

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  ENGINEERING & COMPLIANCE DIV.  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b>	<b>PAGE</b>
	1	5
	<b>APPL. NO.</b>	<b>DATE</b>
	515684	5/12/11
	<b>PROCESSED BY</b>	<b>CHECKED BY</b>
V. Lee		

SAN ANTONIO COMMUNITY HOSPITAL  
999 SAN BERNARDINO RD  
UPLAND, CA 91786-4992

Facility ID 14437

Equipment Location: Same

### **ADMINISTRATIVE CHANGE TO P/O**

#### **A/N 515684—Admin Change to Emergency ICE, F15352 (A/N 341088)**

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, MODEL NO. 8123-7416, DIESEL FUELED, ~~EMERGENCY ELECTRICAL GENERATION~~, 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, ~~UNLESS THE OPERATOR DEMONSTRATES IN WRITING TO THE EXECUTIVE OFFICER THAT SPECIFIC ADDITIONAL TIME IS NECESSARY.~~  
[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

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  ENGINEERING & COMPLIANCE DIV.  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES	PAGE
	2	5
	APPL. NO.	DATE
	515684	5/12/11
	PROCESSED BY	CHECKED BY
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FOR A MINIMUM OF ~~THREE~~ **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.

[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

**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, with the initial Title V facility permit expiring on 10/31/11. The Title V renewal application, A/N 521403, was submitted on 4/14/11.

SACH operates four emergency diesel-fired internal combustion engines (P/O Nos. E1868B, E1867B, E03670, and F15352), three cogeneration systems (P/O Nos. F85020, F85021, and F85022), one spray booth (P/O No. F54693), and two boilers (P/O Nos. F58535, F58537). The three cogeneration systems generate steam for the entire facility. In the event that one of the

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  ENGINEERING & COMPLIANCE DIV.  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES	PAGE
	3	5
	APPL. NO.	DATE
	515684	5/12/11
	PROCESSED BY	CHECKED BY
V. Lee		

systems is taken down or additional steam is required, the Trane Murray boiler (F58535) is put into operation. The Cleaver Brooks boiler (F58537) is permitted as a stand-by unit limited to no more than 90,000 therms in a continuous 12-month period.

On 10/26/10, Inspector John Eckert issued Notice to Comply E00016 to require the submittal of administrative change applications to correct equipment description discrepancies, as well as other requirements. Details were provided by Inspector Eckert in an e-mail, dated 10/6/10.

The applications were submitted by Advanced Environmental Controls (“AEC”) on behalf of SACH and are summarized in the table below.

Date Submitted	A/N	Prior Permit (A/N)	Equipment
10/26/10	515682	F85020 (A/N 457741)	Cogeneration System No. 1
10/26/10	515685	F85022 (A/N 457743)	Cogeneration System No. 2
10/26/10	515684	F15352 (A/N 341088)	ICE, Detroit Diesel, 947 bhp, for Emergency Generator
11/9/10	516182	F58535 (A/N 406908)	Boiler, Trane-Murray
11/9/10	516183	F58537 (A/N 406909)	Boiler, Cleaver-Brooks
3/25/11	520246		Administrative Title V Revision—Converted to minor on 5/11/11.

This evaluation is for A/N 515684. See separate evaluations for other applications.

**ADMINISTRATIVE CHANGES**

**A/N 515352—Emergency ICE, F15352**

- a. Inspector Eckert’s Comments re Permit Corrections in e-mail, dated 10/6/10  
“Standby generator # 4 has discrepancy in model #. I believe your permit lists the engine number incorrectly as the model #. Engine is model DASE 041 8600, engine # 81237416. This needs correction.”
  
- b. Actual Corrections to Permit  
F15352 lists the engine model no. as 8123-7416. The application file for F15352 indicates the engine model no. is 8123-7416 pursuant to Detroit Diesel documentation and the then current AQMD certified engines list. The generator set configuration model no. is DASE 0418600. Although the standard equipment description does not include the generator set model number, it will be added in this case.

Condition no. 3—The provision allowing the facility additional time to use up non-compliant diesel fuel will be deleted.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  ENGINEERING & COMPLIANCE DIV.  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES	PAGE
	4	5
	APPL. NO.	DATE
	515684	5/12/11
	PROCESSED BY	CHECKED BY
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Condition no. 5—The recordkeeping retention period will be changed from 3 years to 5 years because Title V facilities are required to keep records for five years.

### **EMISSIONS CALCULATIONS**

#### **A/N 515684—Emergency ICE, F15352**

##### **a. Prior Emissions, F15352**

Operating schedule: 52 wk/yr, 1 day/wk, 0.58 hr/day

Note: Daily emissions was based on maximum daily operation of 3 hours per day.

CO = 8.31 lb/hr = 25 lb/day	30 DA = 1 lb/day
NO <sub>x</sub> = 17.91 lb/hr = 54 lb/day	30 DA = 3 lb/day
PM <sub>10</sub> = 0.34 lb/hr = 1.0 lb/day	30 DA = 0 lb/day
ROG = 0.17 lb/hr = 1 lb/day	30 DA = 0 lb/day
SO <sub>x</sub> = 0.38 lb/hr = 1 lb/day	30 DA = 0 lb/day

##### **b. A/N 515684—Administrative Change**

Operating schedule: 52 wk/yr, 1 day/wk, 0.58 hr/day

The hourly emissions remain the same. The daily emissions and 30-day averages are calculated based on the operating schedule, as follows:

CO = 8.31 lb/hr = 4.85 lb/day	30 DA = 0.7 lb/day
NO <sub>x</sub> = 17.91 lb/hr = 10.45 lb/day	30 DA = 1.51 lb/day
PM <sub>10</sub> = 0.34 lb/hr = 0.2 lb/day	30 DA = 0.03 lb/day
ROG = 0.17 lb/hr = 0.1 lb/day	30 DA = 0.01 lb/day
SO <sub>x</sub> = 0.38 lb/hr = 0.22 lb/day	30 DA = 0.03 lb/day

### **EVALUATION OF COMPLIANCE WITH MAJOR RULES**

The operation of the emergency ICE with the administrative corrections are expected to comply with all applicable SCAQMD rules and regulations as follows:

#### **Regulation XIII—New Source Review**

- **Rule 1303(a)—BACT**
- **Rule 1303(b)(1)—Modeling**
- **Rule 1303(b)(2)—Offsets**

BACT, modeling, and offset requirements are not triggered because the administrative changes will not result in an increase in emissions from the ICE.

#### **Rule 1470—Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines**

(c)(3)(C)(i)(I)—This provision provides diesel PM standard and hours of operating requirements for in-use stationary emergency standby diesel-fueled engines, except those located on school grounds or 100 meters or less from an existing, as of April 2, 2004, school. No owner or

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  ENGINEERING & COMPLIANCE DIV.  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES	PAGE
	5	5
	APPL. NO.	DATE
	515684	5/12/11
	PROCESSED BY	CHECKED BY
V. Lee		

operator shall operate an in-use stationary emergency standby diesel-fueled CI engine that emits diesel PM at a rate greater than 0.40 g/bhp-hr more than 20 hours per year for maintenance and testing purposes. In-use emergency standby diesel fueled CI engines operated at health facilities shall be allowed up to 10 additional hours per year for maintenance and testing purposes. This section does not limit engine operation for emergency use and for emission testing to show compliance with subparagraph (c)(3)(C).

The applicant has not requested that the hours for testing and maintenance be increased from 20 hours per year. For this engine, the Rule 1472 compliance plan application, A/N 517719, used 11.435 hours for the annual hours value in the index calculation formula. The 11.435 hours was based on the average of the actual annual testing and maintenance operating hours for calendar years 2005 and 2006. Therefore, the number of hours for testing and maintenance allowed by condition nos. 4 and 6 will remain 20 hours.

Regulation XXX—Title V Permits

- Rule 3003—Applications

As noted above, this facility is not in the RECLAIM program. The proposed project is considered as a “minor permit revision” to the Title V permit for this facility.

Rule 3000(b)(12)(vi) defines a “minor permit revision” as any Title V permit revision that does not result in an increase in emissions of a pollutant subject to Regulation XIII—New Source Review (non-RECLAIM pollutants) or a hazardous air pollutant (HAP).

The proposed project is not expected to result in an increase in emissions of a pollutant subject to Regulation XIII – New Source Review (non-RECLAIM pollutants) or a hazardous air pollutant (HAP), and therefore is considered as a “minor permit revision” pursuant to Rule 3000(b)(12)(A)(vi).

This proposed project will be issued as Revision No. 5 of the Title V facility permit.

**RECOMMENDATION**

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “minor 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.