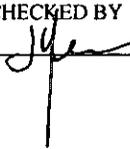


SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 1
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY 

ENGINEERING EVALUATION

COMPANY NAME AND ADDRESS

Loma Linda University Medical Center
25027 Mound Street
Loma Linda, CA 92562

CONTACT(S): Henry Cairus, Environmental Health Supervisor, (909) 651-4019
Jordan Roddy, Director of Environmental Health, (909) 651-4018

EQUIPMENT LOCATION

AQMD ID 800234
25027 Mound Street
Loma Linda, CA 92354

BACKGROUND/SUMMARY

Loma Linda University Medical Center (LLUMC) operates a university and teaching hospital under a Title V operating permit. They were issued a Permit to Construct (A/N 531864) on 7/11/12 to retrofit their incinerator (A/N 139146/ PTO# D03504) to comply with Rule 1147 by replacing the two existing primary burners with new burners. The unit was subsequently source tested but it did not meet the emission limits on the permit. LLUMC is now proposing to retrofit the secondary burner located in the unit's upper chamber under the application no. 558643.

The incinerator is subject to AQMD Rule 1147 which outlines a compliance schedule to come into compliance with a more stringent NOx limit. Emission limits for incinerators that operate with process temperatures greater than or equivalent to 1200°F is 60 ppmvd-NOx. The incinerator is a two chamber unit that uses a primary chamber fired with two burners and a secondary chamber fired with its own burner. The new replacement burner that the facility is proposing to install has the same heat input rating as the existing burner; therefore, there is no increase in emissions associated with this modification.

Following the issuance of the Permit to Construct for the primary burners under A/N 531864, the facility made a request to change the model number of the burners with no change in heat input rating. The new model burners would operate at the same process temperatures in excess of 1200°F. This evaluation will reflect the model change. The facility has also requested a change in Responsible Official. The old contact is no longer the Director of Environmental Health and Safety at Loma Linda University Medical Center. The facility had already submitted a 400-RO form, but the change will be processed under this TV revision.

COMPLIANCE REVIEW

A review of the District Enforcement database reveals that the facility received a Notice to Comply (E07399) to provide source tests for the turbines and boiler. The information was provided to District Enforcement staff by the imposed deadline. The last inspection was conducted on 7/3/13 and the facility was determined to be in compliance.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 2
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

EMISSION CALCULATIONS

The emissions are shown in the tables below and are the same as the emissions determined in the analysis for A/N 531864, since there is no change in emission rates.

Table 1 Data

Parameter	Value	Units	Source
Heat Input	3	MMBtu/hr	Manufacturer ^(a)
Gas HHV	1050	MMBtu/MMscf	AQMD default
Operating Schedule	24	hrs/day	Worst-case
	8760	hrs/yr	
Fd	8710	dscf/MMBtu	Fd for natural gas at 68°F
SMV	385.44	scf/lb-mole	v = RT/P at 68°F and 14.7 psia
NOx MW	46	lb/lb-mole	calculated as NO2
CO MW	28	lb/lb-mole	

^(a) The heat input is based on all burners (0.9 MMBtu/hr x 2 + 1.2 MMBtu/hr) firing at maximum capacity

Table 2 Emission Factors

Pollutant	Emission Factor (ppmvd @ 3% O2)	Emission Factor (lb/MMBtu) ^(a)	Source
NOx	60	0.073	Manufacturer
SOx	-	0.00064	0.25 gr-H2S/100scf gas
PM10	-	0.00724	AP-42 1.4-2
CO	2000	1.48	Rule 407
ROG	-	0.00524	AP-42 1.4-2

^(a) EF (lb/MMBtu) = ppmvd x 1E-6 x MW (lb/lb-mole) ÷ SMV (scf/lb-mole) x Fd (dscf/MMBtu) x 20.9/ (20.9-3)

Table 3 Emission Rates

Pollutant	lb/hr ^(a)	lb/day ^(b)	lb/yr ^(c)	30-DA ^(d)
NOx	0.22	5.26	1,918	5.33
SOx	0	0.05	17	0.05
PM10	0.02	0.52	190	0.53
CO	4.44	106.56	38,894	108.04
ROG	0.02	0.38	138	0.38

^(a) EF (lb/MMBtu) x Heat Input (MMBtu/hr)

^(b) Rate (lb/hr) x Schedule (hrs/day)

^(c) Rate (lb/hr) x Schedule (hrs/yr)

^(d) Rate (lb/hr) x Schedule (hrs/mo) /30

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 3
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

RULES EVALUATION

RULE 212-STANDARDS FOR APPROVING PERMITS AND ISSUING PUBLIC NOTICES

Rule 212 requires that a person shall not build, erect, install, alter, or replace any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants without first obtaining written authorization for such construction from the Executive Officer. Rule 212(c) states that a project requires written notification if there is an emission increase for ANY criteria pollutant in excess of the daily maximums specified in Rule 212(g), if the equipment is located within 1,000 feet of the outer boundary of a school, or if the MICR is equal to or greater than one in a million (1×10^6) during a lifetime (70 years) for facilities with more than one permitted unit, source under Regulation XX, or equipment under Regulation XXX, unless the applicant demonstrates to the satisfaction of the Executive Officer that the total facility-wide maximum individual cancer risk is below ten in a million (10×10^6) using the risk assessment procedures and toxic air contaminants specified under Rule 1402; or, ten in a million (10×10^6) during a lifetime (70 years) for facilities with a single permitted unit, source under Regulation XX, or equipment under Regulation XXX. There are no schools within 1,000 feet of the equipment. There is no increase in burner rating; therefore, there is no increase in emissions that would require a public notice under the sections below.

RULE 401 - VISIBLE EMISSIONS

This rule limits visible emissions to opacity of less than 20 percent (Ringlemann No.1), as published by the United States Bureau of Mines. It is unlikely, that there will be visible emissions from the lean burn engines. However, in the unlikely event that visible emissions do occur, anything greater than 20 percent opacity is not expected to last for greater than 3 minutes. During normal operation, no visible emissions are expected.

RULE 402 - NUISANCE

This rule requires that a person not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which cause, or have a natural tendency to cause injury or damage to business or property. A review of the District database reveals that there have not been any complaints received by the District within the last two years in regards to this facility. Inspections are conducted on an annual basis at this facility and it is expected that LLUMC will continue to comply with Rule 402.

RULE 407 – LIQUID AND GASEOUS AIR CONTAMINANTS

This rule limits CO emissions to 2,000 ppmvd and SO₂ emissions to 500 ppmvd, averaged over 15 minutes. The incinerator is subject to the requirements of this rule. The incinerator has a 2,000 ppmvd CO limit. Continued compliance with this rule is required. The unit also must comply with Rule 431.1, thus it is exempt from the SO₂ limit in Rule 407. The applicant will be required to comply with Rule 431.1 and thus the SO₂ limit in Rule 407 will not apply.

RULE 409 – COMBUSTION CONTAMINANTS

This rule restricts the discharge of contaminants from the combustion of fuel to 0.1 grain per cubic foot of gas, calculated to 12% CO₂, averaged over 15 minutes. Continued compliance with this rule is expected.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 4
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

RULE 431.1-SULFUR CONTENT OF GASEOUS FUELS

The equipment will use natural gas that will comply with the 16 ppm sulfur limit, calculated as H₂S, specified in this rule. Natural gas will be supplied by the Southern California Gas Company which has a H₂S content of less 0.25 gr/100scf, which is equivalent to a concentration of about 4 ppm. It is also much less than the 1 gr/100scf limit typical of pipeline quality natural gas. Continued compliance is expected.

RULE 1147 – NOX REDUCTIONS FROM MISCELLANEOUS SOURCES

The purpose of this rule is to reduce NO_x emissions from gaseous and liquid fuel fired combustion equipment that require a District permit and are not specifically required to comply with a NO_x emission limit by other District Regulation XI rules. The incinerator is subject to the requirements of this rule.

The incinerator has a process temperature that exceeds 1200°F; therefore, it is subject to a NO_x concentration limit of 60 ppmvd. LLUMC is proposing to retrofit the unit and install a burner that will meet the limit. A source test will be required to verify the concentration limit.

NEW SOURCE REVIEW (NSR)

The secondary burner will be replaced with a low NO_x burner of the same rating with no increase in emissions. Therefore, NSR will not be triggered for this project.

RULE 1401 – NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS

This rule is applicable to applications deemed complete on or after June 1, 1990 and it imposes specific limits for maximum individual cancer risk (MICR), cancer burden, and non-cancer acute and chronic hazard indices from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants (TAC) listed in Table I of Rule 1401. The rule establishes allowable risks for permit units requiring new permit pursuant to Rules 201 or 203. The secondary burner will be replaced with a low NO_x burner of the same rating with no increase in emissions. Therefore, NSR for TACs will not be triggered for this project.

RULE 1406 – CONTROL OF DIOXIN EMISSIONS FROM MEDICAL WASTE INCINERATORS

The purpose of the rule is to reduce dioxin emissions from medical waste incinerators. The incinerator at LLUMC does not incinerate anything that can generate dioxins and is therefore exempt from the requirements of the rule.

40 CFR PART 60 SUBPART Ce – EMISSION GUIDELINES AND COMPLIANCE TIMES FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS CONSTRUCTED ON OR BEFORE JUNE 20, 1996

The incinerator at LLUMC was constructed prior to June 20, 1996 and primarily incinerates pathological animal specimens, and the occasional human body part.

§62.14490 defines “*medical/infectious waste*” as...

“any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed in paragraphs (1) through (7) of this definition. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in part 261 of this chapter;

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 5
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

household waste, as defined in §261.4(b)(1) of this chapter; ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment mation; and domestic sewage materials identified in §261.4(a)(1) of this chapter.

(1) Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

(2) Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.

(3) Human blood and blood products including:

- (i) Liquid waste human blood;
- (ii) Products of blood;
- (iii) Items saturated and/or dripping with human blood; or
- (iv) Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also include in this category.

(4) Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

(5) Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals.

(6) Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases.

(7) Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.”

The incinerator at LLUMC primarily incinerates pathological animal specimens and parts; however, per the facility, some of the items that are burned in the incinerator include: animals, and other products (bedding, bags, etc.) that may have been exposed to communicable diseases. In addition, LLUMC

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 6
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

stated that they also burn human tissue on occasion. Therefore, a portion of the waste that the incinerator burns at LLUMC falls under the definition of “medical/infectious waste” of the subpart. Per discussions with LLUMC, a very small portion of the material combusted would be classified as “medical/infectious waste”. The amount incinerated would classify the LLUMC unit as a “co-fired combustor”.

§62.14490 defines “*Co-fired combustor*” as...

“a unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, 10 percent of less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis...”

A co-fired combustor is exempt from the requirements of the subpart per §62.14400 (b)(2). In order to qualify, LLUMC must keep records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted as well as the weight of all other fuels and wastes combusted at the co-fired combustor. The records must reflect that the unit continues to meet the definition of co-fired combustor in 40 CFR 62.14490. Records must be presented to EPA or delegated authority upon request.

Conditions exist on the Title V permit that ensures the equipment operates as a co-fired combustor as defined in the subpart.

REGULATION XXX – TITLE V

LLUMC is a Title V facility with a Title V permit.

RULE 3003 – APPLICATIONS

The “de minimis significant permit revision” is expected to comply with all applicable requirements of this rule.

(i)(4) The de minimis significant permit revision will be issued only after the permit revision application has been found to comply with all conditions of this rule.

(j)(1) The permit revision will be forwarded to EPA for a 45 day review period.

RULE 3005 – PERMIT REVISION

(e) The proposed Title V permit revision satisfies all the applicable conditions listed in this rule. The modification constitutes a “de minimis significant permit revision” as defined in Rule 3000(b)(6).

RULE 3006 – PUBLIC PARTICIPATION

(b) The proposed “de minimis significant permit revision” is exempt from public participation.

PERMIT CONDITIONS

It is recommended that the permit be issued with the conditions shown in the draft permit following the completion of the EPA’s 45 day review period.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 7
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

EQUIPMENT DESCRIPTION

MODIFICATION OF INCINERATOR, PATHOLOGICAL, MULTIPLE CHAMBER, ECOLAIRE E.C.P. INC., MODEL 100 PW1, 100 POUNDS PER HOUR CAPACITY, 6' DIA. X 8' H. (PRIMARY CHAMBER), 4'-6" DIA. X 8' L., SECONDARY CHAMBER WITH TWO OPLE-1SUNSH-Y1H-ANR 900,000 BTU/HR PRIMARY GAS BURNERS WITH A 1.3 HP UNDERFIRE BLOWER AND A 1,200,000 BTU/HR SECONDARY GAS BURNER WITH A 3 HP BLOWER BY REPLACING THE EXISTING SECONDARY BURNER WITH A MAXON KINEDIZER LE LOW NOX BURNER RATED AT 1,200,000 BTU/HR.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL NOT EMIT MORE THAN 60 PPM OF OXIDES OF NITROGEN (NOX), CALCULATED AS NO2, MEASURED BY VOLUME ON A DRY BASIS AT 3% O2.
[RULE 1147]
4. THE COMBUSTION BURNERS SHALL BE INSPECTED AND MAINTAINED PER THE MANUFACTURER'S SCHEDULE AND SPECIFICATIONS. RECORDS SHALL BE KEPT ON FILE FOR INSPECTIONS AND MAINTENANCE, INCLUDING THE SCHEDULE AND INSTRUCTIONS, FOR AT LEAST THREE YEARS.
[RULE 1147]
5. THIS EQUIPMENT SHALL NOT BURN ANY CHLORINATED MATERIALS, INCLUDING BUT NOT LIMITED TO PLASTICS, PACKAGING, TEXTILES, FABRIC, CONTAINERS, TUBING OR ANY OTHER GENERAL REFUSE THAT MAY CONTAIN, OR MAY BE CONTAMINATED WITH, CHLORINATED COMPOUNDS.
[RULE 1406]
6. THE TOTAL QUANTITY OF MATERIAL CHARGED TO THIS INCINERATOR SHALL NOT EXCEED 100 POUNDS PER HOUR OR 800 POUNDS PER DAY.
[RULE 1303(b)(2)-OFFSET]
7. A TEMPERATURE OF NOT LESS THAN 2000 DEGREES F SHALL BE MAINTAINED IN THE AFTERBURNER CHAMBER WHEN THE INCINERATOR IS IN OPERATION.
[RULE 1303(a)-BACT]
8. THE CHARGING DOOR SHALL REMAIN CLOSED EXCEPT DURING CHARGING.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 8
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

[RULE 1303(a)-BACT]

9. THE PRIMARY GAS BURNER SHALL AUTOMATICALLY SHUT OFF WHEN THE CHARGING DOOR IS OPENED.
[RULE 1303(a)-BACT]
10. THE EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES AND OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 1303(a)-BACT]
11. COMPLETE RECORDS OF THE AMOUNT OF MATERIAL PROCESSED PER DAY IN THIS INCINERATOR SHALL BE MAINTAINED IN A FORM APPROVED IN WRITING BY THE EXECUTIVE OFFICER. SUCH RECORDS SHALL BE MAINTAINED FOR A PERIOD OF NOT LESS THAN FIVE YEARS AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
[RULE 1303(a)-BACT]
12. THIS UNIT SHALL OPERATE AS A CO-FIRED COMBUSTOR AND SHALL BE LIMITED TO BURNING MEDICAL/INFECTIOUS WASTE, AS DEFINED IN 40 CFR 62.14490, THAT IS LESS THAN 10 PERCENT OF THE WEIGHT OF WHICH IS COMPRISED, IN AGGREGATE, OF THE MATERIAL BURNED IN THE INCINERATOR. THE PERCENTAGE SHALL BE MEASURED ON A CALENDAR QUARTER BASIS.
[40 CFR SUBPART Ce]
13. THE FACILITY SHALL MAINTAIN RECORDS ON A CALENDAR QUARTER BASIS OF THE WEIGHT OF MATERIAL PROCESSED AND THE WEIGHT OF THE MEDICAL/INFECTIOUS WASTE COMBUSTED TO DEMONSTRATE THAT THE UNIT CONTINUES TO MEET THE DEFINITION OF A CO-FIRED COMBUSTOR IN 40 CFR 62.14490.
[40 CFR SUBPART Ce]
14. THIS EQUIPMENT SHALL COMPLY WITH RULE 1147.
[RULE 1147]
15. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL CONDUCT SOURCE TESTS ON THE EQUIPMENT UNDER THE FOLLOWING CONDITIONS:
 - A. A SOURCE TEST PROTOCOL SHALL BE SUBMITTED FOR THE EXECUTIVE OFFICER'S REVIEW AND APPROVAL PRIOR TO THE COMMENCEMENT OF TESTING.
 - B. SOURCE TESTING SHALL BE CONDUCTED WITHIN 30 DAYS AFTER ACHIEVING MAXIMUM PRODUCTION RATE AT WHICH THE EQUIPMENT WILL BE OPERATED, BUT NO LATER THAN 90 DAYS AFTER INITIAL START-UP.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 9
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

- C. THE SOURCE TESTS SHALL BE PERFORMED TO VERIFY COMPLIANCE WITH THE NOX EMISSION LIMIT SPECIFIED IN CONDITION NO. 3.
- D. THE SOURCE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH SCAQMD METHOD 100.1
- E. THE TESTS SHALL BE PERFORMED WHEN THE UNIT IS OPERATING AT NORMAL CONDITIONS. THE SAMPLING DURATION SHALL BE AT LEAST 15 AND NO MORE THAN 60 CONSECUTIVE MINUTES.
- F. TWO COMPLETE COPIES OF SOURCE TEST REPORTS (INCLUDE THE APPLICATION NUMBER AND A COPY OF THE PERMIT IN THE REPORT) SHALL BE SUBMITTED TO THE DISTRICT (ADDRESSED TO SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, ATTN: MARCEL SAULIS, P.O. BOX 4941, DIAMOND BAR, CA 91765). THE RESULTS SHALL BE SUBMITTED WITHIN 45 DAYS AFTER THE SOURCE TEST IS COMPLETED. THE REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO EMISSION RATES IN POUNDS PER HOUR AND CONCENTRATIONS IN PPMV AT THE OUTLET OF THE UNIT, MEASURED ON A DRY BASIS AT 3% OXYGEN. THE FOLLOWING OPERATING DATA SHALL ALSO BE INCLUDED FOR EACH FIRING RATE:
- I. THE EXHAUST FLOW RATES IN ACTURAL CUBIC FEET PER MINUTE (ACFM).
 - II. THE FIRING RATES IN BTU PER HOUR.
 - III. THE OXYGEN CONTENT OF THE EXHAUST GASES IN PERCENT.
 - IV. THE FUEL FLOW RATE.
- G. A TESTING LABORATORY CERTIFIED BY THE CALIFORNIA AIR RESOURCES BOARD IN THE REQUIRED TEST METHODS FOR CRITERIA POOLUTANTS TO BE MEASURED, AND IN COMPLIANCE WITH DISTRICT RULE 304 (NO CONFLICT OF INTEREST) SHALL CONDUCT THE TEST.
- H. SAMPLING FACILITIES SHALL COMPLY WITH THE DISTRICT GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES PURSUANT TO RULE 217.
[RULE 1147, RULE 304, RULE 217]

Periodic Monitoring:

16. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A MONTHLY BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE MONTHLY PERIOD. THE ROUTINE MONTHLY INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 10	PAGE NO. 10
	APPL. NO. 531846	DATE 1/7/2014
	PROCESSED BY M SAULIS	CHECKED BY

DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:

- A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
- B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
- C. 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.

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

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.

[RULE 3004 (a)(4)]

Emissions And Requirements:

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

NOX: 60 PPMV, RULE 1147
 PM: 0.1 GR/SCF RULE 473
 CO: 2000 PPMV, RULE 407
 SOX: 500 PPMV, RULE 407
 PM: 0.1 GR/SCF, RULE 409
 PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS