



South Coast Air Quality Management District

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

April 26, 2011

Mr. Gerardo Rios (R9Airpermits_sc@epa.gov)
Chief, Permits Office
US EPA, Region IX- Air 3.
75 Hawthorne Blvd.
San Francisco, CA 94105

Dear Mr. Rios:

U.S. Govt. Medical Center, Long Beach has proposed to revise their Title V permit by adding two emergency engines. This is a medical facility (NAICS 622110) located at 5901 East 7th Street, Long Beach, CA 90822. This proposed permit revision is considered as a "de minimis significant permit revision" to their Title V permit. Attached for your review are the evaluation and section D of the Facility permit for the proposed revision. With your receipt of the proposed Title V permit revision today, we will note that the EPA 45-day review period will begin on April 26, 2011.

If you have any questions concerning these changes, please call the permit processing engineer Mr. Roy Olivares at (909) 396-2208.

Very truly yours,

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

Brian L. Yen
Senior Manager
Mechanical, Chemical and Public Services
Engineering and Compliance

BLY:AYL:JTY:RDO
Enclosure

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

SECTION A: FACILITY INFORMATION

LEGAL OWNER &/OR OPERATOR: US GOVT, VETERANS AFFAIRS MEDICAL CENTER

LEGAL OPERATOR (if different than owner):

EQUIPMENT LOCATION: 5901 E 7TH ST
LONG BEACH, CA 90822-5299

MAILING ADDRESS: 5901 5901 7TH 5901
LONG BEACH, CA 90822-5299

RESPONSIBLE OFFICIAL: ANTOINE ARBAJI

TITLE: CHIEF, ENGINEERING SERVICES

TELEPHONE NUMBER: (562) 826-8000

CONTACT PERSON: MICHAEL DUNCAN

TITLE: ENGINEER

TELEPHONE NUMBER: (562) 826-8000

TITLE V PERMIT ISSUED: September 08, 2010

TITLE V PERMIT EXPIRATION DATE: September 07, 2015

TITLE V	RECLAIM
YES	NOx: NO SOx: NO CYCLE: 0 ZONE: COASTAL

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

**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.

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

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	Page no.
213797	D35143	I C E (>500 HP) EM ELEC GEN DIESEL	4
213798	D22276	I C E (50-500 HP) EM ELEC GEN-DIESEL	6
213800	D28791	I C E (>500 HP) EM ELEC GEN DIESEL	8
213804	D22281	I C E (50-500 HP) EM ELEC GEN-DIESEL	10
213805	D22282	I C E (50-500 HP) EM ELEC GEN-DIESEL	12
242917	D67572	BOILER (>20-50 MMBTU/HR) COMB GAS-DISTIL	14
242918	D67574	BOILER (>20-50 MMBTU/HR) COMB GAS-DISTIL	17
242919	D67573	BOILER (>20-50 MMBTU/HR) COMB GAS-DISTIL	20
452849	N18921	GASOLINE STORAGE AND DISPENSING SYSTEM	23
301007	D91873	I C E (>500 HP) EM ELEC GEN DIESEL	27
301008	D91874	I C E (>500 HP) EM ELEC GEN DIESEL	29
321084	F6238	BOILER/HOTWATER HEATER,SINGLE FACILITY,PORTABLE,<600,000BTU/HR,DIESEL/OIL FIRED	31
321085	F6237	BOILER/HOTWATER HEATER,SINGLE FACILITY,PORTABLE,<600,000BTU/HR,DIESEL/OIL FIRED	33
387099	F49031	I C E (>500 HP) EM ELEC GEN DIESEL	35
387100	F49032	I C E (50-500 HP) EM ELEC GEN DIESEL	37
401098	F52909	I C E (>500 HP) EM ELEC GEN DIESEL	39
431729	F83385	SPRAY BOOTH	41
516319	G	I C E (>500 HP) EM ELEC GEN DIESEL	43
516320	G	I C E (>500 HP) EM ELEC GEN DIESEL	

NOTE: EQUIPMENT LISTED ABOVE THAT HAVE 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.

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

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 RINGLEMANN 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 USE PURCHASE ANY DIESEL FUEL UNLESS THE FUEL IS LOW SULFUR DIESEL FOR WHICH THE SULFUR CONTENT SHALL NOT EXCEED 15 PPMV BY WEIGHT AS SUPPLIED BY THE SUPPLIER
[RULE 431.2]

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. D35143
A/N 213797**

Equipment Description:

INTERNAL COMBUSTION ENGINE, CUMMINS, DIESEL-FUELED, EMERGENCY ELECTRICAL GENERATION, MODEL KTA-19-GI, S/N 37120235, TURBOCHARGED, AFTERCOOLED, 6 CYLINDERS, 560 BHP.

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. A TIMER SHALL BE INSTALLED SO AS TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1304 (a)(4)-MODELING AND OFFSETS, RULE 1110.2]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1110.2, RULE 1470, RULE 1303 (a)(1)-BACT]
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 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 1304(b)(2), RULE 1110.2, RULE 1470]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

6. THE OPERATION OF ENGINE BEYOND THE 30 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

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

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. D22276
A/N 213798**

Equipment Description:

INTERNAL COMBUSTION ENGINE GENERAC DIESEL FUELED, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 88A01051-S, SERIAL NO. 8609Z8, 4 CYLINDERS. FOUR CYCLE, NATURALLY ASPIRATED, 130 BHP.

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 CONDITIONS AT ALL TIMES.
[RULE 204]
4. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED, AND CERTIFIED AT A MINIMUM OF ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS, AND CERTIFICATIONS MUST BE PERFORMED BY A QUALIFIED MECHANIC AND DONE IN ACCORDANCE WITH THE ENGINE MANUFACTURER'S SPECIFICATIONS AND PROCEDURES.
[RULE 1303 (a)-BACT]
5. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1110.2, RULE 1470]
6. 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 1304(b)(2), RULE 1110.2, RULE 1470]

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

7. THE OPERATION OF ENGINE BEYOND THE 30 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
8. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
9. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

Periodic Monitoring:

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

Emissions And Requirements:

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

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. D28791
A/N 213800**

Equipment Description:

INTERNAL COMBUSTION ENGINE. CUMMINS DIESEL-FUELED. EMERGENCY ELECTRICAL GENERATION. MODEL NTA-855-G. SERIAL NO. 10794305, TURBOCHARGED. AFTERCOOLED, 6 CYLINDERS,. 655 BHP.

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 OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 1304 (a)(4), RULE 1110.2]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1304 (a)-MODELING AND OFFSETS, 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 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 1304(b)(2), RULE 1110.2, RULE 1470]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

6. THE OPERATION OF ENGINE BEYOND THE 30 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

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

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. D22281
A/N 213804**

Equipment Description:

INTERNAL COMBUSTION ENGINE GENERAL MOTORS, DIESEL FUELED, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 6150. SERIAL NO. 6A-86830, 6 CYLINDERS, FOUR CYCLE, TURBOCHARGED, 250 BHP.

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 CONDITIONS AT ALL TIMES.
[RULE 204]
3. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED, AND CERTIFIED AT A MINIMUM OF ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS, AND CERTIFICATIONS MUST BE PERFORMED BY A QUALIFIED MECHANIC AND DONE IN ACCORDANCE WITH THE ENGINE MANUFACTURER'S SPECIFICATIONS AND PROCEDURES.
{RULE 1303 (a)(1)-BACT}
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1470, RULE 1110.2]
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 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 1304(b)(2), RULE 1110.2, RULE 1470]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

- 6. THE OPERATION OF ENGINE BEYOND THE 30 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
- 7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
- 8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

Periodic Monitoring:

- 9. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETABLE 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

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. D22282
A/N 213805**

Equipment Description:

INTERNAL COMBUSTION ENGINE ALLIS-CHALMERS, DIESEL FUELED, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 25000, SERIAL NO. 2503562, 6 CYLINDERS, FOUR CYCLE, TURBOCHARGED, 445 BHP.

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 CONDITIONS AT ALL TIMES.
[RULE 204]
3. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED, AND CERTIFIED AT A MINIMUM OF ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS, AND CERTIFICATIONS MUST BE PERFORMED BY A QUALIFIED MECHANIC AND DONE IN ACCORDANCE WITH THE ENGINE MANUFACTURER'S SPECIFICATIONS AND PROCEDURES.
[RULE 1303 (a)(1)-BACT]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[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 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 1304(b)(2), RULE 1110.2, RULE 1470]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

6. THE OPERATION OF ENGINE BEYOND THE 30 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

Periodic Monitoring:

9. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 3004 (a)(4)]
10. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR.
[RULE 3004 (a)(4)]

Emissions And Requirements:

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

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. D67572
A/N 242917**

Equipment Description:

BOILER NO. 3, TRANE MURRAY, WATERTUBE TYPE, BOILER TYPE NO. 3-50, SERIAL NO. 10415, WITH A 45,000,000 BTU PER HOUR, NATURAL GAS OR OIL FIRED, FABER BURNER, MODEL NO. WBH-1-20, WITH A 30 H.P. COMBUSTION AIR BLOWER AND AN INDUCED FLUE GAS, RECIRCULATION SYSTEM.

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 FLUE GAS RECIRCULATION SYSTEM SHALL BE IN FULL USE WHENEVER THE BOILER IS IN OPERATION EXCEPT DURING MAINTENANCE OR TESTING.
[RULE 1146]
4. FUEL OIL SUPPLIED AT THE BURNER SHALL BE NO.2 OR A LIGHTER GRADE AS DESCRIBED BY THE LATEST ASTM SPECIFICATIONS AND SHALL CONTAIN LESS THAN 0.015 PERCENT SULFUR BY WEIGHT.
[RULE 431.2]
5. THIS BOILER SHALL BE EQUIPPED WITH A NON- RESETTABLE, TOTALIZING FLOW METER FOR EACH FUEL TO BE BURNED.
[RULE 1146]
6. THE BOILER OPERATOR SHALL RECORD THE ANNUAL FUEL USE IN A MANNER APPROVED IN WRITING BY THE DIRECTOR OF COMPLIANCE. ALL RECORDS SHALL BE RETAINED FOR A PERIOD OF FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1146]
7. IF THIS BOILER BURNS MORE THAN 98,550,000,000 BTUS OF FUEL IN ANY ONE CALENDAR YEAR, THE BOILER SHALL MEET THE 30 PPM OXIDES OF NITROGEN LIMIT OF RULE 1146 FOR THE LIFE OF THE UNIT BEGINNING MARCH 1 OF THE FOLLOWING YEAR.
[RULE 1146]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

8. IF THIS BOILER BURNS MORE THAN 200 BILLION BTUS OF FUEL IN ANY ONE CALENDAR YEAR, THE BOILER OPERATOR SHALL INSTALL AND OPERATE FOR THE LIFE OF THE UNIT BEGINNING MARCH 1 OF THE FOLLOWING YEAR AN OXIDES OF NITROGEN CONTINUOUS EMISSION MONITORING SYSTEM THAT IS APPROVED BY THE EXECUTIVE OFFICER IN ACCORDANCE WITH RULE 218(B).
[RULE 1146]
9. THIS EQUIPMENT SHALL COMPLY WITH THE NOX EMISSIONS LIMITS OF 9 PPMV. THE COMPLIANCE DATE FOR THE NOX CONCENTRATION LIMIT IS SPECIFIED IN RULE 1146, TABLE 1146-1.
[RULE 1146]
10. THE OPERATOR OF THIS EQUIPMENT SHALL COMPLY WITH SOURCE TESTING REQUIREMENTS IN SUBDIVISION (d)(6)--COMPLIANCE DETERMINATION OF RULE 1146.
[RULE 1146]
11. THE OPERATOR OF THIS EQUIPMENT SHALL COMPLY WITH PERIODIC MONITORING REQUIREMENTS OF RULE 1146 (c)(8).
[RULE 1146]

Periodic Monitoring:

12. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 7.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND 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)]
13. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 10.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND 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)]
14. 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

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

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)]

- 15. UNITS WITH A HEAT INPUT GREATER THAN 10 MMBTU/HR AND ANNUAL OIL USAGE GREATER THAN 1,000,000 GALLONS OR GREATER THAN 336 HOURS OF OPERATION, BUT DOES NOT EXCEED 2,000,000 GALLONS IN ANY ONE YEAR. THE OPERATOR SHALL CONDUCT AN ANNUAL MAINTENANCE INSPECTION CHECK OF THE OPERATING PRESSURE, TEMPERATURE, AIR SUPPLY, VENT, SMOKE SPOT, BURNER CONDITION, HEAT-TRANSFER SURFACE CONDITION, WATER TREATMENT, BLOWDOWN AND LEAKAGE

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. DATE WHEN ANNUAL MAINTENANCE INSPECTION WAS CONDUCTED.
[RULE 3004 (a)(4)]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 407
SOX: 500 PPMV, RULE 407
PM: 0.1 GR/SCF, RULE 409
CO: 400 PPMV, RULE 1146
NOX 40 PPMV, RULE 1146, FUEL OIL
NOX 30 PPMV, RULE 1146, NATURAL GAS
NOX 9 PPMV, RULE 1146, EFFECTIVE 1/12/2012 AND 1/12/2014

PERMIT TO OPERATE

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

Permit No. D67574
A/N 242918

Equipment Description:

BOILER NO. 2, TRANE MURRAY, WATERTUBE TYPE, BOILER TYPE NO. 3-50, SERIAL NO. 10416, WITH A 45,000,000 BTU PER HOUR, NATURAL GAS OR OIL FIRED, FABER BURNER, MODEL NO. WBH-1-20, WITH A 30 H.P. COMBUSTION AIR BLOWER AND AN INDUCED FLUE GAS, RECIRCULATION SYSTEM.

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 FLUE GAS RECIRCULATION SYSTEM SHALL BE IN FULL USE WHENEVER THE BOILER IS IN OPERATION EXCEPT DURING MAINTENANCE OR TESTING.
[RULE 1146]
4. FUEL OIL SUPPLIED AT THE BURNER SHALL BE NO.2 OR A LIGHTER GRADE AS DESCRIBED BY THE LATEST ASTM SPECIFICATIONS AND SHALL CONTAIN LESS THAN 0.015 PERCENT SULFUR BY WEIGHT.
[RULE 431.2]
5. THIS BOILER SHALL BE EQUIPPED WITH A NON- RESETTABLE, TOTALIZING FLOW METER FOR EACH FUEL TO BE BURNED.
[RULE 1146]
6. THE BOILER OPERATOR SHALL RECORD THE ANNUAL FUEL USE IN A MANNER APPROVED IN WRITING BY THE DIRECTOR OF COMPLIANCE. ALL RECORDS SHALL BE RETAINED FOR A PERIOD OF TWO YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1146]
7. IF THIS BOILER BURNS MORE THAN 98,550,000,000 BTUS OF FUEL IN ANY ONE CALENDAR YEAR, THE BOILER SHALL MEET THE 30 PPM OXIDES OF NITROGEN LIMIT OF RULE 1146 FOR THE LIFE OF THE UNIT BEGINNING MARCH 1 OF THE FOLLOWING YEAR.
[RULE 1146]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

8. IF THIS BOILER BURNS MORE THAN 200 BILLION BTUS OF FUEL IN ANY ONE CALENDAR YEAR. THE BOILER OPERATOR SHALL INSTALL AND OPERATE FOR THE LIFE OF THE UNIT BEGINNING MARCH 1 OF THE FOLLOWING YEAR AN OXIDES OF NITROGEN CONTINUOUS EMISSION MONITORING SYSTEM THAT IS APPROVED BY THE EXECUTIVE OFFICER IN ACCORDANCE WITH RULE 218(B).
[RULE 1146]
9. THIS EQUIPMENT SHALL COMPLY WITH THE NOX EMISSIONS LIMITS OF 9 PPMV. THE COMPLIANCE DATE FOR THE NOX CONCENTRATION LIMIT IS SPECIFIED IN RULE 1146, TABLE 1146-1.
[RULE 1146]
10. THE OPERATOR OF THIS EQUIPMENT SHALL COMPLY WITH SOURCE TESTING REQUIREMENTS IN SUBDIVISION (d)(6)--COMPLIANCE DETERMINATION OF RULE 1146.
[RULE 1146]
11. THE OPERATOR OF THIS EQUIPMENT SHALL COMPLY WITH PERIODIC MONITORING REQUIREMENTS OF RULE 1146 (c)(8).
[RULE 1146]

Periodic Monitoring:

12. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 7.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND 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)]
13. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 10.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND 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)]
14. 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

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

MINUTES IN ANY ONE HOUR, THE OPERATOR SHALL EITHER:

- C. 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
- D. 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:

- E. STACK OR EMISSION POINT IDENTIFICATION;
- F. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- G. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- H. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

15. UNITS WITH A HEAT INPUT GREATER THAN 10 MMBTU/HR AND ANNUAL OIL USAGE GREATER THAN 1,000,000 GALLONS OR GREATER THAN 336 HOURS OF OPERATION, BUT DOES NOT EXCEED 2,000,000 GALLONS IN ANY ONE YEAR. THE OPERATOR SHALL CONDUCT AN ANNUAL MAINTENANCE INSPECTION CHECK OF THE OPERATING PRESSURE, TEMPERATURE, AIR SUPPLY, VENT, SMOKE SPOT, BURNER CONDITION, HEAT-TRANSFER SURFACE CONDITION, WATER TREATMENT, BLOWDOWN AND LEAKAGE

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. DATE WHEN ANNUAL MAINTENANCE INSPECTION WAS CONDUCTED.
[RULE 3004 (a)(4)]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 407
SOX: 500 PPMV, RULE 407
PM: 0.1 GR/SCF, RULE 409
CO: 400 PPMV, RULE 1146
NOX: 40 PPMV, RULE 1146, FUEL OIL
NOX: 30 PPMV, RULE 1146, NATURAL GAS
NOX: 9 PPMV, RULE 1146, EFFECTIVE 1/12/2012 AND 1/12/2014

PERMIT TO OPERATE

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

**Permit No. D67573
A/N 242919**

Equipment Description:

BOILER NO. 1, TRANE MURRAY, WATERTUBE TYPE, BOILER TYPE NO. 3-50, SERIAL NO. 10417, WITH A 45,000,000 BTU PER HOUR, NATURAL GAS OR OIL FIRED, FABER BURNER, MODEL NO. WBH-1-20, WITH A 30 H.P. COMBUSTION AIR BLOWER AND AN INDUCED FLUE GAS, RECIRCULATION SYSTEM.

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 FLUE GAS RECIRCULATION SYSTEM SHALL BE IN FULL USE WHENEVER THE BOILER IS IN OPERATION EXCEPT DURING MAINTENANCE OR TESTING.
[RULE 1146]
4. FUEL OIL SUPPLIED AT THE BURNER SHALL BE NO.2 OR A LIGHTER GRADE AS DESCRIBED BY THE LATEST ASTM SPECIFICATIONS AND SHALL CONTAIN LESS THAN 0.015 PERCENT SULFUR BY WEIGHT.
[RULE 431.2]
5. THIS BOILER SHALL BE EQUIPPED WITH A NON- RESETTABLE, TOTALIZING FLOW METER FOR EACH FUEL TO BE BURNED.
[RULE 1146]
6. THE BOILER OPERATOR SHALL RECORD THE ANNUAL FUEL USE IN A MANNER APPROVED IN WRITING BY THE DIRECTOR OF COMPLIANCE. ALL RECORDS SHALL BE RETAINED FOR A PERIOD OF TWO YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1146]
7. IF THIS BOILER BURNS MORE THAN 98,550,000,000 BTUS OF FUEL IN ANY ONE CALENDAR YEAR, THE BOILER SHALL MEET THE 30 PPM OXIDES OF NITROGEN LIMIT OF RULE 1146 FOR THE LIFE OF THE UNIT BEGINNING MARCH 1 OF THE FOLLOWING YEAR.
[RULE 1146]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

8. IF THIS BOILER BURNS MORE THAN 200 BILLION BTUS OF FUEL IN ANY ONE CALENDAR YEAR. THE BOILER OPERATOR SHALL INSTALL AND OPERATE FOR THE LIFE OF THE UNIT BEGINNING MARCH 1 OF THE FOLLOWING YEAR AN OXIDES OF NITROGEN CONTINUOUS EMISSION MONITORING SYSTEM THAT IS APPROVED BY THE EXECUTIVE OFFICER IN ACCORDANCE WITH RULE 218(B).
[RULE 1146]
9. THIS EQUIPMENT SHALL COMPLY WITH THE NOX EMISSIONS LIMITS OF 9 PPMV. THE COMPLIANCE DATE FOR THE NOX CONCENTRATION LIMIT IS SPECIFIED IN RULE 1146, TABLE 1146-1.
[RULE 1146]
10. THE OPERATOR OF THIS EQUIPMENT SHALL COMPLY WITH SOURCE TESTING REQUIREMENTS IN SUBDIVISION (d)(6)--COMPLIANCE DETERMINATION OF RULE 1146.
[RULE 1146]
11. THE OPERATOR OF THIS EQUIPMENT SHALL COMPLY WITH PERIODIC MONITORING REQUIREMENTS OF RULE 1146 (c)(8).
[RULE 1146]

Periodic Monitoring:

12. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 7.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND 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)]
13. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 10.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND 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)]
14. 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

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

MINUTES IN ANY ONE HOUR, THE OPERATOR SHALL EITHER:

- E. 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
- F. 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:

- I. STACK OR EMISSION POINT IDENTIFICATION;
- J. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- K. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- L. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

- 15. UNITS WITH A HEAT INPUT GREATER THAN 10 MMBTU/HR AND ANNUAL OIL USAGE GREATER THAN 1,000,000 GALLONS OR GREATER THAN 336 HOURS OF OPERATION, BUT DOES NOT EXCEED 2,000,000 GALLONS IN ANY ONE YEAR. THE OPERATOR SHALL CONDUCT AN ANNUAL MAINTENANCE INSPECTION CHECK OF THE OPERATING PRESSURE, TEMPERATURE, AIR SUPPLY, VENT, SMOKE SPOT, BURNER CONDITION, HEAT-TRANSFER SURFACE CONDITION, WATER TREATMENT, BLOWDOWN AND LEAKAGE

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. DATE WHEN ANNUAL MAINTENANCE INSPECTION WAS CONDUCTED.
[RULE 3004 (a)(4)]

Emissions And Requirements:

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

- CO: 2000 PPMV, RULE 407
- SOX: 500 PPMV, RULE 407
- PM: 0.1 GR/SCF, RULE 409
- CO: 400 PPMV, RULE 1146
- NOX: 40 PPMV, RULE 1146, FUEL OIL
- NOX: 30 PPMV, RULE 1146, NATURAL GAS
- NOX 9 PPMV, RULE 1146, EFFECTIVE 1/12/2012 AND 1/12/2014

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. N18921
A/N 452849**

Equipment Description:

FUEL STORAGE AND DISPENSING FACILITY CONSISTING OF:

1. 1- GASOLINE UNDERGROUND STORAGE TANK, 10,000-GALLON CAPACITY, EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM (VR-102-E), NOT METHANOL COMPATIBLE.
2. 1- METHANOL UNDERGROUND STORAGE TANK, 6,000-GALLON CAPACITY, EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM (VR-102-E), 1 METHANOL COMPATIBLE.
3. 2- GASOLINE NOZZLES DISPENSING 2 PRODUCTS, EQUIPPED WITH PHASE II VAPOR RECOVERY SYSTEM, HEALY PHASE II EVR NOT INCLUDING ISD (VR-201-A).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT WAS 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. ALL PERMIT CONDITIONS APPLICABLE TO THE EQUIPMENT DESCRIBED IN THE PREVIOUS PERMIT TO CONSTRUCT/OPERATE N16871 SHALL REMAIN IN EFFECT UNTIL THE NEW OR MODIFIED EQUIPMENT IS CONSTRUCTED AND OPERATED AS DESCRIBED IN THIS NEW PERMIT. THIS PERMIT TO CONSTRUCT/OPERATE SHALL BECOME INVALID IF THE MODIFICATION AS DESCRIBED IN THE EQUIPMENT DESCRIPTION HAS NOT BEEN COMPLETED WITHIN ONE YEAR FROM THE ISSUE DATE. IF THE MODIFICATION HAS NOT BEEN COMPLETED WITHIN ONE YEAR FROM THE ISSUE DATE OF THE PERMIT, A WRITTEN REQUEST SHALL BE SUBMITTED TO THE AQMD (ATTENTION: RANDY MATSUYAMA) TO REINSTATE THE PREVIOUSLY INACTIVATED PERMIT TO OPERATE. A NEW APPLICATION SHALL BE FILED IF THERE ARE PLANS TO CONTINUE WITH THE MODIFICATION. FURTHERMORE, THIS CONDITION DOES NOT ALLOW ANY TIME EXTENSIONS TO ANY MODIFICATIONS REQUIRED BY THE CALIFORNIA AIR RESOURCES BOARD OR AQMD.
[RULE 461]
4. EXCEPT FOR DIESEL TRANSFERS, PHASE I VAPOR RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO STORAGE TANKS.
[RULE 461]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

5. EXCEPT FOR DIESEL TRANSFERS, PHASE II VAPOR RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO MOTOR VEHICLES, AS DEFINED IN RULE 461.
[RULE 461]
6. ALL PHASE I AND PHASE II VAPOR RECOVERY EQUIPMENT AT THIS FACILITY SHALL BE INSTALLED, OPERATED AND MAINTAINED TO MEET ALL CALIFORNIA AIR RESOURCES BOARD CERTIFICATION REQUIREMENTS.
[RULE 461]
7. NEW EQUIPMENT INSTALLATIONS AND SUBSEQUENT SERVICE AND REPAIRS FOR ANY CERTIFIED COMPONENT FOR WHICH THIS PERMIT WAS ISSUED, SHALL ONLY BE PERFORMED BY A CURRENT AND CERTIFIED PERSON WHO HAS SUCCESSFULLY COMPLETED THE MANUFACTURER'S TRAINING COURSE. COMPLETION OF ANY AQMD TRAINING COURSE DOES NOT CONSTITUTE AS A SUBSTITUTE FOR THIS REQUIREMENT. PROOF OF SUCCESSFUL COMPLETION OF ANY MANUFACTURER TRAINING COURSE SHALL BE WITH THE MANUFACTURER.
[RULE 461]
8. AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO BACK-FILLING ANY UNDERGROUND STORAGE TANK OR PIPING, THE SCAQMD SHALL BE NOTIFIED BY E-MAIL AT R461BACKFILL@AQMD.GOV OR BY FACSIMILE AT TELEPHONE NUMBER (909) 396-3606. SUCH NOTIFICATION SHALL INCLUDE THE NAME OF THE OWNER OR OPERATOR; THE NAME OF THE CONTRACTORS; THE LOCATION OF THE FACILITY; AND THE SCHEDULED START AND COMPLETION DATES OF THE BACK-FILLING PROCEDURE. THE BACK-FILLING PROCEDURE SHALL NOT COMMENCE UNTIL INSPECTED BY A DISTRICT REPRESENTATIVE.
[RULE 461]
9. DEPENDING ON THE SYSTEM CONFIGURATION, A LEAK RATE TEST OF DROP TUBE/DRAIN VALVE ASSEMBLY SHALL BE CONDUCTED TO QUANTIFY THE PRESSURE INTEGRITY OF BOTH THE DROP TUBE AND DRAIN VALVE SEAL OR A LEAK RATE TEST OF DROP TUBE OVERFILL PREVENTION DEVICE AND DRAIN VALVE SHALL BE CONDUCTED TO QUANTIFY THE PRESSURE INTEGRITY OF THE DROP TUBE OVERFILL PREVENTION DEVICE AND THE PRESSURE INTEGRITY OF THE SPILL CONTAINER DRAIN VALVE. EITHER TEST SHALL BE CONDUCTED AS A PERFORMANCE TEST AND AS A REVERIFICATION TEST. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH TEST PROCEDURE METHOD TP-201.1C OR TP-201.1D, RESPECTIVELY. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN SEVENTY-TWO (72) HOURS OF TEST.
[RULE 461]
10. A LEAK RATE AND CRACKING PRESSURE TEST OF PRESSURE/VACUUM RELIEF VENT VALVES SHALL BE CONDUCTED WITHIN THIRTY DAYS (30) AFTER THE START OF OPERATION OF THE OPW PHASE I EVR EQUIPMENT AND AT LEAST ONCE EVERY THREE (3) YEARS THEREAFTER TO DETERMINE THE PRESSURE AND VACUUM AT WHICH THE PRESSURE/VACUUM VENT VALVE ACTUATES, AND TO DETERMINE THE VOLUMETRIC LEAK RATE AT A GIVEN PRESSURE. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH THE TEST PROCEDURE METHOD TP-201.1E. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN SEVENTY-TWO (72) HOURS OF TEST. THIS TEST RESULT SHALL BE KEPT ON SITE FOR THREE (3) YEARS AND MADE AVAILABLE TO DISTRICT REPRESENTATIVES UPON

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

REQUEST.
[RULE 461]

11. A STATIC TORQUE TEST OF ROTATABLE PHASE I ADAPTORS SHALL BE CONDUCTED TO QUANTIFY THE AMOUNT OF STATIC TORQUE REQUIRED TO START THE ROTATION OF THE ROTATABLE PHASE I ADAPTORS. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH THE TEST PROCEDURE METHOD OUTLINED IN TP-201.1B AS A PERFORMANCE TEST AND AS A REVERIFICATION TEST. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN SEVENTY-TWO (72) HOURS OF TEST.
[RULE 461]

12. THE PHASE II VAPOR RECOVERY SYSTEM SHALL BE INSTALLED, OPERATED, AND MAINTAINED SUCH THAT THE MAXIMUM ALLOWABLE PRESSURE THROUGH THE RISER, AND UNDERGROUND PIPING DOES NOT EXCEED THE DYNAMIC BACK PRESSURE DESCRIBED BY THE CALIFORNIA AIR RESOURCES BOARD EXECUTIVE ORDER BY WHICH THE SYSTEM WAS CERTIFIED:

NITROGEN FLOWRATES
(CFH)
60

DYNAMIC BACK PRESSURE
(INCHES OF WATER)
0.50

DYNAMIC BACK PRESSURE TESTS SHALL BE CONDUCTED TO DETERMINE THE PHASE II SYSTEM VAPOR RECOVERY BACK PRESSURES. THE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH CARB TEST PROCEDURE TP-201.4, METHODOLOGY 4; AS A PERFORMANCE TEST. THIS TEST SHALL BE A ONE-TIME TEST AND THE RESULTS KEPT PERMANENTLY ON SITE. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN SEVENTY-TWO (72) HOURS OF TESTS.
[RULE 461]

13. A STATIC PRESSURE LEAK DECAY TEST SHALL BE CONDUCTED TO DEMONSTRATE THAT THE STORAGE TANKS, THE REMOTE AND/OR NOZZLE VAPOR RECOVERY CHECK VALVES, ASSOCIATED VAPOR RETURN PIPING AND FITTINGS ARE FREE FROM VAPOR LEAKS. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH CARB TEST PROCEDURE METHOD TP-201.3 AS A PERFORMANCE TEST AND AS A REVERIFICATION TEST. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN SEVENTY-TWO (72) HOURS OF TEST.
[RULE 461]

14. A STATIC PRESSURE PERFORMANCE TEST FOR THE HEALY CLEAN AIR SEPARATOR USING BOTH THE VACUUM DECAY PROCEDURE AND THE POSITIVE PRESSURE PROCEDURE SHALL BE CONDUCTED TO QUANTIFY THE VAPOR TIGHTNESS OF THE TANK PRESSURE MANAGEMENT SYSTEM. THESE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH EXHIBIT 4 OF CARB EXECUTIVE ORDER VR-201-A AS A PERFORMANCE TEST AND AS A REVERIFICATION TEST. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE WITHIN SEVENTY-TWO (72) HOURS OF TEST.
[RULE 461]

15. A VAPOR TO LIQUID VOLUME RATIO TEST SHALL BE CONDUCTED TO QUANTIFY THE VAPOR TO LIQUID (V/L) VOLUMETRIC RATIO OF THE HEALY CLEAN AIR SEPARATOR SYSTEM. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH EXHIBIT 5 OF CARB EXECUTIVE ORDER

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

VR-201-A AS A PERFORMANCE TEST AND AS A REVERIFICATION TEST. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE WITHIN SEVENTY-TWO (72) HOURS OF TEST.

[RULE 461]

16. A NOZZLE BAG TEST SHALL BE CONDUCTED ON THE HEALY PHASE II EVR NOZZLES TO VERIFY THE INTEGRITY OF THE VAPOR VALVE. THE TEST SHALL BE CONDUCTED ON ANY NEWLY INSTALLED OR REPLACED HEALY PHASE II EVR NOZZLES AND IN ACCORDANCE WITH EXHIBIT 7 OF CARB EXECUTIVE ORDER VR-201-A. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE WITHIN SEVENTY-TWO (72) HOURS OF TEST.
[RULE 461]
17. THE AQMD SHALL BE NOTIFIED BY E-MAIL AT R461TESTING@AQMD.GOV OR BY FACSIMILE AT TELEPHONE NUMBER (909) 396-3606 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY OF THE ABOVE MENTIONED TESTING REQUIREMENTS. SUCH NOTIFICATION SHALL INCLUDE THE NAME OF THE OWNER OR OPERATOR; THE NAME OF THE CONTRACTOR; THE LOCATION OF THE FACILITY; AND THE SCHEDULED START AND COMPLETION DATES OF THE TESTS TO BE PERFORMED.
[RULE 461]

Periodic Monitoring:

18. THE OPERATOR SHALL HAVE A PERSON THAT HAS BEEN TRAINED IN ACCORDANCE WITH RULE 461(C)(6) CONDUCT A SEMI-ANNUAL INSPECTION OF THE GASOLINE TRANSFER AND DISPENSING EQUIPMENT. THE FIRST INSPECTION SHALL BE IN ACCORDANCE WITH RULE 461, ATTACHMENT C, THE SECOND INSPECTION SHALL BE IN ACCORDANCE WITH RULE 461, ATTACHMENT D, AND THE SUBSEQUENT INSPECTIONS SHALL ALTERNATE PROTOCOLS. THE OPERATOR SHALL KEEP RECORDS OF THE INSPECTION AND THE REPAIRS IN ACCORDANCE TO RULE 461 AND SECTION K OF THIS PERMIT.
[RULE 3004 (a)(4)]

Emissions And Requirements:

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

VOC: RULE 461
VOC: RULE 1170

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

PERMIT TO OPERATE

Permit No. D91873
A/N 301007

Equipment Description:

INTERNAL COMBUSTION ENGINE, CUMMINS, MODEL NO. VTS-1710-GI, EMERGENCY ELECTRICAL GENERATION, DIESEL-FUELED, 12 CYLINDERS, TURBOCHARGED, AFTERCOOLED, 760 BHP.

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. A NON-RESETTABLE TIME METER SHALL BE MAINTAINED TO INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 1304 (a)(4), RULE 1110.2]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1304 (a)(4), RULE 1110.2, 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.
[RULE 1304(b)(2), RULE 1110.2, RULE 1470]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

6. THE OPERATION OF ENGINE BEYOND THE 30 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

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

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. D91874
A/N 301008**

Equipment Description:

INTERNAL COMBUSTION ENGINE, CUMMINS, MODEL NO. VTA-28-G2, EMERGENCY ELECTRICAL GENERATION, DIESEL-FUELED, 6 CYLINDERS, TURBOCHARGED, AFTERCOOLED, 900 BHP.

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. A NON-RESETTABLE TIME METER SHALL BE MAINTAINED TO INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 1304 (a)(4), RULE 1110.2]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1304 (a)(4), RULE 1110.2, 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.
[RULE 1304(b)(2), RULE 1110.2, RULE 1470]

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

6. THE OPERATION OF ENGINE BEYOND THE 30 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

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

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. F6238
A/N 321084**

Equipment Description:

BOILER, ALLIED MANUFACTURING INC., PORTABLE, STEAM CLEANING, MODEL NO. 2500-3JGT, SERIAL NO. 1809-183104, 280,000 BTU/HR, FUEL OIL OR KEROSENE.

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 EQUIPMENT SHALL COMPLY WITH RULE 1147.
[RULE 1147]
4. THIS BOILER SHALL EMIT NO MORE THAN 40 PPM FOR OXIDES OF NITROGEN (NOX) MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN. THIS EQUIPMENT SHALL COMPLY WITH THE 40 PPMV NO_x CONCENTRATION LIMIT BY 7/1/2011.
[RULE 1147]

Periodic Monitoring:

5. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 7.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1147 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)]

Emissions And Requirements:

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

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

CO: 2000 PPMV, RULE 407
SOX: 500 PPMV, RULE 407
PM: 0.1 GR/SCF, RULE 409
NOx 40 PPMV, RULE 1147,

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

PERMIT TO OPERATE

Permit No. F6237
A/N 321085

Equipment Description:

BOILER, DAYTON ELECTRIC MANUFACTURING INC., PORTABLE, STEAM CLEANING, MODEL NO. 5Z022, SERIAL NO. C-41785 , 224,000 BTU/HR, FUEL OIL OR KEROSENE.

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 EQUIPMENT SHALL COMPLY WITH RULE 1147.
[RULE 1147]
5. THIS BOILER SHALL EMIT NO MORE THAN 40 PPM FOR OXIDES OF NITROGEN (NOX) MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN. THIS EQUIPMENT SHALL COMPLY WITH THE 40 PPMV CONCENTRATION LIMIT BY 7/1/2011
[RULE 1147]

Periodic Monitoring:

6. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 7.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1147 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)]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 407
SOX: 500 PPMV, RULE 407

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US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PM: 0.1 GR/SCF, RULE 409
NOx 40 PPMV, RULE 1147

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

PERMIT TO OPERATE

Permit No. F49031
A/N 387099

Equipment Description:

INTERNAL COMBUSTION ENGINE, CUMMINS, MODEL KTA-38G1, SERIAL NO. 33124481, DIESEL FUEL, TWELVE CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 1135 B.H.P, DRIVING AN EMERGENCY STAND-BY ELECTRICAL GENERATOR

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. A NON-RESETTABLE TIME METER SHALL BE MAINTAINED TO INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 1304 (a)(4), RULE 1110.2]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[[RULE 1304 (a)(4), RULE 1110.2, 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.

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

[RULE 1304(b)(2), RULE 1110.2, RULE 1470]

6. THE OPERATION OF ENGINE BEYOND THE 50 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

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

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US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. F49032
A/N 387100**

Equipment Description:

INTERNAL COMBUSTION ENGINE, CUMMINS, MODEL LTA10-GI, SERIAL NO. 34984574, DIESEL FUEL, SIX CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 380 B.H.P, DRIVING AN EMERGENCY STAND-BY ELECTRICAL GENERATOR

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. A NON-RESETTABLE TIME METER SHALL BE MAINTAINED TO INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 1304 (a)(4), RULE 1110.2]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1304 (a)(4), RULE 1110.2, 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.

[RULE 1304(b)(2), RULE 1110.2, RULE 1470]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

6. THE OPERATION OF ENGINE BEYOND THE 30 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

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

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PERMIT TO OPERATE

**Permit No. F52909
A/N 401098**

Equipment Description:

INTERNAL COMBUSTION ENGINE, CUMMINS, MODEL QST30-G5, SERIAL NO. 37199012, DIESEL FUEL, 12 CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 1490 B.H.P, DRIVING AN EMERGENCY STAND-BY ELECTRICAL GENERATOR

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. A NON-RESETTABLE TIME METER SHALL BE MAINTAINED TO INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 1304 (a)(4), RULE 1110.2]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[[RULE 1304 (a)(4), RULE 1110.2, 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 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 1304(b)(2), RULE 1110.2, RULE 1470]

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6. THE OPERATION OF ENGINE BEYOND THE 50 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 ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY 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)(1)-BACT, RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1304(a)(1)-BACT, RULE 1470]
8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
[RULE 431.2, RULE 1470]

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

**FACILITY PERMIT TO OPERATE
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PERMIT TO OPERATE

**Permit No. F83385
A/N 431729**

Equipment Description:

SPRAY BOOTH, GREENHECK, MODEL PF-6-7-8, FLOOR TYPE, 6'-0" W.x 8'-0" L.x 7'-0" H., WITH TWELVE FILTERS, EACH 20" X 20" x 2" , AND ONE EXHAUST BLOWER, RATED AT ONE H.P.

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 NOT BE OPERATED UNLESS ALL EXHAUST AIR PASSES THROUGH FILTER MEDIA AT LEAST TWO INCHES THICK.
[RULE 1303 (a), RULE 212(a)]
4. A GAUGE SHALL BE INSTALLED TO INDICATE THE STATIC PRESSURE DIFFERENTIAL ACROSS THE EXHAUST FILTERS. IN OPERATION, THE PRESSURE DIFFERENTIAL SHALL NOT EXCEED 0.25 INCH OF WATER.
[RULE 1303 (a), RULE 212(a)]
5. MATERIAL SAFETY DATA SHEETS FOR ALL COATINGS, SOLVENTS USED IN THIS EQUIPMENT SHALL BE KEPT CURRENT AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1136, 1171, RULE 1401, RULE 1303 (b)(2)]
6. COATINGS, ADHESIVE, REDUCERS, CLEAN-UP SOLVENTS AND ANY OTHER MATERIALS USED IN THIS EQUIPMENT AT THIS FACILITY SHALL NOT CONTAIN ANY COMPOUND IDENTIFIED AS CARCINOGENIC CONTAMINANTS IN RULE 1401, AS AMENDED ON MAY 3, 2003.
[RULE 1401]
7. THIS EQUIPMENT SHALL COMPLY WITH RULES 1136 AND 1171.
[RULE 1136 AND 1171]
8. THE OPERATOR SHALL COMPLY WITH RULE 109 (RECORDKEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS).
[RULE 109]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

9. THE TOTAL QUANTITY OF COATINGS AND SOLVENTS USED IN THIS EQUIPMENT SHALL NOT EXCEED ONE GALLON IN ANY ONE DAY.
[RULE 1136, RULE 1303 (a)-BACT, RULE 1303 (b)(2)-OFFSETS]
10. THE OPEATOR SHALL KEEP ADEQUATE RECORDS FOR THIS FACILITY TO VERIFY CALENDAR MONTHLY VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS AND VOC CONTENT OF EACH COATING AS APPLIED (INCLUDING WATER AND EXEMPT COMPOUNDS). ALL RECORDS SHALL BE PREPARED IN A FORMAT WHICH IS ACCEPTABLE TO THE DISTRICT DURING THE PRECEDING 12 MONTHS.
[RULE 109, RULE 1303 (b)(2)]

Periodic Monitoring:

11. THE OPERATOR SHALL DETERMINE AND RECORD THE PRESSURE DROP ACROSS THE FILTER MEDIA ONCE EVERY WEEK.
[RULE 3004 (a)(4)]
12. 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
 - C. THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.
- [RULE 3004 (a)(4)]

Emissions And Requirements:

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

**FACILITY PERMIT TO OPERATE
US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

PERMIT TO OPERATE

**Permit No. G
A/N 516319**

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 1, CATERPILLAR, MODEL 3516C-DITA, DIESEL FUEL, SIXTEEN CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 3622 B.H.P, WITH A DIESEL PARTICULATE FILTER, JOHNSON MATTHEY, MODEL CRT22-S-BITO-CS-RT AND CRTDM DIAGNOSTIC MODULE AND DATA LOGGING AND ALARM SYSTEM, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

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.
[204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[204]
3. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 431.2 AND RULE 1470.
[RULE 1470, RULE 431.2]
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 AND NO MORE THAN 4.2 HOURS IN ANY ONE MONTH FOR MAINTENANCE AND TESTING.
[RULE 1110.2, RULE 1303 (a)]
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 1470]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

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 (b)(2), RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1470]
8. 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).
 - d. 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 1303 (b)(2), RULE 1470]
9. ON OR BEFORE JANUARY 15TH OF EACH YEAR, THE OPERATOR SHALL RECORD IN THE ENGINE OPERATION LOG THE FOLLOWING:

THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR, AND

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 FIVE CALENDAR YEARS AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER OR REPRESENTATIVE UPON REQUEST.
[RULE 1303 (b)(2)]
10. THIS ENGINE SHALL NOT BE OPERATED UNLESS ITS EXHAUST IS VENTED TO THE DIESEL PARTICULATE FILTER WHICH SHALL BE IN FULL OPERATION AND IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 1303 (a)]
11. THE OPERATOR SHALL NOT OPERATE THE DIESEL PARTICULATE FILTER SYSTEM WITHOUT AN CTRdm MODULE. THE MODULE CONSIST OF OPERATIONAL DATA LOGGING OF EXHAUST TEMPERATURE, BACKPRESSURE AND ALARM SYSTEM.
[RULE 1303 (a)]
12. THE PRESSURE DROP DIFFERENTIAL ACROSS THE DIESEL PARTICULATE FILTER SHALL NOT EXCEED 20 INCHES W.C.
[RULE 1303 (a)]

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

13. THE DATA LOGGING AND ALARM SYSTEM SHALL BE PROGRAMMED TO INTERFACE WITH THE ENGINE CONTROL SYSTEM TO AUTOMATICALLY SHUTDOWN THE ENGINE OR SWITCH IT TO POWER DE-RATING MODE WHENEVER THE BACKPRESSURE OF THE DIESEL PARTICULATE FILTER SYSTEM EXCEEDS THE MAXIMUM BACKPRESSURE SETTING SPECIFIED BY THE FILTER MANUFACTURER.
[RULE 1303 (a)]
14. THE DIESEL ENGINE SHALL OPERATE AT AN ENGINE DUTY CYCLE REQUIRED TO ACHIEVE 464 DEGREE FAHRENHEIT OR ABOVE IN THE EXHAUST GAS STREAM FOR 40% OF THE DUTY CYCLE OR 5 HOURS AT 572 DEGREE FAHRENHEIT AFTER EVERY 200 CONSECUTIVE HOURS BELOW 464 DEGREE FAHRENHEIT.
[RULE 1303 (a)]
15. THIS ENGINE SHALL NOT BE OPERATED IN IDLE MODE FOR MORE THAN 720 CONSECUTIVE MINUTES.
[RULE 1303 (a)]
16. THE TEMPERATURE OF THE ENGINE EXHAUST GAS AT THE INLET TO THE DIESEL PARTICULATE FILTER SYSTEM SHALL BE GREATER THAN OR EQUAL TO 464 DEGREES FAHRENHEIT EXCEPT DURING START-UP.
[RULE 1303 (a)]
17. THE OPERATOR SHALL REGENERATE THE DIESEL PARTICULATE FILTER AFTER EVERY 24 COLD ENGINE START-UPS OR WHENEVER WARNING SIGNAL IS RECEIVED FROM THE ALARM SYSTEM, WHICHEVER OCCURS FIRST. IN ORDER TO ACHIEVE FILTER REGENERATION, THE OPERATOR SHALL RUN THE ENGINE UNTIL THE EXHAUST TEMPERATURE EXCEEDS 464 DEGREES FAHRENHEIT AND THE BACKPRESSURE MONITORING SYSTEM INDICATES A NORMAL BACKPRESSURE READING.
[RULE 1303 (a)]
18. AFTER EVERY 8,000 HOURS OF NORMAL ENGINE OPERATION, THE OPERATOR SHALL INSPECT THE INTEGRITY OF THE FILTER AND, IF NECESSARY, REPLACE IT.
[RULE 1303 (a)]
19. THE OPERATOR SHALL KEEP RECORDS OF PARTICULATE FILTER INSPECTIONS, REPLACEMENTS AND MANUAL REGENERATIONS. THE OPERATOR SHALL MAINTAIN THESE RECORDS FOR A MINIMUM OF FIVE YEARS AND MAKE THEM AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1303 (a)]

Emissions And Requirements:

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

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

PERMIT TO OPERATE

Permit No. G
A/N 516320

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 2, CATERPILLAR, MODEL 3516C-DITA, DIESEL FUEL, SIXTEEN CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 3622 B.H.P, WITH A DIESEL PARTICULATE FILTER, JOHNSON MATTHEY, MODEL CRT22-S-BITO-CS-RT AND CRTDM DIAGNOSTIC MODULE AND DATA LOGGING AND ALARM SYSTEM, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

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.
[204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[204]
3. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 431.2 AND RULE 1470.
[RULE 1470, RULE 431.2]
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 AND NO MORE THAN 4.2 HOURS IN ANY ONE MONTH FOR MAINTENANCE AND TESTING.
[RULE 1110.2, RULE 1303 (a)]
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 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 (b)(2), RULE 1470]

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7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1470]

8. 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).
 - d. 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 1303 (b)(2), RULE 1470]

9. ON OR BEFORE JANUARY 15TH OF EACH YEAR, THE OPERATOR SHALL RECORD IN THE ENGINE OPERATING LOG THE FOLLOWING:

THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR, AND

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 FIVE CALENDAR YEARS AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER OR REPRESENTATIVE UPON REQUEST.
[RULE 1303 (b)(2)]

10. THIS ENGINE SHALL NOT BE OPERATED UNLESS ITS EXHAUST IS VENTED TO THE DIESEL PARTICULATE FILTER WHICH SHALL BE IN FULL OPERATION AND IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 1303 (a)]

11. THE OPERATOR SHALL NOT OPERATE THE DIESEL PARTICULATE FILTER SYSTEM WITHOUT AN CTRdm MODULE. THE MODULE CONSIST OF OPERATIONAL DATA LOGGING OF EXHAUST TEMPERATURE, BACKPRESSURE AND ALARM SYSTEM.
[RULE 1303 (a)]

12. THE PRESSURE DROP DIFFERENTIAL ACROSS THE DIESEL PARTICULATE FILTER SHALL NOT EXCEED 20 INCHES W.C.
[RULE 1303 (a)]

13. THE DATA LOGGING AND ALARM SYSTEM SHALL BE PROGRAMMED TO INTERFACE WITH THE ENGINE CONTROL SYSTEM TO AUTOMATICALLY SHUTDOWN THE ENGINE OR SWITCH IT TO POWER DE-RATING MODE WHENEVER THE BACKPRESSURE OF THE DIESEL PARTICULATE

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FILTER SYSTEM EXCEEDS THE MAXIMUM BACKPRESSURE SETTING SPECIFIED BY THE FILTER MANUFACTURER.

[RULE 1303 (a)]

14. THE DIESEL ENGINE SHALL OPERATE AT AN ENGINE DUTY CYCLE REQUIRED TO ACHIEVE 464 DEGREE FAHRENHEIT OR ABOVE IN THE EXHAUST GAS STREAM FOR 40% OF THE DUTY CYCLE OR 5 HOURS AT 572 DEGREE FAHRENHEIT AFTER EVERY 200 CONSECUTIVE HOURS BELOW 464 DEGREE FAHRENHEIT.
[RULE 1303 (a)]
15. THIS ENGINE SHALL NOT BE OPERATED IN IDLE MODE FOR MORE THAN 720 CONSECUTIVE MINUTES.
[RULE 1303 (a)]
16. THE TEMPERATURE OF THE ENGINE EXHAUST GAS AT THE INLET TO THE DIESEL PARTICULATE FILTER SYSTEM SHALL BE GREATER THAN OR EQUAL TO 464 DEGREES FAHRENHEIT EXCEPT DURING START-UP.
[RULE 1303 (a)]
17. THE OPERATOR SHALL REGENERATE THE DIESEL PARTICULATE FILTER AFTER EVERY 24 COLD ENGINE START-UPS OR WHENEVER WARNING SIGNAL IS RECEIVED FROM THE ALARM SYSTEM, WHICHEVER OCCURS FIRST. IN ORDER TO ACHIEVE FILTER REGENERATION, THE OPERATOR SHALL RUN THE ENGINE UNTIL THE EXHAUST TEMPERATURE EXCEEDS 464 DEGREES FAHRENHEIT AND THE BACKPRESSURE MONITORING SYSTEM INDICATES A NORMAL BACKPRESSURE READING.
[RULE 1303 (a)]
18. AFTER EVERY 8,000 HOURS OF NORMAL ENGINE OPERATION, THE OPERATOR SHALL INSPECT THE INTEGRITY OF THE FILTER AND, IF NECESSARY, REPLACE IT.
[RULE 1303 (a)]
19. THE OPERATOR SHALL KEEP RECORDS OF PARTICULATE FILTER INSPECTIONS, REPLACEMENTS AND MANUAL REGENERATIONS. THE OPERATOR SHALL MAINTAIN THESE RECORDS FOR A MINIMUM OF FIVE YEARS AND MAKE THEM AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1303 (a)]

Emissions And Requirements:

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

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

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

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US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, COOLING TOWERS

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
CR¹⁶: RULE 1404

FACILITY PERMIT TO OPERATE US GOVT, VETERANS AFFAIRS MEDICAL CENTER

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, REFRIGERANT/RECOVERY

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
REFRIGERANT: RULE 1415
REFRIGERANT: 40 CFR82 SUBPART F

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US GOVT, VETERANS AFFAIRS MEDICAL CENTER**

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, SOLVENT CLEANING

Emissions And Requirements:

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

VOC: RULE 1171

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	1
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

PERMIT TO CONSTRUCT/OPERATE

APPLICANT	U.S. GOVT. V.A. MEDICAL CENTER, LONG BEACH
MAILING ADDRESS	5901 EAST 7 TH STREET LONG BEACH, CA
EQUIPMENT LOCATION	SAME

EQUIPMENT DESCRIPTION:

APPLICATION NO 516319

INTERNAL COMBUSTION ENGINE, NO. 1, CATERPILLAR, MODEL 3516C-DITA, DIESEL FUEL, SIXTEEN CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 3622 B.H.P, WITH A DIESEL PARTICULATE FILTER, JOHNSON MATTHEY, MODEL CRT22-S-BITO-CS-RT AND CRTDM DIAGNOSTIC MODULE AND DATA LOGGING AND ALARM SYSTEM, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

APPLICATION NO 516320

INTERNAL COMBUSTION ENGINE, NO. 2, CATERPILLAR, MODEL 3516C-DITA, DIESEL FUEL, SIXTEEN CYLINDERS, TURBOCHARGED AND AFTERCOOLED, RATED AT 3622 B.H.P, WITH A DIESEL PARTICULATE FILTER, JOHNSON MATTHEY, MODEL CRT22-S-BITO-CS-RT AND CRTDM DIAGNOSTIC MODULE AND DATA LOGGING AND ALARM SYSTEM DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

APPLICATION NO 517369

TITLE V REVISION

PERMIT 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.
[204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[204]

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	2
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

3. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 431.2 AND RULE 1470.
[RULE 1470, RULE 431.2]
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 AND NO MORE THAN 4.2 HOURS IN ANY ONE MONTH FOR MAINTENANCE AND TESTING.
[RULE 1110.2, RULE 1303 (a)]
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 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 (b)(2), RULE 1470]
7. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1470]
8. 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).
 - d. 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 1303 (b)(2), RULE 1470]
9. ON OR BEFORE JANUARY 15TH OF EACH YEAR, THE OPERATOR SHALL RECORD IN THE ENGINE OPERATING LOG THE FOLLOWING:

 THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR, AND

 THE TOTAL HOURS OF ENGINE OPERATION FOR MAINTENANCE AND TESTING FOR THE PREVIOUS CALENDAR YEAR.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	3
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

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

[RULE 1303 (b)(2)]

10. THIS ENGINE SHALL NOT BE OPERATED UNLESS ITS EXHAUST IS VENTED TO THE DIESEL PARTICULATE FILTER WHICH SHALL BE IN FULL OPERATION AND IN GOOD OPERATING CONDITION AT ALL TIMES.

[RULE 1303 (a)]

11. THE OPERATOR SHALL NOT OPERATE THE DIESEL PARTICULATE FILTER SYSTEM WITHOUT AN CTRdm MODULE. THE MODULE CONSIST OF OPERATIONAL DATA LOGGING OF EXHAUST TEMPERATURE, BACKPRESSURE AND ALARM SYSTEM.

[RULE 1303 (a)]

12. THE PRESSURE DROP DIFFERENTIAL ACROSS THE DIESEL PARTICULATE FILTER SHALL NOT EXCEED 20 INCHES W.C.

[RULE 1303 (a)]

13. THE DATA LOGGING AND ALARM SYSTEM SHALL BE PROGRAMMED TO INTERFACE WITH THE ENGINE CONTROL SYSTEM TO AUTOMATICALLY SHUTDOWN THE ENGINE OR SWITCH IT TO POWER DE-RATING MODE WHENEVER THE BACKPRESSURE OF THE DIESEL PARTICULATE FILTER SYSTEM EXCEEDS THE MAXIMUM BACKPRESSURE SETTING SPECIFIED BY THE FILTER MANUFACTURER.

[RULE 1303 (a)]

14. THE DIESEL ENGINE SHALL OPERATE AT AN ENGINE DUTY CYCLE REQUIRED TO ACHIEVE 464 DEGREE FAHRENHEIT OR ABOVE IN THE EXHAUST GAS STREAM FOR 40% OF THE DUTY CYCLE OR 5 HOURS AT 572 DEGREE FAHRENHEIT AFTER EVERY 200 CONSECUTIVE HOURS BELOW 464 DEGREE FAHRENHEIT.

[RULE 1303 (a)]

15. THIS ENGINE SHALL NOT BE OPERATED IN IDLE MODE FOR MORE THAN 720 CONSECUTIVE MINUTES.

[RULE 1303 (a)]

16. THE TEMPERATURE OF THE ENGINE EXHAUST GAS AT THE INLET TO THE DIESEL PARTICULATE FILTER SYSTEM SHALL BE GREATER THAN OR EQUAL TO 464 DEGREES FAHRENHEIT EXCEPT DURING START-UP.

[RULE 1303 (a)]

17. THE OPERATOR SHALL REGENERATE THE DIESEL PARTICULATE FILTER AFTER EVERY 24 COLD ENGINE START-UPS OR WHENEVER WARNING SIGNAL IS RECEIVED FROM THE ALARM SYSTEM, WHICHEVER OCCURS FIRST. IN ORDER TO ACHIEVE FILTER REGENERATION, THE OPERATOR SHALL RUN THE ENGINE UNTIL THE EXHAUST TEMPERATURE EXCEEDS 464 DEGREES FAHRENHEIT AND THE BACKPRESSURE MONITORING SYSTEM INDICATES A NORMAL BACKPRESSURE READING.

[RULE 1303 (a)]

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	8
	APPL. NO.	DATE
	See Below	01/22/2011
	PROCESSED BY	CHECKED BY
RDO		

16. AFTER EVERY 5,000 HOURS OF NORMAL ENGINE OPERATION, THE OPERATOR SHALL INSPECT THE INTEGRITY OF THE FILTER AND, IF NECESSARY, REPLACE IT.
[Rule 1303 (a)]

17. THE OPERATOR SHALL KEEP RECORDS OF PARTICULATE FILTER INSPECTIONS, REPLACEMENTS AND MANUAL REGENERATIONS. THE OPERATOR SHALL MAINTAIN THESE RECORDS FOR A MINIMUM OF TWO YEARS AND MAKE THEM AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[Rule 1303 (a)]

BACKGROUND:

These applications were filed as new construction. The engines will be used as diesel fueled emergency stand-by ICE driving and emergency electrical generator. The engine the applicant is proposing to install a Certified Equipment Permit (CEP) engine ref a/n 452608. The applications were deem complete prior to the end of 2010. The applicant is updating the responsible official (see form 500-RO, section B) of Section A of the Facility permit.

In the Facility Permit ID# 13990, additions are requested to Section D by the addition of two emergency diesel fueled ICEs. Attached is a draft of Section D in the Facility Permit affected by this addition.

This Title V modification is considered as a “de minimis significant revision” to the Title V permit because there is no increase of pollutant emissions that do not exceed the threshold levels described District Rule 3000 (b)(7) as reference by 3005 (e)(1).

CALCULATIONS

1. Permit processing Emissions calculation methodology

A. Emissions calculations

Determine emissions from NOx, CO, ROG and PM

$$R1(LB / HR) = \frac{hp \times gr / bhp - hr}{454 gr / lb}$$

Note R1=R2

Note, PM10 =0.96 PM

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT SSC DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	131	5
	APPL. NO.	DATE
	See Below	4/12/2011
	PROCESSED BY	CHECKED BY
RDO		

$$R1(LB/HR) = \frac{EF \times GAL\ USAGE}{1 \times 10^3}$$

Note R1 = R2

Where EF equal lb/MGAL (ref SCAQMD emissions fee form B-3)

Note, if applicant provide SOx in terms of g/bhp-hr, use previous formula

2. EMISSIONS CALCULATIONS

	R1-lb/hr	R1-lb/dy	R2-30 dy av	R2-lb/yr
NOx	29.52	29.52	3.94	1476
ROG	1.99	1.99	0.27	99.72
CO	5.35	5.35	0.71	267
SOx	0.0391	0.0391	0.01	1.95
PM	0.08377	0.08	0.01	4.19
PM10	0.08042	0.08	0.01	4.02

Based on 100% load, see attachment for emissions data (from AQMD database)

3. Permitting since the Title V permit was renewed since 6/4/2007

Two applications were submitted for review after the Title V renewal in 2007

Item	A/n	30 day ave-lb/dy				
		NOx	ROG	CO	SOx	PM10
EM-ICE	510599	+0	+0	+0	+0	+0
Gasloine storage & dispensing	499236	+0	+0	+0	+0	+0
EM-ICE	516319	+2.42	+0.38	+0.51	+0	+0
EM-ICE	516320	+0.26	0.05	+0.11	+0	+0.01
Title v rev	517369	+7.88	+0.54	+1.42	0	0
Facility		+10.56	+0.97	+2.04	+0	+0.01

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	6
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

totals delta						
Threshold limits (lb/dy)	40	30	220	60	30	

Title v a/n 516320 is for two em-ice.

RULE EVALUATION:

RULE 212 The subject equipment is not located within 1,000 feet of a school. The MICR for the engine will be less than one-in-one million. The increase in emissions will not exceed the daily maximum specified is subdivision (g) of this Rule. Therefore, a Rule 212 public notice is not required for this project.

Section (c)(1)

Item	Equipment located within 1000 of a school	Public notice required
Em-ice	no	No

Section (c)(3)(A)(i)

Item	MICR	Threshold	Public notice required
Engine	1.59E-07	1.E-06	No

Section (c)(2)

Item	Lb/dy daily maximum	Allow limit-lb/dy	Trigger Public notice
NOx	+7.88	40	No
ROG	+0.54	30	No
CO	+1.42	220	No
PM10	+0.02	30	No
SOx	+0.02	60	No

Onsite emissions increase less than section (g) of this Rule. See offset section for details (total emissions for two engines)

Rule 401 :The equipment is not expected to emit visible emissions.

Rule 402 :The equipment is not expected to emit odorous emissions.

Rule 404 :Grain loading from the engine expected to comply.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	7
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

Rule 431.2 Per section (c)(e)(2) require the fuel oil purchased to have a sulfur content of less than 15 ppmw, expected to comply with this Rule .

Rule 1110.2 Exempt from section (d) per section (h)(2). Add permit condition limiting hours of operation to 200 hours per year.

Reg. XIII Compliance with the following sections is anticipated.

1303 (a)-BACT- Emissions meets Tier 3 BACT limits for NOx, VOC and CO and LAER for PM10 (see below).

Item	HP	NOX+VOC	CO	PM10
		G/bhp-hr	G/bhp-hr	G/bhp-hr
BACT		4.9	2.6	0.15
Engine	3622	3.7+0.25=3.95	0.67	0.015
Compliance		Yes	Yes	yes

See attached emissions data sheet, certified ICE, ref a/n 452608

*Title V facility install PM filter for LAER, CARB certifies PM reduction of 85% or greater, see R2 PM emissions = 0.07 g/bhp-hr * 0.15 = Appendix B.*

1303 (b)(1)-The engine is exempt from modeling for being emergency equipment, per 1304 (a)(4)

1303 (b)(2)- Exempt per Rule 1304 (a)(4).

Rule 1401-Exempt per section (g)(1)(F), does not apply for stand-by generators exempt per Reg 1304. The MICR was determined for this engine for Rule 212 purposes.

RULE 1470- Compliance with the following sections is anticipated.

1470 (c)(1)-requires ultra low sulfur be used in this equipment 1/2006, but Rule 431.2 already requires the use of this fuel at this time.

1470 (c)(2)(C)(i)(II)-Limit the testing to no more than 50 hours per year, PM emissions less than 0.15 g/bhp-hr, see emissions data sheet (AQMD database, ref a/n 452608, copy in file).

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	8
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

1470 (c)(2)(C)(iv)-Complies, the NO_x, CO and VOC complies with the current BACT emissions limits. Engine application filed and deem completed prior to the end of 2010.

1470 (d)(7)(A)-Require time meter to be installed

1470 (d)(9)-Monthly log requirement of this sections as permit conditions.

RULE 1472- The applicant submitted a compliance plan and is under evaluation.

Regulation XXX

This facility (id# 13990) is included in Phase Two of the Title V universe. Therefore the proposed equipment is expected to comply with the following sections:

Rule 3000 (b)(6): The Title V expected permit revision caused by this equipment installation satisfies all the applicable conditions listed in this rule so, it constitutes a de minimus permit revision.

Rule 3002: The facility complies with the requirements of this rule by filing for applications in a timely manner and by for the appropriate fees.

Rule 3003: The anticipated de minimus permit revision is expected to comply with all the applicable requirements in this rule, of special note are the sections listed below.

Section (j)(1)(A): The EPA Administrator will timely receive the de minimus permit revision application whenever it becomes available to the Executive Officer.

Section (j)(1)(B): The EPA Administrator will timely receive the draft of the de minimus permit revision upon completion of District evaluation.

Section (j)(4): The applicant and the EPA will be timely notified of any refusal to accept all recommendations for the draft permit.

Rule 3005 (e): Whenever applicable, the procedures for de minimus permit revision stated in this rule will be addressed in a proper and timely manner.

CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE FOR STATIONARY
COMPRESSION IGNITION ENGINES

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	8
	APPL. NO.	DATE
	See Below	01/22/2011
	PROCESSED BY	CHECKED BY
RDO		

The engine application was submitted to the District prior to the end of the year 2010 and the application was deem completed before 1/1/2011. The current ATCM requires new applications filed in 2011 for this hp range to be Tier 4i.

The ATCM was amended October 2010 and the requirements for Tier 4i and Tier 4 was removed and section 93115.6 (a)(3)(A)(1)(a) Table 1. Table 1 keeps the current Tier 2 and Tier 3 emissions standards for the applicable HP engine group. The revised ATCM is expected to be formally approved by CARB in spring 2011. CARB in November 2010 distributed a regulatory advisory (see attachment) that provided guidance on compliance with the ATCM during the transition period from the current ATCM to the amended ATCM.

NSPS

Title 40 Part 60 subpart III section 60.4205

Emergency CI ICE of model year of 2007 or later with a displacement of less than 30 liters per cylinder has to comply with the non road emissions standards. The engine displacement is 8.8 liters and the engine complies with Tier 3 emissions limits, thus compliance with this Regulation is met.

RECOMMENDATIONS

Based on the analysis in this report, the equipment is expected to comply with the applicable Rules and Regulations of the SCAQMD and the applicable BACT requirements.

For this reason, the following disposition is recommended; issue a revised Title V Facility Permit reflecting the addition of two emergency stand-by steam cleaners under section D.

Updates in Section D of the Title V facility Permit resulting from this addition are listed in Equipment and Condition sections of the attached draft permit.

RECOMMENDATIONS

FOR THIS APPLICATION THE FOLLOWING DISPOSITION IS RECOMMENDED:

Issue P/O

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**E&C DIVISION****APPLICATION PROCESSING AND CALCULATIONS**

TOTAL PAGES:	PAGE NO.:
13	10
APPL. NO.	DATE
See Below	02/08/2011
PROCESSED BY	CHECKED BY
RDO	

APPENDIX A**MAXIMUM INDIVIDUAL CANCER RISK**

Methods per "Risk Assessment Procedures for Rule 1401 and 212" revised version 6.0, dated August 18, 2000.

- Calculate contaminant R2 emissions (lb/hr) and ton/yr
- Find the correct met zone for this location
- Find the distance from equipment to the nearest residence and commercial receptor
- Look up the unit risk factor for each contaminant

- ⇒ *Note evaluate the engines at 1 hour per day, 50 weeks per year (testing)*
- ⇒ *Nearest residential receptor is 90 meter, based on max. concentration per SCREEN III*
- ⇒ *Nearest commercial receptor is 90 meters, based on max. concentration per SCREEN III*
- ⇒ *Stack diameter is 20 inches, ref from applicant*
- ⇒ *Stack ht =28 ft, ref applicant*
- ⇒ *Stack ACFM is 19049, ref engine information*
- ⇒ *Stack temp is 922 F, ref engine information*
- ⇒ *R1 PM emissions = 0.01 g/bhp-hr, per manufacturers data*
- ⇒ *R2 PM emissions = 0.07 g/bhp-hr * 0.15 = 0.0105 g/hp-hr (use 85% control eff, per CARB executive order no. DE-08-008-02, copy in file)*
- ⇒ *Typically the engines only operate at max load*
- ⇒ *PM emissions*

$$R1(lb/hr) = HP * g / hp - hr.$$

Where HP is the max engine HP.

Where g/bhp-hr is the PM emissions, provided by AQMD certified engine

Please refer to Risk procedures for Risk procedures and formulas

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	11
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

APPENDIX B

Johnson Matthey Clean Air control system
 Continuously regenerating technology (CRT) particulate filter`
 Multi filter design
 CRTdm diagnostic module, the module monitors the exhaust temp and back pressure and has alarms if the preset backpressure is exceeded.
 With data logging system (monitoring temperature and pressure drop)

Reduces PM, HC and CO by over 90% (for this evaluation only use the reductions of PM emissions)

- >> Verified by CARB for emergency backup power, prime power and pumping
- >> Multiple-filter design enables the CRT to be used on all engine sizes
- >> Modular design for ease of installation, routine service and easy maintenance
- >> Self-cleaning for convenience and ease-of-use
- >> No supplemental heat or fuel required
- >> For optimal performance, operates with Ultra Low 15ppm Sulfur diesel, which is now widely available nationally
- >> Each unit is equipped with the CRTdm diagnostic module, with data-logging, alarm capability and computer interface
- >> Housed in stainless steel for strength and durability
- >> PM collection/filtration begins when engine starts and continues for the entire run time

The proposed control system is a verified as a Level 3 Plus emissions control device (pm reductions greater than or equal to 85%) and gone through and extensive certification and testing program. CARB executive order no. DE-08-008-02 has operating condition in Table 1 of the executive order

- R1 PM emissions from the engine must be less than 0.1 g/bhp-hr
- Maximum consecutive minutes at idle is 720 min
- Number of 30 minute idle sessions before regeneration is required is 24
- The engine must have a duty cycle with an ave. temperature profile greater than 240 degree C for 40% of operating cycle
- Number of hours before cleaning /replacement of filter is 8000.
- PM verification level plus is at least 85% reduction.
- The CRT Control includes catalyzed passive diesel particulate and a CTRdm diagnostic module with data logging (monitor temp and pressure) and alarm system.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	12
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

- No changes are permitted to the control device without notifying ARB and must be approved by ARB

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT E&C DIVISION APPLICATION PROCESSING AND CALCULATIONS	TOTAL PAGES:	PAGE NO.:
	13	13
	APPL. NO.	DATE
	See Below	02/08/2011
	PROCESSED BY	CHECKED BY
RDO		

Johnson Matthey employs a novel two-component design in which the catalyst is separate from the filter. This allows for maximum catalyst and filter performance. The catalyst is positioned before the filter to convert NO into NO₂. The NO₂ then oxidizes the soot that is collected on the filter to regenerate the filter. The soot is combusted at a much lower temperature than is normally required. In fact, the CRT enables the filter to be regenerated at a temperature that is 20% lower than other filters on the market. NO₂ generation is the key to the oxidation of soot collected by the wall flow filter and is the heart of the Johnson Matthey patent. The catalyst also converts CO and HC into CO₂ and water.

The significantly lower operating temperature of the Johnson Matthey CRT is compatible with typical diesel exhaust temperatures, so no supplemental heat is required. Using a “flowthrough” platinum coated catalyst, the soot travels directly through the catalyst and is captured on the filter. As a result, the catalyst is kept free of soot, ensuring that it performs at the highest level possible. Soot is trapped on the filter where it’s then destroyed by the NO₂ produced by the catalyst. This coordinated operation between the catalyst and filter makes the CRT highly efficient and effective.

What’s more, the Johnson Matthey CRT utilizes passive regeneration during which soot trapped on the filter is automatically burned off to clean the filter. This is in contrast to active regeneration employed with other filters, during which diesel fuel or an electrical current is used to heat up the filter. This active approach has the dangerous potential to cause a fire.

Engine data entry

Engine hp	3622	hp
use default fuel usage	YES	
actual fuel rate	181.1	gal/hr
fuel rate	181.10	gal/hr
use default E.F.	no	yes/no
use PM default E.F	yes	
Use 15 ppm sulfur	yes	yes/no
SOx-15 ppm sulfur	0.21579384	lb/mgal
PM10	0.96	
Nox (actual data)	3.7	g/bhp-hr
ROG (actual data)	0.25	g/bhp-hr
CO (actual data)	0.67	g/bhp-hr
PM (actual data)	0.0105	g/bhp-hr
hr/dy	1	hr
dy/wk	1	dy
dy/mon	4	dy
wk/yr	50	wk

Emissions Calculations

	R1-lb/hr	R1-lb/dy	R2-30 dy a	R2-lb/yr
NOx	29.52	29.52	3.94	1476
ROG	1.99	1.99	0.27	99.72
CO	5.35	5.35	0.71	267
SOx	0.0391	0.0391	0.01	1.95
PM	0.08377	0.08	0.01	4.19
PM10	0.08042	0.08	0.01	4.02

lbNOx/hr

$$\begin{aligned}
 &= [\text{E.F., g/bhp-hr}] [\text{Rating, hp}] \\
 &= [3.7 \text{ g/bhp-hr}] [3622 \text{ hp}] [1 \text{ lb}/454 \text{ g}] \\
 &= [29.52 \text{ lb/hr}]
 \end{aligned}$$

lbNox/day

$$\begin{aligned} &= [\text{lbNOx/hr}][\text{hr/day}] && \text{diesel} \\ &= [29.52 \text{ lb/hr}][1 \text{ hr/day}] \\ &= [29.52 \text{ lb/hr}][1 \text{ hr/day}] \end{aligned}$$

30 day NOx ave

$$\begin{aligned} &= [\text{lbNox/day}][\text{days/mon}]/[30 \text{ days/mon}] \\ &= [29.52 \text{ lb/day}][4 \text{ days/mon}]/[30 \text{ days/mon}] \\ &= [3.94 \text{ lb/day}] \end{aligned}$$

lbNox/year

$$\begin{aligned} &= [\text{lbNox/day}][\text{days/wk}][\text{wk/yr}] \\ &= [29.52 \text{ lb/day}][1 \text{ days/wk}][50 \text{ wk/yr}] \\ &= [1476 \text{ lb/year}] \end{aligned}$$

lbCO/hr

$$\begin{aligned} &= [\text{E.F. g/bhp-hr}][\text{Rating, hp}] \\ &= [0.7 \text{ g/bhp-hr}][3622 \text{ hp}][1 \text{ lb}/454 \text{ g}] \\ &= [5.35 \text{ lb/hr}] \end{aligned}$$

lbCO/day

$$\begin{aligned} &= [\text{lbCO/hr}][\text{hr/day}] \\ &= [5.35 \text{ lb/hr}][1 \text{ hr/day}] \\ &= [5.35 \text{ lb/day}] \end{aligned}$$

30 day CO ave

$$\begin{aligned} &= [\text{lbCO/hr}][\text{hr/day}] \\ &= [0.71 \text{ lb/day}][4 \text{ days/mon}]/[30 \text{ days/mon}] \\ &= [0.71 \text{ lb/day}] \end{aligned}$$

lbCO/year

$$\begin{aligned} &= [\text{lbCO/day}][\text{days/wk}][\text{wk/yr}] \\ &= [5.35 \text{ lb/day}][1 \text{ days/wk}][50 \text{ wk/yr}] \\ &= [267 \text{ lb/year}] \end{aligned}$$

lbROG/hr

$$\begin{aligned} &[\text{E.F. g/bhp-hr}][\text{Rating, hp}] \\ &[0.25 \text{ g/bhp-hr}][3622 \text{ hp}][1 \text{ lb}/454 \text{ g}] \\ &[1.99 \text{ lb/hr}] \end{aligned}$$

lbROG/day

$$\begin{aligned} &[\text{lbROG/hr}][\text{hr/day}] \\ &[1.99 \text{ lb/hr}][1 \text{ hr/day}] \\ &[1.99 \text{ lb/day}] \end{aligned}$$

30 day ROG ave

$$[\text{lbROG/day}][\text{days/mon}]/[30 \text{ days/mon}]$$

[0.27 lb/day][4days/mon]/[30 days/mon]
[0.27 lb/day] diesel

lbROG/year

[lbROG/day][days/wk][wk/yr]
[0.27 lb/day][1days/wk][50wk/yr]
[100 lb/year]

lbSOx/hr

[SOx E.F.][gal/hr][Fuel rate]
[0.22 lb/mgal][181.10 gal/hr][1mgal/1000 gal]
[0.0391 lb/hr]

lbSOx/day

[lbSOx/hr] x [hr/day]
[0.0391 lb/hr] x [1 hr/day]
[0.0391 lb/day]

30 day SOx ave

[lbSOx/day][days/mon]/[30 days/mon]
[0.0052 lb/day][4days/mon]/[30 days/mon]
[0.0052 lb/day]

lbSOx/year

[lbSOx/day][days/wk][wk/yr]
[0.0052 lb/day][1days/wk][50wk/yr]
[2 lb/year]

lbPM/hr

[E.F, g/bhp-hr][Rating, hp]
[0.22 g/bhp-hr][3622 hp][1 lb/454 g]
[1.755 lb/hr]

lbPM/day

[lbPM/hr][hr/day]
[1.7552 lb/hr] [1 hr/day]
[1.7552 lb/day]

30 day PM ave

[lbPM/day][days/mon]/[30 days/mon]
[1.7552 lb/day][4days/mon]/[30 days/mon]
[0.2340 lb/day]

lbPM/year

[lbPM/day][days/wk][wk/yr]
[1.7552 lb/day][1days/wk][50wk/yr]
[87.76 lb/year]

lbPM10/hr

diesel

Page 4

[PM lb/hr][0.96]

[1.7552 lb/hr] [0.96]

[0.080 lb/hr]

lbPM10/dy

[PM lb/dy][0.96]

[1.7552 lb/day] [0.96]

[1.685 lb/day]

30 day ave PM10 lb/dy

[PM 30 dy ave][0.96]

[1.7552 lb/day] [0.96]

[1.685 lb/day]

lbPM10/yr

[PM lb/yr][0.96]

[87.7577 lb/yr] [0.96]

[84.247 lb/yr]

Equations

A. Emissions as a function of lb/mgal or g/bhp-hr

Emissions = E.F. (lb/mgal) * gal/hr * 1mgal/1000 gal

Emissions = gr/hp-hr * hp * 1lb/454 gr

B. NSR 30 day and lb/yr values

30 day ave = lb/hr * hr/dy * dy/mon * (1mon/30 day)

lb/yr = lb/hr * hr/dy * dy/wk * wk/yr

***** SCREENS MODEL *****
 ***** VERSION DATED 95181 *****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):
 P

ENTER SOURCE TYPE: P FOR POINT
 F FOR FLARE
 A FOR AREA
 U FOR VOLUME
 P

ENTER EMISSION RATE (G/S):
 0.12611

ENTER STACK HEIGHT (M):
 3.535

ENTER STACK INSIDE DIAMETER (M):
 0.503

ENTER STACK GAS EXIT VELOCITY OR FLOW RATE:
 OPTION 1 : EXIT VELOCITY (M/S):
 DEFAULT : ENTER NUMBER ONLY
 OPTION 2 : VOLUME FLOW RATE (M³/S):
 EXAMPLE "UF=20.00"
 OPTION 3 : VOLUME FLOW RATE (ACFM):
 EXAMPLE "UF=1000.00"
 44.379

ENTER STACK GAS EXIT TEMPERATURE (K):
 787

ENTER AMBIENT AIR TEMPERATURE (USE 293 FOR DEFAULT) (K):
 293

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):
 1

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):
 U

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:
 N

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?
 ENTER Y OR N:
 N

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?
 ENTER Y OR N:
 N

ENTER CHOICE OF METEOROLOGY:

Page: 1 of 1 Words: 0

Start | Perms Admin... | 3 Microsoft O... | Inbox - Micro... | K7 AM 640... | 2 Microsoft O... | 4 Windows E... | C:\Users\RO... | 2:19 PM

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)
 2 - INPUT SINGLE STABILITY CLASS
 3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:
 Y

ENTER MIN AND MAX DISTANCES TO USE (M):
 25
 1000

***** SCREEN AUTOMATED DISTANCES *****

***** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES *****

DIST (M)	CGWC (UG/MH-3)	STAB	U10M (M/S)	USTK (H/S)	MIX HT (M)	PLUME RT (M)	SIGMA Y (M)	SIGMA Z (M)	OWASH
25.	.1305E-02	4	20.0	20.0	6400.0	17.64	4.04	3.56	NO
100.	4.097	4	20.0	20.0	6400.0	17.64	15.74	13.85	NO
200.	3.065	4	8.0	8.0	2560.0	31.30	31.20	27.68	NO
300.	2.312	4	5.0	5.0	1600.0	44.86	46.53	41.55	NO
400.	2.023	6	1.5	1.5	10000.0	64.32	43.85	29.90	NO
500.	2.007	6	1.0	1.0	10000.0	72.39	53.42	35.31	NO
600.	3.025	6	1.0	1.0	10000.0	72.39	62.01	39.31	NO
700.	3.235	6	1.0	1.0	10000.0	72.39	70.46	43.16	NO
800.	3.299	6	1.0	1.0	10000.0	72.39	78.74	46.85	NO
900.	3.270	6	1.0	1.0	10000.0	72.39	86.63	50.39	NO
1000.	3.185	6	1.0	1.0	10000.0	72.39	94.74	53.79	NO

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 25. M:

90.	4.187	4	20.0	20.0	6400.0	17.64	14.35	12.63	NO
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USE DISCRETE DISTANCES? ENTER Y OR N:
 -

Page: 1 of 1 Words: 0

Start | Perms Admin... | 3 Microsoft O... | Inbox - Micro... | K7 AM 640... | 2 Microsoft O... | 4 Windows E... | C:\Users\RO... | 2:19 PM

TIER 3 SCREENING RISK ASSESSMENT REPORT

A/N: 516320
 Fac:

Application deemed complete date: 11/24/10

2. Tier 2 Data

MET Facto.	1.00
4 hr	0.92
6 or 7 hrs	0.83

Dispersion Factors tables

2	For Chronic X/Q
6	For Acute X/Q

Dilution Factors (ug/m3)/(tons/yr)

Receptor	X/Q	X/Qmax
Residential	0.076542324	4.19069224
Commercial	0.302732478	16.57460317

Adjustment and Intake Factors

	AFann	DBR	EVF
Residential	1	302	0.96
Worker	4.2	149	0.38

A/N: 516320

Application deemed complete date: 11/24/10

TIER 3 RESULTS

5a. MICR

MICR = CP (mg/(kg-day))⁻¹ * Q (ton/yr) * (X/Q) * AFann * MET * DBR * EVF * 1E-6* MP

Compound	Residential	Commercial
Diesel PM from diesel-fueled internal combustion engine	4.91E-08	1.59E-07
Total	4.91E-08 PASS	1.59E-07 PASS

No Cancer Burden, MICR < 1.0E-6

5b. Cancer Burden	NO
X/Q for one-in-a-million:	
Distance (meter)	2773.11
Area (km2):	2.41E+01
Population:	169,029
Cancer Burden:	2.69E-02

6. Hazard Index

HIA = [Q(lb/hr) * (X/Q)max] * AF / Acute REL

HIC = [Q(ton/yr) * (X/Q) * MET * MP] / Chronic REL

Target Organs	Acute	Chronic	Acute Pass/Fail	Chronic Pass/Fail
Alimentary system (liver) - AL			Pass	Pass
Bones and teeth - BN			Pass	Pass
Cardiovascular system - CV			Pass	Pass
Developmental - DEV			Pass	Pass
Endocrine system - END			Pass	Pass
Eye			Pass	Pass
Hematopoietic system - HEM			Pass	Pass
Immune system - IMM			Pass	Pass
Kidney - KID			Pass	Pass
Nervous system - NS			Pass	Pass
Reproductive system - REP			Pass	Pass
Respiratory system - RES		1.22E-04	Pass	Pass
Skin			Pass	Pass

A/N: 516320

Application deemed complete date:

11/24/10

6a. Hazard Index Acute

$$HIA = [Q(\text{lb/hr}) * (X/Q)_{\text{max}}] * AF / \text{Acute REL}$$

HIA - Residential

Compound	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Diesel PM from diesel-fueled internal combustion engine										
Total										

Compound	HIA - Commercial									
	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Diesel PM from diesel-fueled internal combustion engine										
Total										

6b. Hazard Index Chronic

$$HIC = [Q(\text{ton/yr}) \cdot (X/O) \cdot \text{MET} \cdot \text{MPI} / \text{Chronic REL}]$$

Compound	HIC - Residential												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Diesel PM from diesel-fueled internal combustion engine												3.08E-05	
Total												3.08E-05	

6b. Hazard Index Chronic (cont.)

A/N: 516320

Application deemed complete date:

11/24/10

Compound	HIC - Commercial										RESP	SKIN	
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS			REP
Diesel PM from diesel-fueled internal combustion engine												1.22E-04	
Total												1.22E-04	

Table A

Modeling emissions rate	0.126000	gr/sec
Modeling emissions rate	1.00	lb/hr
Modeling emissions rate	4.38	tons/yr
Max hr/dy	24	hr/day
Day per week	7	dy/wk
Week per year	52	wk/yr
MODELING RESULTS -MAX ONE HOUR		
Distance residence	90.00	meter
Max. 1-hour Conc. Residence	4.187000	ug/m3
Annualized Conc. Residence	0.334960	ug/m3
Distance Commerical	4.19	meter
Max. 1-hour Conc. Commerical	16.560000	ug/m3
Annualized Conc. Commerical	1.324800	ug/m3

Annualized X/Q

X/Q Residential	0.076542324	(ug/m ³)/(tons/yr)
X/Q Commercial	0.302732478	(ug/m ³)/(tons/yr)

Max. X/Q

X/Q Residential	4.19069224	(ug/m ³)/(lbs/hr)
X/Q Commercial	16.57460317	(ug/m ³)/(lbs/hr)

Table B (These values are needed to calculate cancer burden)

Distance	Interpolation						X/Q for one-in-a-million		
	Residential			Industrial			near	actual	far
	near	actual	far	near	actual	far			
Stack Height (ft):	40			Row: 2					
Distance	1500.00	90.00	2000.00	1500.00	4.19	2000.00	1500.00	#NAME?	2000.00
X/Q - 1 hr conc ug/m3	9.09	4.19	5.52	9.09	16.56	5.52	9.09	#NAME?	5.52
X/Q Annualized (ug/m ³)/(tons/yr)	0.17	0.08	0.10	0.17	0.30	0.10	0.17	#NAME?	0.10

CONVERSION CALCULATOR FOR SCREEN MODELING INPUT (British to Metric Units)

SCREEN INPUT DATA - BRITISH UNITS

Actual exhausted rate	19049.00	acfm
Temperature	922.00	degree F
Stack diameter	20.00	in
Stack height	28.00	ft
Modeling emissions rate	1.00	lb/hr

SCREEN INPUT DATA - METRIC UNITS

Temperature	767.444	degrees K
Stack diameter	0.508	meter
Stack area	0.203	square meter
Stack height	8.535	meter
Stack velocity	44.379	m/s
Modeling emissions rate	0.12611	gr/s