = 0.06 \text{ lb/day}$$

RULE EVALUATION

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

District Rules and Regulations

Rule 212—Standards for Approving Permits and Issuing Public Notice

Public notice is not required for the installation of the two emergency ICEs, as discussed below:

(c)(1)— Public notice is required for any new or modified equipment under Regulation XXX (Title V) that may emit air contaminants located within 1000 feet from the outer boundary of a school. Greatschools.org shows that the Gospel Restoration Academy, 640 East F St, Upland, CA 91786, is located 0.3 miles (1584 ft) from the facility. AEC was requested to determine whether this is a school because I was only able to reach a recording, and to provide a more accurate distance. AEC states the school has 20 students from kindergarten through grade 12, and the distance is 1,244 ft from either engine stack to the outer boundary of the school. Since the distance is greater than 1000 ft, public notice is not required.

(c)(2)— This subsection does not require public notice because the on-site emission increases from this project, consisting of the addition of a new boiler and two emergency ICEs, will not exceed any of the daily maximum thresholds set forth in subdivision (g).

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	VOC	NOx	PM ₁₀	SOx	CO	Lead
Project Emissions	2.74	9.28	2.76	0.244	14.54	0
Rule 212 Daily Maximum, lbs/day	30	40	30	60	220	3

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

Rule 401—Visible Emissions

Based on experience with similar equipment, the engines are expected to comply with the opacity limits.

Rule 402—Nuisance

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

Rule 404—Particulate Matter - Concentration

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

Rule 407—Liquid and Gaseous Air Contaminants

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

Rule 431.2—Sulfur Content of Liquid Fuels

Compliance is expected to comply with the requirement that diesel fuel supplied to equipment is to contain 15 ppm or less sulfur by weight.

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

The engine is exempt per section (h)(2), which exempts emergency standby engines that operate 200 hours or less per year as determined by an elapsed operating time meter. Condition no. 4 limits operation to no more than 200 hours in any one year, and condition no. 6 requires an operational non-resettable elapsed operating time meter.

Regulation XIII—New Source Review

- Rule 1303(a)—BACT

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

As shown below, the emission levels for the engine comply with the Tier 2 BACT standards.

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	NO_x + NMHC	SO_x	CO	PM
BACT Limits ≥ 750 HP	<u>Tier 2</u> 4.8 g/bhp-hr = 6.4 g/kW-hr	Diesel fuel with a sulfur content no greater than 0.0015% by wt. (Rule 431.2)	<u>Tier 2</u> 2.6 g/bhp-hr = 3.5 g/kW-hr	Compliance with Rule 1470 [0.15 g/bhp-hr = 0.2 g/kW-hr] and <u>Tier 2</u> 0.15 g/bhp-hr
AQMD Engine Certification File, A/N 449987	4.33 g/bhp-hr (3.74 g/bhp-hr + 0.59 g/bhp-hr)		0.79 g/bhp-hr	0.084 g/bhp-hr

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

Lowest Achievable Emission Rate (LAER)

For major polluting facilities, emergency engines are subject to LAER (diesel particulate filter) if the maximum PM₁₀ emissions are 1 lb/day or greater for testing and maintenance (not emergency use). Since the PM emission factor for the proposed engine is 0.084 g/bhp-hr, the PM₁₀ emissions will remain less than 1 lb/day if the engine is operated not more than 2.5 hr in any day for testing and maintenance, calculated as follows:

$$\text{Hr/day} = \frac{[1 \text{ lb/day}]}{[(2206 \text{ bhp}) (0.084 \text{ g/bhp-hr PM per AQMD certification}) (0.96 \text{ PM}_{10}/\text{PM}) (\text{lb}/454 \text{ g})]} = 2.55 \text{ hr/day}$$

In an 3/21/12 e-mail, Robin Bradshaw Sr. Project Manager for AEC, indicated that the applicant impressed upon AEC that under NFPA 110 (2005 Edition), the engines are required to be tested for at least 4 hours, at least once within every 36 months. The applicant indicated that the hospital is bound to the 2005 Edition, not the most recent 2010 Edition, by the Joint Commission formerly The Joint Commission on Accreditation of Healthcare Organizations, Centers for Disease Control (CDC) and the California Department of Public Health. (A copy of the relevant sections of the 2005 and 2010 editions are included in the application file.)

The above requirements are found in Chapter 8—Routine Maintenance and Operational Testing, Section 8.4.9, of the NFPA 110. Section 8.4.9 (2005 Edition) states:

“Level 1 EPSS shall be tested for the duration of its assigned class (see Section 4.2), for at least 4 hours, at least once within every 36 months.”

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These requirements depend on the level and class of the engine, which are defined in Chapter 4—Classification of Emergency Power Supply Systems (EPSSs). This standard recognizes two levels of equipment installation, performance, and maintenance (Section 4.4). Per applicant, these engines are Level 1. Level 1 EPSS shall be installed when failure of the equipment to perform could result in loss of human life or serious injuries (Section 4.4.1). The class defines the minimum time, in hours, for which the EPSS is designed to operate at its rated load without being refueled or recharged (Section 4.2). Per applicant, these engines are Class X. Table 4.1(a)—Classification of EPSSs defines Class X as a minimum time other than those listed in the table, as required by the application, code, or user. Per applicant, these engines are designed to run in excess of four hours without being refueled during an emergency event.

The 2010 edition of Section 8.4.9 clarifies that level 1 EPSS shall be tested continuously for the duration of its assigned class (Section 8.4.9.1). This means that if the engine is designed to operate for 2 hours, fuel is not required to be trucked in to complete a four hour test. Further, where the assigned class is greater than 4 hours, it shall be permitted to terminate the test after 4 continuous hours (Section 8.4.9.2). Accordingly, both the 2005 and 2010 editions require the 4-hour testing for these engines.

In a 5/23/12 e-mail, Robin Bradshaw indicated, however, that the facility has decided to forego the NFPA 110 requirement to operate the engines for four hours every 36 months for testing and maintenance purposes. When questioned regarding the mechanism for foregoing the standard and whether this will be permanent, Mr. Bradshaw did not answer the mechanism inquiry but stated this would be permanent.

To remain under 1 lb/day PM₁₀, condition no. 4 limits testing and maintenance to 2.5 hr/day, in addition to the standard 50 hr/yr and 4.2 hr/month limits. Condition no. 7 requires recordkeeping.

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

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

Rule 1401—New Source Review of Toxic Air Contaminants

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

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

(b)(47) This defines a “new engine” as a stationary CI engine installed or to be installed at a facility on or after January 1, 2005. As the engines will be installed later in 2012, they are “new engines” for the purpose of this rule.

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

- (i) Such engines shall not operate more than 50 hours per year for maintenance and testing, as defined in (b)(43). Condition no. 4 implements this requirement.
- (v) New stationary emergency standby diesel-fueled engines installed or with an application for P/C or P/O deemed complete on or after January 1, 2011 and prior to January 1, 2013, shall use a certified CI engine that emits diesel PM at a rate less than or equal to 0.15 g/bhp-hr.

The PM emission rate for these certified engines is 0.084 g/bhp-hr.

- (vii) **NMHC + NO_x, and CO Standards**
Any new stationary emergency standby diesel-fueled CI engines (> 50 bhp) installed and with an application for Permit to Construct or Permit to Operate deemed complete on or after January 1, 2011, shall meet the standards for off-road engines of the same maximum rated power as specified in Table 2 below:

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

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

These are the same as the Tier 2 BACT standards, which the engines meet.

- (c)(7)(C)(i) To be part of a Demand Response Program (DRP) and enrolled in an Interruptible Service Contract (ISC) after on or after January 1, 2005, the new engines are required to meet a diesel PM standard of 0.01 gram/bhp-hr or less, among other requirements. The engines do not meet this standard.

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

On 4/26/11, the District approved A/N 517719 for the Rule 1472 compliance plan application for the five diesel fired ICEs driving emergency generators.

On 12/1/11, AEC submitted A/N 529901 for a Rule 1472 compliance plan application to update A/N 517719, approved 4/26/11. This application was submitted simultaneously with the two applications for engines under evaluation, and will update the plan to include these two new engines. The evaluation for A/N 529901 indicates that the engine group index for the facility will not exceed 1.0 with the addition of the two engines. The compliance plan for A/N 529901 was approved on 6/27/12.

Regulation XXX—Title V Permits

- Rule 3003—Applications

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

Rule 3000(b)(6) defines a “de minimis significant permit revision” as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants (HAPs) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NOx	40
PM10	30
SOx	60
CO	220

To determine if a project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project will be the second permit revision to the Title V renewal permit issued to this facility on November 1, 2011. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

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Facility Permit Rev No	Revision	HAP	VOC	NO _x	PM ₁₀	SO _x	CO
6	Title V Renewal, issued 11/1/11						
7	First Permit Revision, A/N 518430—Retrofit Trane-Murray Boiler under A/N 517738, issued 6/28/12.	0	0	-18.84	0	0	0
8	Proposed Second Permit Revision, A/N 529900: Addition of new equipment.						
	A/N 529897—Boiler	0	1.92	4.08	2.64	0.24	13.44
	A/N 529898—Emergency ICE	0	0.41	2.6	0.06	0.002	0.55
	A/N 529899—Emergency ICE	0	0.41	2.6	0.06	0.002	0.55
	Cumulative Total	0	2.74	-9.56	2.76	0.244	14.54
	Maximum Daily	30	30	40	30	60	220

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a “de minimis significant permit revision”.

This proposed project will be issued as Revision No. 8 of the Title V facility permit.

Federal Regulations

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

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

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

The EPA comment letter, dated 5/23/12, regarding the proposed permit for A/N 529701 for an emergency ICE for US Govt., Veterans Admin Medical Center (ID 5679) indicated permit conditions should include at a minimum the requirements of the following sections.

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

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for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. Since the engines under evaluation each have a total displacement of 51.8 liters for 12 cylinders, §60.4202 is applicable.

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

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

40 CFR 89.112—Exhaust emission from nonroad engines shall not exceed the applicable exhaust standards in Table 1 of this provision. For an engine rated at 1500 kW for model year 2007 and later, Tier 2 is applicable (6.4 g/kW-hr NMHC + NO_x, 3.5 g/kW-hr CO, 0.2 g/kW-hr PM). The engines comply with these limits, which are the same as the District BACT standards.

Permit condition: Accordingly, the emissions limits in condition no. 12 for NMHC + NO_x, CO, and PM will be tagged with Rule 1301(a)—BACT and 40 CFR 60.4205(b).

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

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

(1) Sulfur content.

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

Permit condition: Condition no. 9 limits diesel fuel sulfur content to 15 ppm, which is the same as BACT.

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

Permit condition: Condition no. 6 requires a non-resettable hour meter.

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

Permit condition: These engines are not equipped with diesel particulate filters.

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

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

Permit condition: Pursuant to EPA guidance, condition no. 10 is added to implement the above requirements regarding the engine (no control device).

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

Permit condition: Pursuant to EPA guidance, condition no. 11 is added to implement the above requirements regarding the engine. As discussed above, the engine is in compliance with the emissions standards specified in 40 CFR 60.4205(b).

§60.4211(f)—Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations....

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

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hours for testing and maintenance, and 200 hours total including the 50 hours for testing and maintenance. Condition no. 4 implements the more stringent District requirements.

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

Permit condition: Condition no. 7 sets forth the recordkeeping requirements.

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

Permit condition: These engines are not equipped with diesel particulate filters.

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

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

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

§63.6585(c) An “area source” is a source that is not a major source. This hospital is an area source for HAPs.

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

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

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

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

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

RECOMMENDATION

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “de minimis significant permit revision,” it is exempt from the public participation requirements under Rule 3006(b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V permit will be issued to this facility.