



South Coast Air Quality Management District

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

September 27, 2011

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

Dear Mr. Rios:

Subject: Rancho Los Amigos National Rehabilitation Center (ID 6384) – Title V
Permit Revision (Application No. 517569)

Rancho Los Amigos National Rehabilitation Center has proposed to revise their Title V permit by installing Low NOx burners on 3 of their boilers to meet the upcoming Rule 1146 limits. This is a medical care facility (SIC 8060) located at 7601 E Imperial Highway, Downey, CA 90242. This proposed permit revision is considered as a “minor permit revision” to their Title V permit. Attached for your review are the permit evaluation and proposed Section D. With your receipt of the proposed Section D today, we will note that the EPA 45-day review period begins on September 27, 2011.

If you have any questions or need additional information regarding the proposed permit revision, please call Chris Perri at (909) 396-2696.

Very truly yours,

A handwritten signature in black ink, appearing to read "Brian L. Yeh", is written over a light blue circular stamp.

Brian L. Yeh
Senior Manager
Chemical, Mechanical & Public Services

BLY:AYL:JTY:cgp

Attachments



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APPL NO. 517565	DATE 9/23/2011
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PERMIT TO CONSTRUCT EVALUATION

APPLICANT:

Los Angeles County Rancho Los Amigos NRC
7601 East Imperial Highway
Downey, CA 90242

EQUIPMENT LOCATION:

7601 East Imperial Highway
Downey, CA 90242

EQUIPMENT DESCRIPTION:

A/N 525440

MODIFICATION OF:

BOILER NO. 2, NEBRASKA, MODEL NO. NS-B-44ECON, 29,000,000 BTU/HR, WITH COEN LONOX BURNER, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED, WITH A FUEL GAS RECIRCULATION SYSTEM.

OPERATING UNDER P/O D92936

BY REMOVAL OF THE COEN LOW NOX BURNER AND INSTALLATION OF 1 AMERICAN COMBUSTION TECHNOLOGIES LOW NOX BURNER, MODEL SLE07, 29,000,000 BTU/HR, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED.

A/N 525441

MODIFICATION OF:

BOILER NO. 3, NEBRASKA, MODEL NO. NS-B-44ECON, 29,000,000 BTU/HR, WITH COEN LONOX BURNER, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED, WITH A FUEL GAS RECIRCULATION SYSTEM.

OPERATING UNDER P/O D92937

BY REMOVAL OF THE COEN LOW NOX BURNER AND INSTALLATION OF 1 AMERICAN COMBUSTION TECHNOLOGIES LOW NOX BURNER, MODEL SLE07, 29,000,000 BTU/HR, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED.



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A/N 525442

MODIFICATION OF:

BOILER NO. 4, NEBRASKA, MODEL NO. NS-B-44ECON, 29,000,000 BTU/HR, WITH COEN LONOX BURNER, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED, WITH A FUEL GAS RECIRCULATION SYSTEM

OPERATING UNDER P/O D92861

BY REMOVAL OF THE COEN LOW NOX BURNER AND INSTALLATION OF 1 AMERICAN COMBUSTION TECHNOLOGIES LOW NOX BURNER, MODEL SLE07, 29,000,000 BTU/HR, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED.

BACKGROUND:

The facility submitted 3 applications plus a Title V modification to retrofit 3 of their boilers with new Low Nox burners for Rule 1146 compliance. The applications were submitted as Class I on July 28, 2011. Following is a summary:

Application Number	Equip	Bcat	Fee Sch	Fee
525440	Boiler 2	011204/81	D	\$694.16 ⁽¹⁾
525441	Boiler 3	011204/81	D	694.16 ⁽¹⁾
525442	Boiler 4	011204/81	D	694.16 ⁽¹⁾
517569	Title V	555007		861.52
			Total	\$2,944.00

(1) The applications were submitted as administrative revisions because the facility had previously submitted 4 applications for boiler modifications under A/N's 517565-68, plus 4 SCR applications under A/N's 517570-517573, and paid a total of \$20,575.56. The facility then requested cancellation of those applications and decided to go with Low Nox burners instead, but they were not given a refund because the applications had already been worked on. They requested some type of relief from paying the full fees for this new set of applications, and AQMD agreed to allow an administrative fee.

The boilers were originally permitted and installed in the mid 1990's. They are currently operating under the permits issued at that time. The following table summarizes the current application and permit numbers.

Equipment	Current A/N	Current P/O
Boiler 1	264880	D92935
Boiler 2	264881	D92936
Boiler 3	264882	D92937
Boiler 4	264883	D92861

Boiler 1 will be decommissioned at the end of 2011.

This facility is subject to Title V, but not RECLAIM.



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PROCESS DESCRIPTION:

The boilers are used to produce steam for heating and cooling. The facility is proposing to retrofit the units with an upgraded low NOx burner manufactured by American Combustion Technologies to reduce outlet NOx emissions to 9 ppm to comply with Rule 1146.

The boilers are all identical units each rated at 29 mmbtu/hr. The burners are designed to reduce NOx emissions to 9 ppm at 3% O₂, with a maximum turndown ratio of 5:1 (5524 scf/hr). Following are the specifications:

Specification	
Boiler Manufacturer	Nebraska
Model	NS-B-44ECON
Fuel Type	Natural gas primary, low nitrogen emergency
Maximum Fuel Consumption	27,619 ft ³ /hr natural gas, 208.6 gal/hr oil ⁽¹⁾
Maximum Exhaust Flow	295,530 ft ³ /hr natural gas, 311,176 ft ³ /hr oil ⁽²⁾
Maximum Heat Input	29 mmbtu/hr
NOx Combustion Control	FGR, Low NOx Burner
Number of Burners	1 per boiler
Burner Manufacturer/Model	American Combustion Technologies/SLE07
Outlet NOx	9 ppm @ 3% O ₂ natural gas

(1) Based on 1050 btu/cf natural gas and 139,000 btu/gal oil

(2) Based on an F factor of 8710 cf/mmbtu for natural gas and 9190 cf/mmbtu for oil, corrected to 3% O₂

EMISSIONS:

Emission estimates are based on standard boiler emission factors for ROG, PM, and SOx. NOx is based on the rule limit of 9 ppm, and CO is based on the results from the previous source test. Calculations are shown in Appendix A, following is a summary.

Natural Gas

Pollutant	Maximum Emissions, Uncontrolled		Maximum Emissions, Controlled		30 Day Average Emissions	Annual Emissions
	Lbs/hr	lbs/day	Lbs/hr	Lbs/day	lbs/day	lbs/yr
NOx	1.1	26.4	0.32	7.68	8	2787
CO	0.88	21.1	0.88	21.2	21	7665
ROG	0.18	4.4	0.18	4.4	4	1569
PM10	0.2	4.8	0.2	4.8	5	1742
SOx	0.02	0.48	0.02	0.48	0	174



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Oil

Pollutant	Maximum Emissions, Uncontrolled		Maximum Emissions, Controlled		30 Day Average Emissions*	Annual Emissions
	Lbs/hr	lbs/day	Lbs/hr	Lbs/day	lbs/day	lbs/yr
NOx	1.51	36.2	1.51	36.2	0	9
CO	0.40	9.6	0.40	9.6	0	2
ROG	0.042	1.0	0.042	1.0	0	0
PM10	0.42	10.1	0.42	10.1	0	3
SOx	0.44	10.6	0.44	10.6	0	3

* based on 30 minutes per month oil firing as allowed in the permit

Existing 30 Day Average Emissions

Pollutant	Existing 30 Day Average (lbs/day)
NOx	34 (oil)
CO	21 (oil)
ROG	4 (gas)
PM10	10 (oil)
SOx	35 (oil)

All NSR entries will now be based on gas firing. Note that the reduction in PM10 and SOx from the previous application is due to this change in methodology and NOT due to an actual reduction in emissions. The NOx reduction is however, due to the equipment modification.

EVALUATION:

Rule 212 – Standards for Approving Permits

The facility is not within 1000 feet of a school, therefore the project is not significant under paragraph (c)(1). There is no increase in any criteria pollutant or lead from the addition of the SCRs, therefore the project is not significant under paragraph (c)(2). There is an increase in ammonia emissions, however, there is no cancer risk from ammonia, therefore the project is not significant under paragraph (c)(3). In conclusion, this is not considered a significant project under the rule and no public notice is required.

Rule 401 – Visible Emissions

Visible emissions are not expected under normal operation firing gaseous fuel. However, fuel oil combustion has the potential to result in visible emissions. Fuel oil is only fired in the unit during a natural gas curtailment, or during maintenance testing.

Rule 402 – Nuisance

Nuisance problems are not expected from the normal operation of these boilers.



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Rule 407 – Liquid and Gaseous Air Contaminants

This rule limits the CO emissions to 2000 ppm, and also limits the SO2 emissions to 500 ppm when firing fuel oil. The Rule 1146 CO limit of 400 ppm is more stringent. One of the boilers was tested in the 1990's and showed CO emissions below 50 ppm for both oil and gas firing. After installation of the new Low NOx burners, compliance with the CO limit will again be verified through a source test. The units have not been tested for SO2 emissions, however, since 15 ppm sulfur fuel oil is required by Rule 431.2, the equipment should theoretically be able to comply with the 500 ppm SO2 limit.

Rule 409 – Combustion Contaminants

This rule limits particulate emissions to 0.1 gr/scf. Although the units have not been tested for PM emissions, the following theoretical calculations show that compliance can be expected:

Estimated grain loading, gas firing	=	0.2 lbs/hr X (7000 gr/lb)/0.296E6 scf/hr
	=	0.0047 gr/scf
Estimated grain loading, oil firing	=	0.42 lbs/hr X (7000 gr/lb)/312E6 scf/hr
	=	0.0094 gr/scf

Rule 431.1. - Sulfur Content of Gaseous Fuels

The boiler will be fired on pipeline natural gas, which under this rule, is required to meet a sulfur content of 16 ppm sulfur. Compliance is expected.

Rule 431.2 – Sulfur Content of Liquid Fuels

The applicant is expected to comply with the requirements that the maximum sulfur content of diesel fuel used in these boilers cannot exceed 500 ppm, if the fuel was purchased prior to June 1, 2004, and that only 15 ppm sulfur fuel can be purchased after June 1, 2004.

Rule 1146 – NOx from Boilers

This rule applies to all boilers over 5 mmbtu/hr. Current emission limits are 30 ppm NOx for gas firing, and 40 ppm NOx for oil firing, and 400 ppm CO for all fuels. One of the boilers was tested in the 1990's with the following results:

Fuel	NOx	CO
Gas	13	46
Oil	37	17

Under the rule, these boilers are classified as Group II Units because their rating is between 20 and 75 mmbtu/hr. For Group II Units, the new limit that takes effect January 1, 2012 is 9 ppm NOx for gas firing. With the installation of the new Low NOX burners, the units should be able to meet the new limits. The burner manufacturer has provided a guarantee for NOx of < 9 ppm and for CO < 400 ppm. A source test will be required to verify compliance. The facility has several options on which test method to use. The rule specifies either District Methods 100.1 or 7.1, or a portable analyzer method. Furthermore, periodic testing will be required every 3 years for these units.



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The rule also requires submittal of a compliance plan specifying when the facility will come into compliance with the limits. Rancho submitted their plan under A/N 504851, the plan was submitted within the required timeframe (before 1/1/10), and was approved by AQMD on March 3, 2010. The plan specified a 9 ppm NOx compliance level to be achieved by January 1, 2012. The facility also has submitted their modification applications within the required timeframe¹ (before 1/1/11), therefore the 9 ppm NOx limit is still applicable.

Regulation XIII – New Source Review

There is no increase in any criteria pollutant as a result of the installation of the new Low NOx burners.

Rule 1401 – Toxic Air Contaminants

There is no increase in emissions of toxic contaminants as a result of the new burner installation, therefore Rule 1401 is not applicable to this modification.

Regulation XXX – Title V

Rancho Los Amigos NRC is a Title V facility because it is a major source of NOx emissions. The facility is currently operating under a valid Title V permit issued on June 6, 2007. The installation of the Low NOx burners is considered a minor permit revision because there is no increase in either criteria pollutant or HAP emissions. As a minor revision, the proposed permit is subject to a 45 day EPA review and comment period.

RECOMMENDATION:

After the end of the 45 day EPA review period, issue a Permit to Construct subject to the conditions listed below.

The following condition changes are recommended:

1. Modify Condition no. 4 pertaining to the NOx and CO emissions by separating it into four conditions to clarify the existing limit, the new limit taking effect on 1/1/12, as well as the different limit for oil firing and the CO limit.
2. Add a fuel limit to insure the boiler operates above the 5:1 turndown ratio.
3. Add a condition requiring a fuel meter to verify compliance with the fuel limit.
4. Add a source test condition.
5. Update the Rule 431.2 sulfur limit to 15 ppm.

Also note that condition 12 which allows the operation of only 3 boilers at a time can be removed when the final Permit to Operate is issued, because boiler #1 will be shut down by January 1, 2012, and there will only be 3 boilers left.

¹ The previous set of applications, 517565-68 and 51770-73, were submitted on 12/28/10 for boiler modification with SCRs. The facility later decided to go with Low Nox burners instead and asked to cancel the SCR applications on 2/11/11. These latest applications, although submitted on 7/28/11, are considered a continuation of the first set of applications for purposes of determining compliance with the submittal date requirement of R1146.



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All other existing conditions will remain the same.

CONDITIONS:

Proposed new condition language is shown in **bold underline**.

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS BOILER SHALL BE FIRED ON NATURAL GAS ONLY EXCEPT DURING PERIODS OF NATURAL GAS CURTAILMENT, DURING MAINTENANCE TESTING OF THE BOILER WHICH SHALL NOT EXCEED 30 MINUTES PER MONTH, OR DURING COMPLIANCE TESTING WITH FUEL OIL.
[RULE 1146, RULE 1303(a)(1)-BACT]
4. **THE BURNER SHALL NOT FIRE ON LESS THAN 5524 SCF/HR OF NATURAL GAS DURING NORMAL OPERATION, NOT INCLUDING START-UPS AND SHUTDOWNS.**
[RULE 1146]
5. **THE OPERATOR SHALL INSTALL A FLOW METER TO ACCURATELY INDICATE THE FLOW RATE OF THE GAS AND SHALL RECORD THE HOURLY GAS BEING FIRED IN THE BOILER. THE MEASURING DEVICE SHALL CONTINUOUSLY MEASURE THE FLOW RATE AND SHALL BE ACCURATE TO WITHIN PLUS OR MINUS 5 PERCENT AND SHALL BE CALIBRATED ONCE EVERY 12 MONTHS. CALIBRATION RECORDS AND HOURLY FLOW RECORDS SHALL BE KEPT ON SITE AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.**
[RULE 1146]
6. ~~THIS BOILER SHALL EMIT NO MORE THAN 30 PPM (40 PPM WHEN FIRED ON FUEL OIL) OF OXIDES OF NITROGEN (NOX), CALCULATED AS NO2 WHEN FIRED ON FUEL OIL, AND 400 PPM OF CARBON MONOXIDE (CO) ALL MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE.~~
[RULE 1146]
7. **PRIOR TO JANUARY 1, 2012, THIS BOILER SHALL EMIT NO MORE THAN 30 PPM OXIDES OF NITROGEN (NOX) CALCULATED AS NO2 MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE WHEN FIRED ON NATURAL GAS.**
[RULE 1146]



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8. **BEGINNING JANUARY 1, 2012, THIS BOILER SHALL EMIT NO MORE THAN 9 PPM OXIDES OF NITROGEN (NOX) CALCULATED AS NO2 MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE WHEN FIRED ON NATURAL GAS.**
[RULE 1146]
9. **EMISSIONS OF NOX SHALL NOT EXCEED 40 PPM REFERENCED AT 3% O2 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES WHENEVER THIS EQUIPMENT IS FIRED WITH OIL.**
[RULE 1146]
10. **EMISSIONS OF CO SHALL NOT EXCEED 400 PPM REFERENCED AT 3% O2 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES.**
[RULE 1146]
11. FUEL OIL SUPPLIED TO THE BURNER SHALL BE NO. 2 OR A LIGHTER GRADE AS DESCRIBED BY THE LATEST ASTM SPECIFICATIONS AND SHALL CONTAIN LESS THAN 0.05 PERCENT SULFUR BY WEIGHT **IF PURCHASED PRIOR TO 6/1/04 AND LESS THAN 15 PPM SULFUR BY WEIGHT IF PURCHASED ON OR AFTER 6/1/04.**
[RULE 431.2]
12. THE OPERATOR SHALL HAVE THE BURNER EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE THE COMBUSTION AIR, FUEL, AND RECIRCULATION FLUE GAS AS THE BOILER LOAD VARIES. THIS CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO MAINTAIN ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME FIRING RATE.
[RULE 1146]
13. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN USE WHENEVER THE BOILER IS IN OPERATION.
[RULE 1146]
14. ONLY THREE OF THE FOUR BOILERS SHALL BE OPERATED AT ANY ONE TIME.
[RULE 1146, 1303(b)(2)-OFFSET]
15. **THE OPERATOR SHALL PERFORM PERIODIC EMISSION TESTS ON THE BOILER WITH A PORTABLE ANALYZER IN ACCORDANCE WITH THE SCHEDULE AND SPECIFICATIONS OUTLINED IN RULE 1146.**
[RULE 1146]
16. **THE OPERATOR SHALL CONDUCT A SOURCE TEST ON THE BOILER UNDER THE FOLLOWING CONDITIONS:**
 - A. **THE INITIAL TEST SHALL BE CONDUCTED WITHIN 60 DAYS AFTER APPROVAL OF THE SOURCE TEST PROTOCOL, BUT NO LATER THAN 180 DAYS AFTER THE PERMIT TO CONSTRUCT IS ISSUED. AFTER THE INITIAL TEST, TESTING SHALL BE CONDUCTED ONCE EVERY 3 YEARS, OR IN ACCORDANCE WITH THE SCHEDULE SPECIFIED IN RULE 1146.**
 - B. **THE TEST SHALL BE CONDUCTED TO DETERMINE THE EMISSIONS OF NOX AND CO USING ONE OF THE TEST METHODS SPECIFIED IN RULE 1146. THE TEST SHALL BE CONDUCTED OVER**



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15 MINUTE AVERAGING TIME. THE TEST SHALL BE CONDUCTED DURING GAS FIRING AT A GREATER THAN 90% LOAD, 50% LOAD, AND 25% LOAD. THE TEST SHALL BE CONDUCTED DURING OIL FIRING AT GREATER THAN 90% LOAD ONLY.

C. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH AN AQMD APPROVED TEST PROTOCOL. THE PROTOCOL SHALL BE SUBMITTED TO THE AQMD ENGINEER NO LATER THAN 45 DAYS BEFORE THE PROPOSED TEST DATE AND SHALL BE APPROVED BY THE AQMD BEFORE THE TEST COMMENCES. THE TEST PROTOCOL SHALL INCLUDE THE PROPOSED OPERATING CONDITIONS OF THE BOILER DURING THE TESTS, THE IDENTITY OF THE TESTING LAB, A STATEMENT FROM THE TESTING LAB CERTIFYING THAT IT MEETS THE CRITERIA OF RULE 304, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES. THE AQMD SHALL BE NOTIFIED ON THE DATE AND TIME OF THE TEST AT LEAST 10 DAYS PRIOR TO THE TEST.
[RULE 1146]

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

CO: 2000 PPMV, RULE 407

SOX: 500 PPMV **FUEL OIL**, RULE 409

PM: 0.1 GR/SCF, RULE 409

CO: 400 PPMV, RULE 1146

NOX: 30 PPMV, UNTIL DECEMBER 31, 2011, RULE 1146

NOX: 9 PPMV, **NATURAL GAS**, ON OR AFTER JANUARY 1, 2012,
RULE 1146

NOX: 40 PPMV FUEL OIL, RULE 1146



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Appendix A

Emission Calculations

Emission Factors

Pollutant	Natural Gas (lbs/mmcf)	Oil (lbs/Mgal)
NOx	R1 = 30 ppm R2 = 9 ppm	R1 = 40 ppm R2 = 40 ppm ⁽¹⁾
CO	46 ppm (R1 = R2) ⁽²⁾	17 ppm (R1 = R2) ⁽²⁾
ROG	7.0 (R1 = R2)	0.2 (R1 = R2)
PM10	7.5 (R1 = R2)	2.0 (R1 = R2)
SOx	0.83 (R1 = R2)	2.13 (R1 = R2)

- (1) The applicant has proposed meeting 9 ppm NOx when firing on oil, however, the calculations will only reflect the Rule 1146 requirement of 40 ppm
- (2) CO emissions are calculated using the methodology from the previous evaluation which used the source test results

Data:

Exhaust flow

Natural gas 295,530 ft³/hr (based on F factor of 8710 corrected to 3% O₂)
Oil 311,176 ft³/hr (based on F factor of 9190 corrected to 3% O₂)

Fuel Use

Natural gas 27,619 ft³/hr (based on 1050 btu/ft³)
Oil 208.6 gal/hr (based on 139,000 btu/gal)

Molecular weight

NO₂ 46 lbs/lb-mole
CO 28 lbs/lb-mole
NH₃ 17 lbs/lb-mole

Specific Molar Volume

380 ft³/lb-mole



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Calculations

Natural Gas

Pollutant	Maximum Emissions, Uncontrolled		Maximum Emissions, Controlled		30 Day Average Emissions	Annual Emissions
	Lbs/hr	lbs/day	Lbs/hr	Lbs/day	lbs/day	lbs/yr
NOx	1.1	26.4	0.32	7.68	8	2787
CO	0.88	21.1	0.88	21.2	21	7665
ROG	0.18	4.4	0.18	4.4	4	1569
PM10	0.2	4.8	0.2	4.8	5	1742
SOx	0.02	0.48	0.02	0.48	0	174

Oil

Pollutant	Maximum Emissions, Uncontrolled		Maximum Emissions, Controlled		30 Day Average Emissions*	Annual Emissions*
	Lbs/hr	lbs/day	Lbs/hr	Lbs/day	lbs/day	lbs/yr
NOx	1.51	36.2	1.51	36.2	0	9
CO	0.40	9.6	0.40	9.6	0	2
ROG	0.042	1.0	0.042	1.0	0	0
PM10	0.42	10.1	0.42	10.1	0	3
SOx	0.44	10.6	0.44	10.6	0	3

* based on 30 minutes per month and 6 hours per year oil firing.

Comparison of Existing to Proposed 30 Day Average Emissions

Pollutant	30 Day Average (lbs/day)	
	Existing	Proposed
NOx	34 (oil)	7 (gas)
CO	21 (oil)	21 (gas)
ROG	4 (gas)	4 (gas)
PM10	10 (oil)	5 (gas)
SOx	35 (oil)	0 (gas)

**FACILITY PERMIT TO OPERATE
LA CO., RANCHO LOS AMIGOS NATIONAL REHABILITATION CENTER**

PERMIT TO CONSTRUCT

A/N 525440

Equipment Description:

MODIFICATION OF:

BOILER NO. 2, NEBRASKA, MODEL NO. NS-B-44ECON, 29,000,000 BTU/HR, WITH COEN LONOX BURNER, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED, WITH A FUEL GAS RECIRCULATION SYSTEM.

OPERATING UNDER P/O D92936

BY REMOVAL OF THE COEN LOW NOX BURNER AND INSTALLATION OF 1 AMERICAN COMBUSTION TECHNOLOGIES LOW NOX BURNER, MODEL SLE07, 29,000,000 BTU/HR, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS BOILER SHALL BE FIRED ON NATURAL GAS ONLY EXCEPT DURING PERIODS OF NATURAL GAS CURTAILMENT, DURING MAINTENANCE TESTING OF THE BOILER WHICH SHALL NOT EXCEED 30 MINUTES PER MONTH, OR DURING COMPLIANCE TESTING WITH FUEL OIL.
[RULE 1146, RULE 1303(a)(1)-BACT]
4. PRIOR TO JANUARY 1, 2012, THIS BOILER SHALL EMIT NO MORE THAN 30 PPM OXIDES OF NITROGEN (NOX) CALCULATED AS NO₂ MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE WHEN FIRED ON NATURAL GAS.
[RULE 1146]
5. BEGINNING JANUARY 1, 2012, THIS BOILER SHALL EMIT NO MORE THAN 9 PPM OXIDES OF NITROGEN (NOX) CALCULATED AS NO₂ MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE WHEN FIRED ON NATURAL GAS.
[RULE 1146]
6. EMISSIONS OF NOX SHALL NOT EXCEED 40 PPM REFERENCED AT 3% O₂ ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES WHENEVER THIS EQUIPMENT IS FIRED WITH OIL.
[RULE 1146]

FACILITY PERMIT TO OPERATE LA CO., RANCHO LOS AMIGOS NATIONAL REHABILITATION CENTER

7. EMISSIONS OF CO SHALL NOT EXCEED 400 PPM REFERENCED AT 3% O2 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES.
[RULE 1146]
8. THE BURNER SHALL NOT FIRE ON LESS THAN 5524 SCF/HR OF NATURAL GAS DURING NORMAL OPERATION, NOT INCLUDING START-UPS AND SHUTDOWNS.
[RULE 1146]
9. THE OPERATOR SHALL INSTALL A FLOW METER TO ACCURATELY INDICATE THE FLOW RATE OF THE GAS AND SHALL RECORD THE HOURLY GAS BEING FIRED IN THE BOILER. THE MEASURING DEVICE SHALL CONTINUOUSLY MEASURE THE FLOW RATE AND SHALL BE ACCURATE TO WITHIN PLUS OR MINUS 5 PERCENT AND SHALL BE CALIBRATED ONCE EVERY 12 MONTHS. CALIBRATION RECORDS AND HOURLY FLOW RECORDS SHALL BE KEPT ON SITE AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1146]
10. FUEL OIL SUPPLIED TO THE BURNER SHALL BE NO. 2 OR A LIGHTER GRADE AS DESCRIBED BY THE LATEST ASTM SPECIFICATIONS AND SHALL CONTAIN LESS THAN 0.05 PERCENT SULFUR BY WEIGHT IF PURCHASED PRIOR TO 6/1/04 AND LESS THAN 15 PPM SULFUR BY WEIGHT IF PURCHASED ON OR AFTER 6/1/04.
[RULE 431.2]
11. THE OPERATOR SHALL HAVE THE BURNER EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE THE COMBUSTION AIR, FUEL, AND RECIRCULATION FLUE GAS AS THE BOILER LOAD VARIES. THIS CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO MAINTAIN ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME FIRING RATE.
[RULE 1146]
12. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN USE WHENEVER THE BOILER IS IN OPERATION.
[RULE 1146]
13. ONLY THREE OF THE FOUR BOILERS SHALL BE OPERATED AT ANY ONE TIME.
[RULE 1146, 1303(b)(2)-OFFSET]
14. THE OPERATOR SHALL PERFORM PERIODIC EMISSION TESTS ON THE BOILER WITH A PORTABLE ANALYZER IN ACCORDANCE WITH THE SCHEDULE AND SPECIFICATIONS OUTLINED IN RULE 1146.
[RULE 1146]
15. THE OPERATOR SHALL CONDUCT A SOURCE TEST ON THE BOILER UNDER THE FOLLOWING CONDITIONS:
 - A. THE INITIAL TEST SHALL BE CONDUCTED WITHIN 60 DAYS AFTER APPROVAL OF THE SOURCE TEST PROTOCOL, BUT NO LATER THAN 180 DAYS AFTER THE PERMIT TO CONSTRUCT IS ISSUED. AFTER THE INITIAL TEST, TESTING SHALL BE CONDUCTED ONCE EVERY 3 YEARS, OR IN ACCORDANCE WITH THE SCHEDULE SPECIFIED IN RULE 1146.
 - B. THE TEST SHALL BE CONDUCTED TO DETERMINE THE EMISSIONS OF NOX AND CO USING ONE OF THE TEST METHODS SPECIFIED IN RULE 1146. THE TEST SHALL BE

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CONDUCTED OVER 15 MINUTE AVERAGING TIME. THE TEST SHALL BE CONDUCTED DURING GAS FIRING AT A GREATER THAN 90% LOAD, 50% LOAD, AND 25% LOAD. THE TEST SHALL BE CONDUCTED DURING OIL FIRING AT GREATER THAN 90% LOAD ONLY.

- C. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH AN AQMD APPROVED TEST PROTOCOL. THE PROTOCOL SHALL BE SUBMITTED TO THE AQMD ENGINEER NO LATER THAN 45 DAYS BEFORE THE PROPOSED TEST DATE AND SHALL BE APPROVED BY THE AQMD BEFORE THE TEST COMMENCES. THE TEST PROTOCOL SHALL INCLUDE THE PROPOSED OPERATING CONDITIONS OF THE BOILER DURING THE TESTS, THE IDENTITY OF THE TESTING LAB, A STATEMENT FROM THE TESTING LAB CERTIFYING THAT IT MEETS THE CRITERIA OF RULE 304, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES. THE AQMD SHALL BE NOTIFIED ON THE DATE AND TIME OF THE TEST AT LEAST 10 DAYS PRIOR TO THE TEST.

[RULE 1146]

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 FUEL OIL, RULE 409
PM: 0.1 GR/SCF, RULE 409
CO: 400 PPMV, RULE 1146
NOX: 30 PPMV, UNTIL DECEMBER 31, 2011, RULE 1146
NOX: 9 PPMV, NATURAL GAS, ON OR AFTER JANUARY 1, 2012, RULE 1146
NOX: 40 PPMV FUEL OIL, RULE 1146

**FACILITY PERMIT TO OPERATE
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PERMIT TO CONSTRUCT

A/N 525441

Equipment Description:

MODIFICATION OF:

BOILER NO. 3, NEBRASKA, MODEL NO. NS-B-44ECON, 29,000,000 BTU/HR, WITH COEN LONOX BURNER, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED, WITH A FUEL GAS RECIRCULATION SYSTEM.

OPERATING UNDER P/O D92937

BY REMOVAL OF THE COEN LOW NOX BURNER AND INSTALLATION OF 1 AMERICAN COMBUSTION TECHNOLOGIES LOW NOX BURNER, MODEL SLE07, 29,000,000 BTU/HR, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS BOILER SHALL BE FIRED ON NATURAL GAS ONLY EXCEPT DURING PERIODS OF NATURAL GAS CURTAILMENT, DURING MAINTENANCE TESTING OF THE BOILER WHICH SHALL NOT EXCEED 30 MINUTES PER MONTH, OR DURING COMPLIANCE TESTING WITH FUEL OIL.
[RULE 1146, RULE 1303(a)(1)-BACT]
4. PRIOR TO JANUARY 1, 2012, THIS BOILER SHALL EMIT NO MORE THAN 30 PPM OXIDES OF NITROGEN (NOX) CALCULATED AS NO₂ MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE WHEN FIRED ON NATURAL GAS.
[RULE 1146]
5. BEGINNING JANUARY 1, 2012, THIS BOILER SHALL EMIT NO MORE THAN 9 PPM OXIDES OF NITROGEN (NOX) CALCULATED AS NO₂ MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE WHEN FIRED ON NATURAL GAS.
[RULE 1146]
6. EMISSIONS OF NOX SHALL NOT EXCEED 40 PPM REFERENCED AT 3% O₂ ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES WHENEVER THIS EQUIPMENT IS FIRED WITH OIL.
[RULE 1146]

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7. EMISSIONS OF CO SHALL NOT EXCEED 400 PPM REFERENCED AT 3% O2 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES.
[RULE 1146]
8. THE BURNER SHALL NOT FIRE ON LESS THAN 5524 SCF/HR OF NATURAL GAS DURING NORMAL OPERATION, NOT INCLUDING START-UPS AND SHUTDOWNS.
[RULE 1146]
9. THE OPERATOR SHALL INSTALL A FLOW METER TO ACCURATELY INDICATE THE FLOW RATE OF THE GAS AND SHALL RECORD THE HOURLY GAS BEING FIRED IN THE BOILER. THE MEASURING DEVICE SHALL CONTINUOUSLY MEASURE THE FLOW RATE AND SHALL BE ACCURATE TO WITHIN PLUS OR MINUS 5 PERCENT AND SHALL BE CALIBRATED ONCE EVERY 12 MONTHS. CALIBRATION RECORDS AND HOURLY FLOW RECORDS SHALL BE KEPT ON SITE AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1146]
10. FUEL OIL SUPPLIED TO THE BURNER SHALL BE NO. 2 OR A LIGHTER GRADE AS DESCRIBED BY THE LATEST ASTM SPECIFICATIONS AND SHALL CONTAIN LESS THAN 0.05 PERCENT SULFUR BY WEIGHT IF PURCHASED PRIOR TO 6/1/04 AND LESS THAN 15 PPM SULFUR BY WEIGHT IF PURCHASED ON OR AFTER 6/1/04.
[RULE 431.2]
11. THE OPERATOR SHALL HAVE THE BURNER EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE THE COMBUSTION AIR, FUEL, AND RECIRCULATION FLUE GAS AS THE BOILER LOAD VARIES. THIS CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO MAINTAIN ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME FIRING RATE.
[RULE 1146]
12. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN USE WHENEVER THE BOILER IS IN OPERATION.
[RULE 1146]
13. ONLY THREE OF THE FOUR BOILERS SHALL BE OPERATED AT ANY ONE TIME.
[RULE 1146, 1303(b)(2)-OFFSET]
14. THE OPERATOR SHALL PERFORM PERIODIC EMISSION TESTS ON THE BOILER WITH A PORTABLE ANALYZER IN ACCORDANCE WITH THE SCHEDULE AND SPECIFICATIONS OUTLINED IN RULE 1146.
[RULE 1146]
15. THE OPERATOR SHALL CONDUCT A SOURCE TEST ON THE BOILER UNDER THE FOLLOWING CONDITIONS:
 - A. THE INITIAL TEST SHALL BE CONDUCTED WITHIN 60 DAYS AFTER APPROVAL OF THE SOURCE TEST PROTOCOL, BUT NO LATER THAN 180 DAYS AFTER THE PERMIT TO CONSTRUCT IS ISSUED. AFTER THE INITIAL TEST, TESTING SHALL BE CONDUCTED ONCE EVERY 3 YEARS, OR IN ACCORDANCE WITH THE SCHEDULE SPECIFIED IN RULE 1146.
 - B. THE TEST SHALL BE CONDUCTED TO DETERMINE THE EMISSIONS OF NOX AND CO USING ONE OF THE TEST METHODS SPECIFIED IN RULE 1146. THE TEST SHALL BE

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CONDUCTED OVER 15 MINUTE AVERAGING TIME. THE TEST SHALL BE CONDUCTED DURING GAS FIRING AT A GREATER THAN 90% LOAD, 50% LOAD, AND 25% LOAD. THE TEST SHALL BE CONDUCTED DURING OIL FIRING AT GREATER THAN 90% LOAD ONLY.

- C. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH AN AQMD APPROVED TEST PROTOCOL. THE PROTOCOL SHALL BE SUBMITTED TO THE AQMD ENGINEER NO LATER THAN 45 DAYS BEFORE THE PROPOSED TEST DATE AND SHALL BE APPROVED BY THE AQMD BEFORE THE TEST COMMENCES. THE TEST PROTOCOL SHALL INCLUDE THE PROPOSED OPERATING CONDITIONS OF THE BOILER DURING THE TESTS, THE IDENTITY OF THE TESTING LAB, A STATEMENT FROM THE TESTING LAB CERTIFYING THAT IT MEETS THE CRITERIA OF RULE 304, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES. THE AQMD SHALL BE NOTIFIED ON THE DATE AND TIME OF THE TEST AT LEAST 10 DAYS PRIOR TO THE TEST.

[RULE 1146]

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 FUEL OIL, RULE 409
PM: 0.1 GR/SCF, RULE 409
CO: 400 PPMV, RULE 1146
NOX: 30 PPMV, UNTIL DECEMBER 31, 2011, RULE 1146
NOX: 9 PPMV, NATURAL GAS, ON OR AFTER JANUARY 1, 2012, RULE 1146
NOX: 40 PPMV FUEL OIL, RULE 1146

**FACILITY PERMIT TO OPERATE
LA CO., RANCHO LOS AMIGOS NATIONAL REHABILITATION CENTER**

PERMIT TO CONSTRUCT

A/N 525442

Equipment Description:

MODIFICATION OF:

BOILER NO. 4, NEBRASKA, MODEL NO. NS-B-44ECON, 29,000,000 BTU/HR, WITH COEN LONOX BURNER, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED, WITH A FUEL GAS RECIRCULATION SYSTEM.

OPERATING UNDER P/O D92861

BY REMOVAL OF THE COEN LOW NOX BURNER AND INSTALLATION OF 1 AMERICAN COMBUSTION TECHNOLOGIES LOW NOX BURNER, MODEL SLE07, 29,000,000 BTU/HR, NATURAL GAS AND FUEL OIL (AMBER 363) FIRED.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS BOILER SHALL BE FIRED ON NATURAL GAS ONLY EXCEPT DURING PERIODS OF NATURAL GAS CURTAILMENT, DURING MAINTENANCE TESTING OF THE BOILER WHICH SHALL NOT EXCEED 30 MINUTES PER MONTH, OR DURING COMPLIANCE TESTING WITH FUEL OIL.
[RULE 1146, RULE 1303(a)(1)-BACT]
4. PRIOR TO JANUARY 1, 2012, THIS BOILER SHALL EMIT NO MORE THAN 30 PPM OXIDES OF NITROGEN (NOX) CALCULATED AS NO₂ MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE WHEN FIRED ON NATURAL GAS.
[RULE 1146]
5. BEGINNING JANUARY 1, 2012, THIS BOILER SHALL EMIT NO MORE THAN 9 PPM OXIDES OF NITROGEN (NOX) CALCULATED AS NO₂ MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN OVER A 15 MINUTE AVERAGE WHEN FIRED ON NATURAL GAS.
[RULE 1146]
6. EMISSIONS OF NOX SHALL NOT EXCEED 40 PPM REFERENCED AT 3% O₂ ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES WHENEVER THIS EQUIPMENT IS FIRED WITH OIL.
[RULE 1146]

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7. EMISSIONS OF CO SHALL NOT EXCEED 400 PPM REFERENCED AT 3% O2 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES.
[RULE 1146]
8. THE BURNER SHALL NOT FIRE ON LESS THAN 5524 SCF/HR OF NATURAL GAS DURING NORMAL OPERATION, NOT INCLUDING START-UPS AND SHUTDOWNS.
[RULE 1146]
9. THE OPERATOR SHALL INSTALL A FLOW METER TO ACCURATELY INDICATE THE FLOW RATE OF THE GAS AND SHALL RECORD THE HOURLY GAS BEING FIRED IN THE BOILER. THE MEASURING DEVICE SHALL CONTINUOUSLY MEASURE THE FLOW RATE AND SHALL BE ACCURATE TO WITHIN PLUS OR MINUS 5 PERCENT AND SHALL BE CALIBRATED ONCE EVERY 12 MONTHS. CALIBRATION RECORDS AND HOURLY FLOW RECORDS SHALL BE KEPT ON SITE AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1146]
10. FUEL OIL SUPPLIED TO THE BURNER SHALL BE NO. 2 OR A LIGHTER GRADE AS DESCRIBED BY THE LATEST ASTM SPECIFICATIONS AND SHALL CONTAIN LESS THAN 0.05 PERCENT SULFUR BY WEIGHT IF PURCHASED PRIOR TO 6/1/04 AND LESS THAN 15 PPM SULFUR BY WEIGHT IF PURCHASED ON OR AFTER 6/1/04.
[RULE 431.2]
11. THE OPERATOR SHALL HAVE THE BURNER EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE THE COMBUSTION AIR, FUEL, AND RECIRCULATION FLUE GAS AS THE BOILER LOAD VARIES. THIS CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO MAINTAIN ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME FIRING RATE.
[RULE 1146]
12. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN USE WHENEVER THE BOILER IS IN OPERATION.
[RULE 1146]
13. ONLY THREE OF THE FOUR BOILERS SHALL BE OPERATED AT ANY ONE TIME.
[RULE 1146, 1303(b)(2)-OFFSET]
14. THE OPERATOR SHALL PERFORM PERIODIC EMISSION TESTS ON THE BOILER WITH A PORTABLE ANALYZER IN ACCORDANCE WITH THE SCHEDULE AND SPECIFICATIONS OUTLINED IN RULE 1146.
[RULE 1146]
15. THE OPERATOR SHALL CONDUCT A SOURCE TEST ON THE BOILER UNDER THE FOLLOWING CONDITIONS:
 - A. THE INITIAL TEST SHALL BE CONDUCTED WITHIN 60 DAYS AFTER APPROVAL OF THE SOURCE TEST PROTOCOL, BUT NO LATER THAN 180 DAYS AFTER THE PERMIT TO CONSTRUCT IS ISSUED. AFTER THE INITIAL TEST, TESTING SHALL BE CONDUCTED ONCE EVERY 3 YEARS, OR IN ACCORDANCE WITH THE SCHEDULE SPECIFIED IN RULE 1146.
 - B. THE TEST SHALL BE CONDUCTED TO DETERMINE THE EMISSIONS OF NOX AND CO USING ONE OF THE TEST METHODS SPECIFIED IN RULE 1146. THE TEST SHALL BE

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CONDUCTED OVER 15 MINUTE AVERAGING TIME. THE TEST SHALL BE CONDUCTED DURING GAS FIRING AT A GREATER THAN 90% LOAD, 50% LOAD, AND 25% LOAD. THE TEST SHALL BE CONDUCTED DURING OIL FIRING AT GREATER THAN 90% LOAD ONLY.

- C. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH AN AQMD APPROVED TEST PROTOCOL. THE PROTOCOL SHALL BE SUBMITTED TO THE AQMD ENGINEER NO LATER THAN 45 DAYS BEFORE THE PROPOSED TEST DATE AND SHALL BE APPROVED BY THE AQMD BEFORE THE TEST COMMENCES. THE TEST PROTOCOL SHALL INCLUDE THE PROPOSED OPERATING CONDITIONS OF THE BOILER DURING THE TESTS, THE IDENTITY OF THE TESTING LAB, A STATEMENT FROM THE TESTING LAB CERTIFYING THAT IT MEETS THE CRITERIA OF RULE 304, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES. THE AQMD SHALL BE NOTIFIED ON THE DATE AND TIME OF THE TEST AT LEAST 10 DAYS PRIOR TO THE TEST.

[RULE 1146]

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 FUEL OIL, RULE 409
SOX: 40 PPM NATURAL GAS, RULE 431.1
PM: 0.1 GR/SCF, RULE 409
CO: 400 PPMV, RULE 1146
NOX: 30 PPMV, UNTIL DECEMBER 31, 2011, RULE 1146
NOX: 9 PPMV, NATURAL GAS, ON OR AFTER JANUARY 1, 2012, RULE 1146
NOX: 40 PPMV FUEL OIL, RULE 1146