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	APPL. NO. 556271-278	DATE 4/10/2014
	PROCESSED BY LI CHEN	CHECKED BY <i>Jye</i>

PERMIT TO OPERATE

COMPANY NAME AND ADDRESS

Los Angeles County Sheriff Department
441 Bauchet Street
Los Angeles, CA 90012
FACILITY ID # 029411

CONTACT: Joey Manalaysay, (626) 300-3030

EQUIPMENT LOCATION

441 Bauchet Street
Los Angeles, CA 90012

EQUIPMENT DESCRIPTION:

A/N 556271:

SELECTIVE CATALYTIC REDUCTION (SCR), UNIT #1, NATIONWIDE BOILER, MODEL CATASTAK SCR, WITH HALDOR-TOPSOE DNX-1029 CATALYST CONSISTING OF TI-V-W CATALYST MATERIAL, CATALYST DIMENSION 5' W X 5' L X 2' H, WITH A 32.5% UREA INJECTION GRID

A/N 562214:

SELECTIVE CATALYTIC REDUCTION (SCR), UNIT #2, NATIONWIDE BOILER, MODEL CATASTAK SCR, WITH HALDOR-TOPSOE DNX-1029 CATALYST CONSISTING OF TI-V-W CATALYST MATERIAL, CATALYST DIMENSION 5' W X 5' L X 2' H, WITH A 32.5% UREA INJECTION GRID

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A/N 562215:

SELECTIVE CATALYTIC REDUCTION (SCR), UNIT #3, NATIONWIDE BOILER, MODEL CATASTAK SCR, WITH HALDOR-TOPSOE DNX-1029 CATALYST CONSISTING OF TI-V-W CATALYST MATERIAL, CATALYST DIMENSION 5' W X 5' L X 2' H, WITH A 32.5% UREA INJECTION GRID

A/N 556273:

Modification of existing boiler permit No. D72327

BOILER, MURRAY IRON WORKS, WATER TUBE TYPE, WITH A COEN DAF MODEL D4846, LOW NOX, 39,900,000 BTU/HR, NATURAL GAS OR FUEL OIL BURNER, A 40 HP COMBUSTION AIR BLOWER, AND A FORCED FLUE GAS RECIRCULATION SYSTEM, VENTING TO A SELECTIVE CATALYTIC REDUCTION SYSTEM.

A/N 556274:

Modification of existing boiler permit No. D72378

BOILER, MURRAY IRON WORKS, WATER TUBE TYPE, WITH A COEN DAF MODEL D4846, LOW NOX, 39,900,000 BTU/HR, NATURAL GAS OR FUEL OIL BURNER, A 40 HP COMBUSTION AIR BLOWER, AND A FORCED FLUE GAS RECIRCULATION SYSTEM, VENTING TO A SELECTIVE CATALYTIC REDUCTION SYSTEM.

A/N 556275:

Modification of existing boiler permit No. D72329

BOILER, MURRAY IRON WORKS, WATER TUBE TYPE, WITH A COEN DAF MODEL D4846, LOW NOX, 39,900,000 BTU/HR, NATURAL GAS OR FUEL OIL BURNER, A 40 HP COMBUSTION AIR BLOWER, AND A FORCED FLUE GAS RECIRCULATION SYSTEM, VENTING TO A SELECTIVE CATALYTIC REDUCTION SYSTEM.

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BACKGROUND

The facility operates a correction facility in Los Angeles. It has three existing boilers, permit No. D72327, G19701, G19702, that are subject to Rule 1146. The boilers are of the same make and model, all rated at 39.9 MMBtu/hr. They are Group II boilers by the definitions of Rule 1146. The facility did not file a Rule 1146 compliance plan application by January 1, 2010, as required by the rule. Thus, the boilers are subject to the enhanced compliance schedule that they shall meet the 5 ppmv NOx emission limits. The date to achieve compliance with the 5 ppmv NOx limit is January 1, 2014.

The facility had planned to install new burners to achieve compliance. Three applications were submitted, A/N520188, 520189 in 2011 and A/N 545661 in 2012, for modification of the boilers by installing new Todd C-RMB ultra low NOx burners. The District approved the applications and issued permits to operate for the first two boilers, permit number G19701 and G19702. The District issued permit to construct for the third application.

However, the facility had learned that burner retrofit alone might not be sufficient to meet the 5 ppmv NOx limit. It has decided to take a different approach. Instead of installing low NOx burners the facility now chooses to install a selective catalytic reduction (SCR) system. The SCR will be designed to achieve compliance with the 5 ppmv NOx concentration limit. Each of the three boilers will be venting into a SCR system. In doing so, the facility requested that the boiler permits be revised back to the original burner configuration. Therefore, the first two boilers will be reversed to the previous permits D72327 and D72329. The permit to construct under A/N545661 will be cancelled.

The SCR will be manufactured by Nationwide Boiler. Three identical units will be built. The model number is CataStak SCR. The catalyst material is Haldor-Topsoe DNX-1029 DeNOx catalyst, corrugated type consisting of a fiber reinforced Titania carrier impregnated with the active oxides of Tungsten and Vanadium (Ti-V-W). The catalyst will be configured for vertical up flow of flue gas flow and the approximate reactor house/catalyst dimensions of 5' W x 5' L x 2' H.

The SCR will utilize injection of 32.5% urea solutions to react with flue gas for control of NOx emissions. Urea will be provided either with the 55 gallons barrels or with 330 gallon totes. The nominal urea injection rate is between 0.075 gallon/hr to 0.3 gallons/hr. The effective catalyst temperature is between 350 and 475 degree Fahrenheit. The pressure drop across the catalyst is between 0-1" WC.

The facility filed a variance petition, Case #4270-4, with the SCAQMD hearing board to request continued operation of the three boilers after January 1, 2014 until the new SCR is constructed. The hearing board approved the variance petition on January 15, 2014. As a part of the variance condition the facility agrees to operate only one boiler under normal ambient conditions. It will

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be allowed to operate the 2nd boiler once the ambient temperature falls below 50 degrees Fahrenheit. It will not be allowed to operate all three boilers simultaneously at any time. The final date of compliance is August 1, 2014 per approved variance.

The facility submitted three permit applications for the construction and operation of the SCR, three permit applications for the modification of the three boilers, and a permit application for the Title V permit revision.

The following table shows the applications and fees received by SCAQMD.

Application	Type	Fee
556271	SCR construction and operation	\$3,508.86
562214	SCR construction and operation	\$1,754.43
556215	SCR construction and operation	\$1,754.43
556273	Boiler #1 modification	\$4,842.82
556274	Boiler #2 modification	\$2,421.41
556275	Boiler #3 modification	\$2,421.41
556278	Title V minor revision	\$912.44
301(v) expedited permit processing fee		\$8,351.70
Total Fee		\$20,704.20

The facility made a payment of \$20,600.96, an additional payment of \$103.24, and another payment of \$5,263.30. The boiler applications were deemed complete on October 3, 2013. The SCR applications were not deemed complete until March 2014.

The facility is a Title V facility. It does not participate in the RECLAIM program.

EMISSIONS

A/N 556271, 562214, 562215 – Three SCRs

The SCR will have ammonia slip emissions. The ammonia slip emissions will be limited at 5 ppmv.

The maximum ammonia slip emissions are calculated based on the boiler operating at 100% load:

Exhaust: 39.9 MMBtu/hr * 8,710 dscf/MMBtu = 347,529 dscf/hr

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Ammonia: $5 \text{ ppm} * 10^{-6} * 347,529 \text{ dscf/hr} / 385 \text{ scf/lb-mole} * 17 \text{ lb/lb-mole} = 0.08 \text{ lb/hr}$

When corrected to dry and 3% oxygen:

Ammonia: $0.08 * 20.9 / (20.9 - 3) = 0.09 \text{ lb/hr}$

The ammonia emission rate will be used to verify toxic risk and compliance with Rule 1401.

A/N 556273, 556274, 556275 – Boilers

Emissions are calculated based on heat input rate of 39.9 MMBtu/hr and HHV of 1,050 Btu/scf.

Heat input: 39.9 MMBtu/hr
 Natural gas HHV: 1,050 Btu/scf
 Natural gas flow rate: 38,000 scf/hr

Emission limits for natural gas operation:

NOx: 5 ppmv, natural gas (Rule 1146 compliance limit)
 CO: 400 ppmv
 VOC: 5.5 lbs/mmscf (AP-42 limit)
 PM10: 7.6 lbs/mmscf (AP-42 limit)
 SOx: 0.6 lbs/mmscf (AP-42 limit)

Convert the ppmv to lb/hr by the following calculations, assuming 3% O₂:

Exhaust as a function of fuel flow rate:

$8,710 \text{ dscf/mmBtu} * 1,050 \text{ mmBtu/mmscf} * 20.9 / (20.9 - 3) = 10.68 * 10^6 \text{ dscf/mmscf}$, or 10.68 dscf/scf

NOx:

$38,000 \text{ scf/hr} * 10.68 \text{ dscf/scf} * 5 \text{ ppm} * 10^{-6} / 385 \text{ dscf/lb-mole} * 44 \text{ lb/lb-mole} = 0.23 \text{ lb/hr}$

CO:

$38,000 \text{ scf/hr} * 10.68 \text{ dscf/scf} * 400 \text{ ppm} * 10^{-6} / 385 \text{ dscf/lb-mole} * 28 \text{ lb/lb-mole} = 11.81 \text{ lb/hr}$

The F factor of 8,710 of EPA Method 19 assumes 68 degree Fahrenheit. The standard constant at this temperature is 385 scf/lb-mole.

Emission calculations are shown in the next table:

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Each Boiler	NOx	CO	VOC	PM10	SOx
Emission Factor (lbs/mmscf)	5 ppmv @ 3% O2	400 ppmv @ 3% O2	5.5	7.6	0.6
Hourly (lbs/hr)	0.23	11.81	0.21	0.29	0.023
Daily Max (lbs/day)	5.52	283.4	5.04	6.96	0.55
Yearly Max (tons/yr)	1.01	51.73	0.92	1.22	0.10

Greenhouse gas (GHG) emissions are calculated based on fuel usage and EPA published emission factors.

CO2: $53.02 \text{ kg/MMBtu} \times 39.9 \text{ MMBtu/hr} \times 2.2 = 4,654 \text{ lbs/hr}$

RULE EVALUATION

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

This rule applies to boilers greater than 10 MMBtu/hr and less than 100 MMBtu/hr. Since the boiler is rated at 39.9 MMBtu/hr this rule applies.

This rule specifies SO₂ and PM emission standards. However, because the boiler operates exclusively on natural gas, the emission standards requirements do not apply (Sections 60.42c and 60.43c).

The rule requires that the operator shall record and maintain records of fuel usage on the daily basis (Section 60.48c.g1). If the boiler is to burn natural gas exclusively the requirement is to record and maintain records of fuel usage on the monthly basis (Section 60.48c.g2). Therefore, there will be a permit condition requiring that the facility keep fuel usage records.

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

This regulation applies to the major sources of hazardous air pollutants (HAP). This facility is not a major source of HAPs, which is defined as facility total HAP emissions exceeding 25 tons per year for all pollutants, or 10 tons per year for a single pollutant. Based on the 2013 annual emission report the total HAP emissions are 1.45 tons. Therefore, the boilers are considered area sources.

The final ruling was released on 3/21/2011 and applies to boilers using non-gaseous fuels. For this project the boilers are using natural gas, with fuel oil stand-by fuel. The boilers meet the definition of gas fired boiler per 40 CFR 63.11237 as long as the fuel oil operation is less than 48

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hours per year. Per 40 CFR 63.11195 (e) the gas fired boilers are not subject any requirements of this subpart. There will be a permit condition to limit the periodic testing using fuel oil to less than 48 hours per calendar year to meet the definition of 40 CFR 63.11237.

California Environment Quality Act (CEQA)

The facility has submitted a SCAQMD 400-CEQA form that the proposed installation of the SCR does not trigger CEQA review.

Rule 212 – Standards for Approving Permits and Issuing Public Notice

The facility is not located within 1,000 feet of a school boundary. In addition the proposed project will not have emission increases. Public notice is not required.

Rule 218 – Continuous Emission Monitoring

Rule 1146 requires a NOx CEMS for boilers greater than 40 MMBtu/hr. Since the subject boilers are rated less than 40 MMBtu/hr they are not required to have a NOx CEMS.

Rule 401 – Visible Emissions

Compliance with this rule is expected under normal operation.

Rule 402 – Nuisance

Compliance with this rule is expected under normal operation.

Rule 404 – Particulate Matter – Concentration

This rule limits the PM emissions. Compliance is anticipated.

Rule 407 – Liquid and Gaseous Air Contaminants

This rule limits CO to 2,000 ppmv. Compliance is expected.

Rule 409 – Combustion Contaminants

This rule specifies that PM emissions from combustion shall be less than 0.1 g/scf, corrected to 12% CO₂ concentration. Compliance is anticipated for natural gas combustion.

Rule 431.1 – Sulfur Content of Gaseous Fuels

The boilers will be fired primarily with PUC grade pipeline quality natural gas. The sulfur content of the natural gas meets the criteria specified in this rule. Compliance is anticipated.

Rule 431.2 – Sulfur Content of Liquid Fuels

The boilers are allowed to use liquid fuel as a backup fuel. The liquid fuel must contain less than 15 ppm sulfur as calculated as H₂S. Compliance is anticipated.

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Rule 1146 – NOx Emissions from Boilers, Steam Generators, and Process Heaters

This rule applies to boilers and heaters whose heat input rates are greater than 5 million BTU per hour. The three boilers each has a heat input rate of 39.9 MMBtu/hr. They are subject to Rule 1146, and they are defined as Group II units.

The rule requires facilities with Group II units to submit Rule 1146 compliance plan by January 1, 2010. The plan shall demonstrate the strategy to achieve compliance with the 9 ppmv NOx emission limit. If the facilities do not submit the compliance plan prior to January 1, 2010 they will be subject to the enhanced compliance limits and schedule. The enhanced compliance limit and schedule requires submittal of compliance plan by 1/1/2011, submittal of application to construct by 1/1/2013, and full compliance of the 5 ppmv NOx emission limit by 1/1/2014.

As discussed in the early sections the facility now wants to install three SCRs for the three boilers. Compliance with the 5 ppmv NOx limit is expected once the SCR is installed.

Since each boiler is rated under 40 MMBtu per hour a continued emission monitoring system (CEMS) is not required to monitor NOx emissions.

Regulation XIII – New Source Review

This regulation is not triggered for the three boilers since there will be no emission increases.

This rule is triggered for the SCR. BACT is required for ammonia emissions. However, modeling and offset are not required. The proposed 5 ppmv ammonia slip emissions limit is consistent with the BACT limit.

Rule 1401 – New Source Review of Toxic Air Contaminants

This rule is not triggered for the three boilers since there will be no emission increases.

For the SCR, ammonia emissions are considered as toxic air contaminants. A Tier 1 screening analysis is conducted based on the emission rate of 0.27 lb/hr. Based on the analysis, both the cancer/chronic application screening index of 0.136 and the acute application screening index of 0.084 are less than 1. Compliance is demonstrated.

Regulation XVII – Prevention of Significant Deterioration (PSD)

The project will not trigger PSD because there are no emission increases of attainment criteria pollutants.

Regulation XXX – Title V Operating Permit

The proposed burner modification will be a De Minimis significant permit revision since there will be increase of ammonia emissions. The revised draft permit will be submitted to EPA for a 45-day review. The draft permit revision will be finalized after EPA review.

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RECOMMENDATION

Issue the permit to construct with the following conditions.

CONDITIONS

A/N 556271, 562214, 562215 – SCR

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 be operated whenever the upstream boiler is operating with natural gas and the catalyst has reached its effective operating temperature window.
[RULE 1303(a)(1)-BACT, RULE 1146]
4. This equipment shall be equipped with an automatic control system that regulates urea injection rate automatically with boiler load, exhaust mass flow rate, stack temperature to ensure effective control of NOx emissions.
[RULE 1303(a)(1)-BACT, RULE 1146]
5. The stack ammonia emission level shall not exceed 5 ppmv, dry and corrected to 3% oxygen.
[RULE 1303(a)(1)-BACT]
6. This equipment shall be equipped with an urea flow meter to measure the amount of urea being injected into the catalyst. The urea injection rate shall be between 0.075 gal/hr and 0.3 gal/hr.
[RULE 1303(a)(1)-BACT, RULE 1146]
7. This equipment shall be equipped with a temperature sensor to measure the catalyst temperature. The operator shall monitor the catalyst temperature to ensure that it is

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between 350 degree Fahrenheit and 475 degree Fahrenheit for effective control of NOx emissions.

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

8. This equipment shall be equipped with a pressure gauge to measure the pressure drop across the catalyst. The operator shall monitor the pressure drop to ensure that it is less than 1" water column for effective control of NOx emissions.
[RULE 1303(a)(1)-BACT, RULE 1146]

9. The operator of this equipment shall conduct a source test on this equipment under the following conditions:
 - A. The source test shall be conducted within 180 days after issuance of this permit to operate unless otherwise approved in writing by the Executive Officer.
 - B. The source test shall be performed to verify compliance with NH3 emissions limit specified by this permit, and to verify compliance with the 5 ppmv NOx emission limits that each of three boilers is subject to.
 - C. The source test shall be conducted while the upstream boiler is operating on natural gas at maximum, minimum, and average loads. The sampling time at each load shall be for a minimum of 15 consecutive minutes.
 - D. Two complete copies of source test reports shall be submitted to the SCAQMD within 60 days after the test (addressed to South Coast Air Quality Management District, P.O. Box 4941, Diamond Bar, CA 91765). The report shall included, but not limited to NH3 emissions rates in pounds per hour and concentrations in ppmv at the outlet of this equipment, measured on a dry basis at 3% oxygen. The following operating data shall also be included for each firing rate:
 - a. The exhaust flow rates, in actual cubic feet per minute
 - b. The firing rates, in BTU per hour
 - c. The exhaust temperature, in degree F
 - d. The oxygen content of the exhaust gases, in percentage
 - e. The fuel flow rate
 - E. A testing laboratory certified by the California Air Resource Board in the required test methods for criteria pollutant to be measured, and in compliance with District Rule 304 shall conduct the test
 - F. Sampling facilities shall comply with the district guidelines for construction of sampling and testing facilities, pursuant to Rule 217.
 - G. The source test shall be conducted once every three calendar years following the initial source test.

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

Emissions and Requirements

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10. This equipment is subject to the applicable requirements of the following rules and regulations.

NH3: 5 ppmv, averaged over 15 minutes at 3% O2, Rule 1303

A/N 556273, 556274, 556275 – Boilers

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
[RULE 204]
2. This equipment shall be properly maintained and kept in good operating condition at all times.
[RULE 204]
3. This boiler shall be fired with natural gas only, except during periods of natural gas curtailment, during maintenance testing with the fuel oil not to exceed 0.5 hours per month. The total annual operation with fuel oil shall not exceed 48 hours.
[RULE 1303(a)(1)-BACT, Rule 1146, 40 CFR Part 63 Subpart JJJJJ]
4. This boiler shall be operated in full compliance with the applicable provisions of Rule 1146 and Rule 431.2.
[RULE 1146, Rule 431.2, 40 CFR Part 60 Subpart Dc]
5. The flue gas recirculation shall be operated in accordance with the burner manufacturer recommendations. A mechanical gauge shall be installed and maintained to indicate the amount of flue gas recirculated from the exhaust stack to the burner.
[RULE 1303(b)(2)-OFFSET, RULE 1303(a)(1)-BACT, RULE 1146]
6. The flue gas recirculation system (FGR) shall recirculate at least 12% of the flue gas from exhaust stack to the burner of the boiler, whenever the boiler is operating between 10% through 100% load.
[RULE 1303(b)(2)-OFFSET, RULE 1303(a)(1)-BACT, RULE 1146]
- ~~7. The FGR shall be in use whenever the boiler load is 10% or greater.
[RULE 1303(b)(2)-OFFSET, RULE 1303(a)(1)-BACT, RULE 1146]~~
7. The low NOx burner shall be equipped with a control system to automatically regulate the combustion air and fuel as the boiler load varies. This automatic control system shall be

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adjusted and tuned at least twice a year according to the manufacturer's specifications to assure its ability to repeat the same performance at the same burner firing rate.
[RULE 1303(b)(2)-OFFSET, RULE 1303(a)(1)-BACT, RULE 1146]

8. The owner or operator of this boiler shall maintain all boiler tune-up records, as specified in Condition 7 for a period of at least five years and made available to SCAQMD personnel upon request.
[RULE 1303(b)(2)-OFFSET, RULE 1303(a)(1)-BACT, RULE 1146]

9. The owner or operator of this boiler shall arrange for a certified boiler technician to perform twice yearly boiler tune-ups in accordance with "attachment 1" of Rule 1146. The boiler tune-up records shall be maintained for a period of at least two years and made available to District personnel upon request
[RULE 1146]

10. The owner or operator of this equipment shall conduct a source test on this equipment under the following conditions:
 - A. The source test shall be conducted within 180 days after issuance of this permit to operate unless otherwise approved in writing by the Executive Officer.
 - B. The source test shall be performed to verify compliance with the 5 ppmv NOx and 400 ppmv CO emission limits, dry and corrected to 3% oxygen.
 - C. The source test shall be conducted while the equipment is operating on natural gas at maximum, minimum, and average loads. The sampling time at each load shall be for a minimum of 15 consecutive minutes.
 - D. Two complete copies of source test reports shall be submitted to the SCAQMD within 60 days after the test (addressed to South Coast Air Quality Management District, P.O. Box 4941, Diamond Bar, CA 91765). The report shall included, but not limited to NOx and CO emissions rates in pounds per hour and concentrations in ppmv, measured on a dry basis at 3% oxygen. The following operating data shall also be included for each firing rate:
 - a. The exhaust flow rates, in actual cubic feet per minute
 - b. The firing rates, in BTU per hour
 - c. The exhaust temperature, in degree F
 - d. The oxygen content of the exhaust gases, in percentage
 - e. The fuel flow rate
 - E. A testing laboratory certified by the California Air Resource Board in the required test methods for criteria pollutant to be measured, and in compliance with District Rule 304 shall conduct the test
 - F. Sampling facilities shall comply with the district guidelines for construction of sampling and testing facilities, pursuant to Rule 217.
 - G. The source tests shall be conducted once every three calendar years after the initial source test.

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

Periodic Monitoring:

11. The operator shall conduct an inspection for visible emission from all stacks and other emission points of this equipment whenever this equipment has combusted one million gallons of diesel fuel, to be counted cumulatively over a five year period. The inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall either:
- A. Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in the same fashion as deviations are required to be reported in section k of this permit or
 - B. Have a card-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)]

12. If annual fuel oil usage exceeds 2,000,000 gallons in any one year, then operator shall determine compliance with the particulate matter (pm) emission limit(s) by conducting a source test at least once every five years using SCAQMD Method 5.2. the test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with Rule 409 limit. the operator shall comply with all general testing, reporting, and recordkeeping requirements in section e and k of this permit.

for the purpose of determining compliance with rule 409 limit, the emissions shall be measured and averaged over a 60 minutes time period.

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.

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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)]

13. For 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 not exceeding 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

14. This equipment is subject to the applicable requirements of the following rules and regulations.

NOx: 5 ppmv, dry at 3% oxygen, Rule 1146 [for natural gas]

NOx: 40 ppm, dry at 3% oxygen, Rule 1146 [for fuel oil]

CO: 400 ppm, dry at 3% oxygen, Rule 1146

CO: 2000 ppmv, Rule 407

PM: 0.1 gr/scf, Rule 409