



South Coast Air Quality Management District

21865 E. Copley Drive, Diamond Bar, CA 91765-4182

(909) 396-2000 • <http://www.aqmd.gov>



February 14, 2002

Mr. Robert L. Therkelsen
Deputy Director
Systems Assessment & Facilities Siting
California Energy Commission
1516 9th Street
Sacramento, CA 95814-5512

DOCKET 00-AFC-14
DATE FEB 14 2002
RECD. JAN 31 2003

Subject: El Segundo Power Redevelopment Project (00-AFC-14)

Dear Mr. Therkelsen:

The South Coast Air Quality Management District (AQMD) has completed our analysis of the subject project and our Final Determination of Compliance (FDOC) is attached for your review.

The FDOC contains AQMD's second addendum to the original permit to construct evaluation, and section H of the final draft Title V and AQMD RECLAIM permit (both dated February 12, 2002). The second addendum includes the following information: a summary of the public notification process, responses to comments received during the EPA and public review period, and a description of the changes to the equipment description and permit conditions that occurred since the Preliminary Determination of Compliance was sent to you last year (i.e., October 17, 2001). Section H contains the permit to construct the subject project.

Please be advised that the FDOC does not constitute a final Title V permit. The final permit will be issued pending the Commission Decision on the project and after all necessary offsets are provided in the form of either Emission Reduction Credit (ERC) certificates or credits from the AQMD's Priority Reserve. Although the applicant does not currently hold enough PM₁₀ ERCs to offset the emission increase from the project, they have informed us that they will obtain the ERCs from our Priority Reserve (in accordance with AQMD Rule 1309.1) if they are unable to obtain all the required ERCs from the open market. They do not intend to generate ERCs by implementing a street sweeping program.

PROOF OF SERVICE (REVISED 12203) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 2-3-03
Fat Chow

Clean Air Is Every Body's Business®

Mr. Robert L. Therkelsen

-2-

February 14, 2002

If you have any questions or wish to provide comments regarding this project, please call Mr. Knut J. Beruldsen (909) 396-3136 or Mr. John Yee (909) 396-2531.

Very truly yours,



Pang Mueller
Senior Manager
Refinery, Energy, & RECLAIM Administration
Engineering and Compliance

CM:TV:JTY:KJB

Attachments

cc: James Reede, CEC (w/ attachments)
Tim Hemig, NRG Energy, Inc. (w/ attachments)
Gary Rubenstein, Sierra Research (w/ attachments)

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 1
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

ESPR Project
Second Addendum to P/C Evaluation originally dated 5/25/01

EQUIPMENT DESCRIPTION

Changes to the equipment description, emissions/requirements, and conditions are indicated with strikethrough and underline.

PROCESS 5: INORGANIC CHEMICAL STORAGE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
STORAGE TANK, UNDERGROUND, TK-001, AQUEOUS AMMONIA, CARBON STEEL, DOUBLE WALLED, WITH THREE TRANSFER PUMPS AND A PRV SET AT 50 PSIG, 20000 GALS; DIAMETER: 10 FT 2 IN; LENGTH: 37 FT 10 IN, WITH A TWO-STAGE JET VENTURI SCRUBBER, WITH A/N 379904	D30				157-1, 193-2, <u>193-3</u>
SCRUBBER, VENTURI, TWO STAGE	C64	D30			

**PROCESS 2: INTERNAL COMBUSTION
SYSTEM 1: DIESEL ENGINES**

INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, DIESEL FUEL, CLARKE, MODEL JDFP 06WA, WITH AFTERCOOLER, TURBOCHARGER, 265 HP, WITH A/N 378769	D45		NOX: PROCESS UNIT	NOX: 284 479 LBS/1000 GAL DIESEL (1) [RULE 2012] NOX: 6.9 GR/BHPH DIESEL (4)[RULE 2005 – BACT] VOC: 1.0 GR/BHPH DIESEL (4)[RULE 1303 – BACT] PM: (9)[RULE 404] PM10: 0.38 GR/BHPH DIESEL (4)[RULE 1303 – BACT]	1-5, <u>193-3</u>
--	-----	--	-------------------------	---	-------------------

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 2
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

**PROCESS 2: INTERNAL COMBUSTION
SYSTEM 2: GAS TURBINES POWER GENERATION**

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
TURBINE, GAS, NO. 5, COMBINED CYCLE, NATURAL GAS, GENERAL ELECTRIC, MODEL 7241FA, WITH DRY LOW NOX COMBUSTORS AND STEAM INJECTION FOR POWER AUGMENTATION, 1896 MMBTU/HR, WITH A/N 378766	D46	C51	NOX: MAJOR SOURCE	CO: 6 PPMV (4) [RULE 1303-BACT]; CO: 2000 PPMV (5) [RULE 407]; NOX (COMMIS): 109 LBS/MMSCF (1)[RULE 2012]; NOX (INTERIM): 33.9 LBS/MMSCF (1)[RULE 2012]; NOX: 2.5 PPMV (4) [RULE 2005]; NOX: 114 PPMV (8) [40CFR 60 SUBPART GG]; NOX: 80 LBS/HR: (7)[RULE 2005]; PM: 0.1 GR/SCF (5) [RULE 409]; PM: 0.05 GR/SCF (5A) [RULE 475]; VOC: 2 PPMV (4) [RULE 1303-BACT]; SOX: 150 PPMV (8) [40CFR 60 SUBPART GG]; SO2: (9)[40CFR 72-Acid Rain] SO2: 0.2 LBS/MMBTU (8A) [40CFR 60 SUBPART Da];	29-5, 29-6, 40-3, 57-1, 63-1, 67-4, 82-1, 82-2, 99-1, 99-2, 99-3, 99-4, 99-6, <u>193-3</u> , 195-2, 195-3, <u>195-5</u> , 296-1
GENERATOR, 179 MW	B47				
BURNER, DUCT, NATURAL GAS, 600 MMBTU/HOUR	D48	C51	NOX: MAJOR SOURCE	CO: 6 PPMV (4) [RULE 1303-BACT]; CO: 2000 PPMV (5) [RULE 407]; NOX (INTERIM): 102 LBS/MMSCF (1)[RULE 2012]; NOX: 2.5 PPMV (4) [RULE 2005]; NOX: 0.2 LBS/MMBTU (8A) [40CFR 60 SUBPART Da]; NOX: 114 PPMV (8B) [40CFR 60 SUBPART GG]; PM: 0.03 LBS/MMBTU (8A) [40CFR 60 SUBPART Da]; PM: 0.1 GR/SCF (5) [RULE 409]; PM: 0.05 GR/SCF (5A) [RULE 475]; VOC: 2 PPMV (4) [RULE 1303-BACT]; SO2: 0.2 LBS/MMBTU (8A) [40CFR 60 SUBPART Da]; SOX: 150 PPMV (8B) [40CFR 60 SUBPART GG]; SO2: (9)[40CFR 72-Acid Rain]	29-5, 29-6, 40-3, 57-1, 63-1, 67-4, 82-1, 82-2, 99-1, 99-2, 99-3, 99-5, <u>193-3</u> , 195-2, 195-3, <u>195-5</u> , 296-1
GENERATOR, HEAT RECOVERY STEAM	B49				
TURBINE, STEAM, COMMON TO UNITS 5 AND 7, 288 MW	B50				

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 3
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
TURBINE, GAS, NO. 7, COMBINED CYCLE, NATURAL GAS, GENERAL ELECTRIC, MODEL 7241FA, WITH DRY LOW NOX COMBUSTORS AND STEAM INJECTION FOR POWER AUGMENTATION, 1896 MMBTU/HR, WITH A/N 378767	D55	C60	NOX: MAJOR SOURCE	CO: 6 PPMV (4) [RULE 1303-BACT]; CO: 2000 PPMV (5) [RULE 407]; NOX (COMMIS): 109 LBS/MMSCF (1)[RULE 2012]; NOX (INTERIM): 33.9 LBS/MMSCF (1)[RULE 2012]; NOX: 2.5 PPMV (4) [RULE 2005]; NOX: 114 PPMV (8) [40CFR 60 SUBPART GG]; NOX: 80 LBS/HR (7)[RULE 2005]; PM: 0.1 GR/SCF (5) [RULE 409]; PM: 0.05 GR/SCF (5A) [RULE 475]; VOC: 2 PPMV (4) [RULE 1303-BACT]; SOX: 150 PPMV (8) [40CFR 60 SUBPART GG]; SO2: (9)[40CFR 72-Acid Rain] SO2: 0.2 LBS/MMBTU (8A) [40CFR 60 SUBPART Da];	29-5, 29-6, 40-3, 57-1, 63-1, 67-4, 82-1, 82-2, 99-1, 99-2, 99-3, 99-4, 99-6, <u>193-3</u> , 195-2, 195-3, <u>195-5</u> , 296-1
GENERATOR, 179 MW	B56				
BURNER, DUCT, NATURAL GAS, 600 MMBTU/HOUR	D57	C60	NOX: MAJOR SOURCE	CO: 6 PPMV (4) [RULE 1303-BACT]; CO: 2000 PPMV (5) [RULE 407]; NOX (INTERIM): 102 LBS/MMSCF (1)[RULE 2012]; NOX: 2.5 PPMV (4) [RULE 2005]; NOX: 0.2 LBS/MMBTU (8A) [40CFR 60 SUBPART Da]; NOX: 114 PPMV (8B) [40CFR 60 SUBPART GG]; PM: 0.03 LBS/MMBTU (8A) [40CFR 60 SUBPART Da]; PM: 0.1 GR/SCF (5) [RULE 409]; PM: 0.05 GR/SCF (5A) [RULE 475]; VOC: 2 PPMV (4) [RULE 1303-BACT]; SO2: 0.2 LBS/MMBTU (8A) [40CFR 60 SUBPART Da]; SOX: 150 PPMV (8B) [40CFR 60 SUBPART GG]; SO2: (9)[40CFR 72-Acid Rain]	29-5, 29-6, 40-3, 57-1, 63-1, 67-4, 82-1, 82-2, 99-1, 99-2, 99-3, 99-5, <u>193-3</u> , 195-2, 195-3, <u>195-5</u> , 296-1
GENERATOR, HEAT RECOVERY STEAM	B58				
TURBINE, STEAM, COMMON TO UNITS 5 AND 7, 288 MW	B59				

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 4
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

CO OXIDATION CATALYST, SERVING UNIT 5, WITH 1000 CUBIC FEET CATALYST VOLUME, ENGELHARD, HEIGHT: 3 FT; LENGTH: 44 FT; WIDTH: 41 FT, WITH A/N 378771	C51	D46, D48, C52			
SELECTIVE CATALYTIC REDUCTION, SERVING UNIT 5, CORMETECH, TITANIUM-VANADIUM, 4379 CU. FT.; HEIGHT: 3 FT; LENGTH: 44 FT; WIDTH: 41 FT, WITH A/N 378771	C52	C51, S54		NH3: 5 PPMV (4) [RULE 1303(a)(1)-BACT]	12-7, 12-8, 12-9, 29-4, 73-3, 82-3, 179-4, 179-5, 193-3, 195-6
AMMONIA INJECTION, INJECTION GRID	B53				
STACK, NO. 5, DIAMETER: 19 FT; HEIGHT: 215 FT, WITH A/N 378771	S54	C52			

CO OXIDATION CATALYST, SERVING UNIT 7, WITH 1000 CUBIC FEET CATALYST VOLUME, ENGELHARD, HEIGHT: 3 FT; LENGTH: 44 FT; WIDTH: 41 FT, WITH A/N 378773	C60	D55, D57, C61			
SELECTIVE CATALYTIC REDUCTION, SERVING UNIT 7, CORMETECH, TITANIUM-VANADIUM, 4379 CU. FT.; HEIGHT: 3 FT; LENGTH: 44 FT; WIDTH: 41 FT, WITH A/N 378773	C61	C60, S63		NH3: 5 PPMV (4) [RULE 1303(a)(1)-BACT]	12-7, 12-8, 12-9, 29-4, 73-3, 82-3, 179-4, 179-5, 193-3, 195-6
AMMONIA INJECTION, GRID	B62				
STACK, NO. 7 DIAMETER: 19 FT; HEIGHT: 215 FT, WITH A/N 378773	S63	C61			

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 5
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

BACKGROUND/HISTORY

The subject permit applications (seven total) were submitted to the District on December 20, 2000, and January 18, 2001. The application package was deemed complete on January 19, 2001.

Since the first addendum (dated October 17, 2001) was written the following actions have occurred regarding this project.

October 17, 2001 - Preliminary Determination of Compliance (PDOC) is provided to the CEC and the applicant.

October 19, 2001 - Applicant's proposed street sweeping plan (along with their responses to the District's earlier comments) is submitted to District planning staff for reevaluation. Based on new information received from District Counsel, it appears that District rules do not preclude this type of credit generating program.

November 29, 2001 - Notice of Intent to Issue Permit Pursuant to AQMD Rules 212 and 3006 is mailed to persons included the District's and the CEC's mailing lists for this project.

November 29, 2001 - Notice of Intent to Issue Permit Pursuant to AQMD Rules 212 and 3006 is mailed to the following persons: Steve Odabashian (applicant), Gary Rubenstein (applicant's consultant), Jack Broadbent (EPA Region IX), Peter Venturini (CARB), Debra Brighton (El Segundo Library), Mike McCorison (USDA Forest Service), John Notar (National Parks Service), Jeffery Smith (SCAG), Mary Strenn (El Segundo City Manager), and David Janssen (LA County Chief Administrative Officer). In addition, the following persons also received copies of the draft permit and the District's engineering analysis of the subject project: Jack Broadbent, Peter Venturini, and Debra Brighton.

December 4, 2001 - EPA (Region IX) receives a copy of the proposed changes to the Title V permit. Their 45 -day review period begins on this day.

December 6, 2001 - Notice of Intent to Issue Permit Pursuant to AQMD Rules 212 and 3006 is published in the LA Times, the Daily Breeze, and the El Segundo Herald.

December 13, 2001 - Applicant provides door-to-door distribution of the public notice to each business and residential address located within a 1/4 mile radius of the project site, with the exception of the following adjacent facilities which are notified via certified mail: Chevron Refinery, SCE, DWP, and the Hyperion Wastewater Treatment Plant. Written verification and proof of distribution of the public notice is provided to the District on December 19, 2001.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 6
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

December 13, 2001 - Applicant and the CEC are informed that the District has completed its review of the proposed street sweeping program. The District believes that emission reductions achieved by this type of program cannot be adequately quantified and enforced for the purpose of using credits to offset increases in ducted, combustion point sources, or made permanent and enforceable to the degree required for credit generation. The District's conclusion is that for this project street sweeping cannot be used as a mechanism to generate PM10 credits to offset the net increase in emissions from the new equipment.

February 5, 2002 - EPA (Region IX) informs the District (via telephone call) that they have no comments regarding the proposed revisions to the Title V permit.

PROCESS DESCRIPTION

No changes.

TECHNICAL INFORMATION

No changes.

EMISSIONS

The first year annual NOx emissions for this project were revised from 331,365 lbs/year to 332,147 lbs/year based on the additional emissions from the emergency fire pump engine. The detailed emission calculations are included in Revised Appendix G (dated 2/8/02).

The RECLAIM emission factor for the fire pump engine included in the proposed permit was revised to reflect NOx emissions at the current BACT level of 6.9 grams/BHP-hour.

$$\begin{aligned} \text{Emission Factor} &= 6.9 \text{ grams/BHP-hour} * 1 \text{ lb}/453.593 \text{ grams} * 265 \text{ BHP} * 1/14.2 \text{ gallons per hour} \\ &= 284 \text{ lbs}/1000 \text{ gallons} \end{aligned}$$

EVALUATION

Rule 212 – Standards for Approving Permits

During the public comment period that ended on January 12, 2002, written comments were submitted to the District by the following persons: Jeffrey Smith with SCAG (letter dated December 20, 2001), Joe Lyou with California League of Conservation Voters Education Fund (email dated January 6, 2002), and Gary Rubenstein with Sierra Research (letter dated January 11, 2002). The District's responses to the comments are included in the Discussion section of this report.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 7
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

1303(b)(2) - Emission Offsets (non-RECLAIM pollutants)

The amount of emissions offsets needed for his project is as follows:

CO = not required

PM10 = 312 to 374 lbs/day (depends on the amount of ERCs purchased from the District's Priority Reserve)

VOC = 109 lbs/day

SOx = 44 lbs/day

The applicant currently holds the following amounts of active ERCs:

PM10 = 23 lbs/day

VOC = 295 lbs/day

SOx = 247 lbs/day

2005(c)(2) - Emission Offsets

Based on the inclusion of the NOx emissions from the emergency fire pump engine, the first year annual emissions from the new equipment will be 332,147 lbs/year. The applicant will satisfy the NOx RTC requirement by utilizing existing RTCs allocated to the El Segundo and Long Beach Generating Stations.

Rule 2012 - Monitoring, Reporting, and Recordkeeping Requirements for NOx

The emergency fire pump engine is classified as a process unit and the draft permit specified a RECLAIM emission factor of 469 lbs/1000 gallons. The emission factor was revised to reflect NOx emissions at the current BACT limit of 6.9 grams/BHP-hour. The revised RECLAIM emission factor for the emergency fire pump engine is 284 lbs/1000 gallons.

DISCUSSION

Several comments were submitted to the District during the 30-day comment period, and a brief description of the comments along with the District's responses is provided below.

Comments (Gary Rubenstein, Sierra Research representing the applicant)

He provided the following comments:

1. With regards to the amount of PM10 ERCs needed for the project, the District's addendum to the P/C evaluation dated October 17, 2001, states that the amount of offsets needed for this project is 374 lbs/day. Since the applicant is proposing to obtain a portion or all of the offsets from the District's Priority Reserve, the District's analysis should show that the amount of PM10 ERCs needed for the project will vary from 312 lbs/day (if 100% of the ERCs come from the Priority Reserve at a 1:1 ratio) to 374 lbs/day (if 100% of the ERCs are purchased on the ERC market at a 1.2:1 ratio).

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 8
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

2. Conditions 179-3 and 179-4 specify a monthly recording requirements. These conditions should specify an hourly recording requirement.
3. In our July 13, 2001 letter, we requested an alternative approach to monitoring ammonia slip. The suggested alternative involves measuring the ammonia flow rate during the initial compliance tests at the same time that the ammonia slip is measured in the gas turbine/HRSG exhaust. This information could be used to calculate the additional ammonia injection rate that would result in an exhaust ammonia slip of 5 ppm. For each load (i.e., 50%, 75%, and 100%), the sum of the ammonia injection rate measured during the compliance test and the additional ammonia injection needed to increase the ammonia slip to 5 ppm would equal the maximum allowable ammonia injection rate (excluding startups and shutdowns). Rather than include the ammonia slip calculation methodology specified in Condition 195-4 (and all the potential difficulties previously noted regarding this approach), the permit could contain three ammonia injection limits that would cover the full operating range of the new units.

Response

The District's responses are as follows:

1. The FDOC will specify that the amount of PM10 credits needed for this project will vary from 312 lbs/day to 374 lbs/day depending on the amount of credits purchased from the District's Priority Reserve and/or ERC market.
2. Condition 179-4 was revised to specify an hourly recording requirement. Condition 179-3, which applies to the SCR equipment for boiler no. 3, is not part of this project.
3. Condition 195-4 was revised and it no longer includes a calculation methodology to determine ammonia slip on a continuous basis. Condition 82-3 was added to the permit and it requires the applicant to install an ammonia CEMS to continuously monitor and record the ammonia emissions from the stack. Currently, there are several technologies available for directly measuring ammonia slip in situ. They include a GC-UV monitoring system and a laser gas NH3 monitor based on a tunable diode laser. The District recently issued a permit to construct to another facility that includes a requirement for continuous ammonia slip monitoring and recording, and the applicant plans to comply with the requirement by installing the tunable diode laser technology. Given the long lead time for this project (at least 3 years until startup), it is expected that a certified ammonia CEMS using the above technology (or equivalent) will be commercially available by the time the new combined cycle equipment becomes operational.

Comment (Jeffrey Smith with Southern California Association of Governments)

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

Response

The CEC Compliance Project Manager will be responsible for implementing and monitoring compliance with the mitigation measures included in the Conditions of Certification.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING & COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 9
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

Comment (Joe Lyou with California League of Conservation Voters Education Fund)

He provided the following comments:

1. The applicant failed to consider any cumulative impacts associated with the planned modifications at the adjacent Chevron refinery (and possibly other projects in the area). Would consideration of the Chevron project have changed the CEC's decision to accept the pending license application as data "adequate." Similarly, would this information have affected the District's intention to issue a Facility Permit at the end of the public comment and review period?
2. The El Segundo Library did not have the proposed permit on its shelves readily available to the public prior to the close of the public comment period. The library was instructed to make the information available until December 29, 2001. However, the public comment period was based on a distribution date of December 6, 2001, and the information should have been readily available until January 5, 2002. I went to the library on January 5, 2002, and I was lucky to locate the information.

Response

The District's responses are as follows:

1. The CEC Application for Certification (AFC) process is functionally equivalent to the CEQA process. As such, the CEC is the designated lead agency for this project and is responsible for the discussion of the cumulative impact analysis. The District has notified the CEC of Mr. Lyou's comments and concerns and it is anticipated that the CEC will address his comments on this matter. To assist the CEC in evaluating the cumulative impacts associated with the Chevron RFG 3 project, we recently provided them with the most current technical information regarding this project. Regarding the District's intention to issue a permit to construct at the end of the comment and review period, we cannot issue the final permit to construct until after the CEC has issued its Final Commission Decision for this project. In accordance with our public notice procedures, we will respond to all comments and will consider all relevant air quality issues including CEC's response to Mr. Lyou's comments, prior to issuing the final permit to construct for this project.
2. In general, for projects requiring a public notice pursuant to Rule 212, AQMD makes documents available for a 30-day public review period at the closest public library in the vicinity of the proposed project. For this project, the AQMD sent a letter to the El Segundo Library on November 29, 2001 requesting that they make the documents available until December 29, 2001. Unfortunately, the newspapers were unable to publish the public notice until December 6, 2001. We have reviewed our internal procedures and will in the future request the library to make the documents available for a suitable time frame that includes the time for the local newspapers to publish the notice. We would like to note that the documents are always available by contacting the AQMD directly.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
 APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 10
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

PERMIT CONDITIONS (Section H)

Facility Conditions

No changes.

Device Conditions Applicable to Subject Project

- 1-5. No changes.
- 12-7. No changes.
- 12-8. No changes.
- 12-9. No changes.
- 29-4. No changes.

29-5. The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Avg. Time	Test Location
NOx emissions	District Method 100.1	1 hour	Outlet of the SCR
CO emissions	District Method 100.1	1 hour	Outlet of the SCR
SOx emissions	Approved District method	1 hour District Approved Avg. Time	Outlet of the SCR Fuel Sample
ROG emissions	Approved District method	1 hour	Outlet of the SCR
PM emissions	Approved District method	District Approved Avg. Time	Outlet of the SCR
NH3 emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine and steam turbine generating output in MW.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 11
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

The test shall be conducted in accordance with a District approved source 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 District before the test commences. The test protocol shall include the proposed operating conditions of the turbine 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 test shall be conducted with and without duct firing, when this equipment is operating at loads of 100, 75, and 50 percent of maximum load.~~

The test shall be conducted for all pollutants 1) when the gas turbine and duct burner are operating simultaneously at 100 percent of maximum heat input and 2) when the gas turbine is operating alone at 100 percent of maximum heat input. In addition, tests shall be conducted when the gas turbine is operating alone at loads of 75 and 50 percent of maximum heat input for the NOx, CO, VOC and NH3 tests.

[Rule 1303 – BACT, Rule 1303 – Offsets, Rule 2005 – BACT, Rule 2005 – Offsets]

[Devices subject to this condition: D46, D48, D55, D57]

29-6. The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Avg. Time	Test Location
SOx emissions	Approved District method	1 hour District Approved Avg. Time	SCR Outlet Fuel Sample
ROG emissions	Approved District method	1 hour	SCR Outlet
PM emissions	Approved District method	District Approved Avg. Time	SCR Outlet

The test(s) shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least ~~7~~ 10 days prior to the test.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 12
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and emissions limit.

The test shall be conducted 1) when the gas turbine and duct burner are operating simultaneously at 100 percent of maximum heat input and 2) when the gas turbine is operating alone at 100 percent of maximum heat input.

[Rule 1303 – BACT, Rule 1303 – Offsets]

[Devices subject to this condition: D46, D48, D55, D57]

- 40-3. No changes.
- 57-1. No changes.
- 63-1. No changes.

- 67-4. The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas fuel use during the commissioning period.

Natural gas fuel use after the commissioning period and prior to CEMS certification.

Natural gas fuel use after CEMS certification.

[Rule 2012]

[Devices subject to this condition: D46, D48, D55, D57]

- 73-3. No changes.
- 82-1. No changes.
- 82-2. No changes.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 13
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

82-3. The operator shall install and maintain a CEMS to measure the following parameters:

NH3 concentration in ppmv.

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated to measure NH3 concentration over a 15 minute averaging time period.

The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine.

The CEMS shall be installed and operated, in accordance with an AQMD approved CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD.

[Rule 1303 – BACT, Rule 1303 - Offset]

[Devices subject to this condition: C52, C61]

- 99-1. No changes.
- 99-2. No changes.
- 99-3. No changes.
- 99-4. No changes.
- 99-5. No changes.
- 99-6. No changes.
- 157-1. No changes.

179-4. For the purpose of the following condition number(s) continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition no. 12-7
Condition no. 12-8
Condition no. 12-9
~~Condition no. 195-6~~

[Rule 1303 - BACT]

[Devices subject to this condition: C52, C61]

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 14
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

~~179-5. For the purpose of the following condition number(s) continuously record shall be defined as recording at least once every month and shall be calculated based upon the average of the continuous monitoring for that month.~~

~~Condition no. 12-9~~

~~[Rule 1303 - BACT]~~

~~[Devices subject to this condition: C52, C61]~~

193-2. The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In compliance with all mitigation measures as stipulated by the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" and final subsequent Environmental Impact Report dated January, 1994 (SCH No. 88032315) for the El Segundo Generating Station ammonia storage and selective catalytic reduction project.

[CEQA]

[Devices subject to this condition: D30]

193-3. The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In compliance with all Conditions of Certification included in the California Energy Commission's Staff Assessment dated June 2001 (00-AFC-14) for the El Segundo Power Redevelopment Project.

[CEQA]

[Devices subject to this condition: D30, D45, D46, D48, D55, D57, C52, C61]

195-2. No changes.

195-3. No changes.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING & COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

PAGES 16	PAGE 15
APPL. NO. 378766 (master file)	DATE 2/14/02
PROCESSED BY KJB	CHECKED BY

195-5. The 2.0 PPMV VOC emission limit(s) are averaged over 1 hour at 15 percent oxygen, dry.

[Rule 1303 – BACT]

[Devices subject to this condition: D46, D48, D55, D57]

~~195-6. The 5 PPMV NH3 emissions limit(s) are averaged over 60 minutes at 15 percent oxygen, dry. The operator shall calculate and continuously record the NH3 slip concentration using the following:~~

~~NH3 (ppmv) = [a - (b*e/1000000)]*1000000/b, where
a = ammonia injection rate (lb/hr)/17 (lbs/lb-mole)
b = dry exhaust gas flow rate (lb/hr)/29 (lbs/lb-mole)
e = change in measured NOx across the SCR (ppmv, dry basis)~~

~~The operator shall install and maintain a NOx analyzer, or other method as approved by the AQMD, to measure the SCR inlet NOx ppm accurate to within +/- 5 percent calibrated at least every 12 months.~~

~~[Rule 1303 – BACT]~~

~~[Devices subject to this condition: C52, C61]~~

296-1. No changes.

**Revised Appendix G - Emission Offsets Calculations
Rule 2005 Analysis (RECLAIM Pollutants)**

PAGES 16	PAGE 16	AVN 378766
BY KJB	DATE 2/8/02	

Data:

1. Operating Schedule (1st Year) per turbine/HRSG (unless otherwise stated):

OC 1 = 2,099 hours, OC 2 = 2,099 hours, Hot Starts = 365 hours

OC 4 = 3,801 hours for Unit 5, OC 4 = 3,945 hours for Unit 7

2. Operating Schedule Commissioning Period:

Unit 5 = 396 hours

Unit 7 = 252 hours

3. NOX emissions during the commissioning period:

Unit 5 = 18,536 lbs

Unit 7 = 15,999 lbs

4. Operating Schedule Emergency Fire Pump Engine = 200 hours/year

Assumptions:

Facility begins operation on January 1 (cold temperature operating condition)

NOx Emissions 1st Year

Gas Turbine/HRSG Operating Condition	Hours per Year	NOx (lbs/hr)	NOX (lbs/year)
Unit 5 Hot Startup	365	80.00	29,200
Unit 5 Operating Condition 1	2,099	18.27	38,349
Unit 5 Operating Condition 2	2,099	12.62	26,489
Unit 5 Operating Condition 4	3,801	14.04	53,366
Unit 5 Commissioning	396		18,536
Unit 5 Totals	8,760		165,940
Unit 7 Hot Startup	365	80.00	29,200
Unit 7 Operating Condition 1	2,099	18.27	38,349
Unit 7 Operating Condition 2	2,099	12.62	26,489
Unit 7 Operating Condition 4	3,945	14.04	55,388
Unit 7 Commissioning	252		15,999
Unit 7 Totals	8,760		165,425
Fire Pump Engine	200	3.91	782
Total 1st Year Emissions (lbs/year)			332,147
Offset Ratio			PAG
PAGES E			332,147

Revised AvpdAnixnRvGdxAniAbold Revis

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : EXTERNAL COMBUSTION					
System 2 : BOILER, POWER GENERATION					
BOILER, UNIT NO. 1, NATURAL GAS, REFINERY/NATURAL GAS, BABCOCK & WILCOX, 1785 MMBTU/HR WITH A/N: 380626 Permit to Construct Issued: 04/27/01 BURNER, NATURAL GAS, REFINERY/NATURAL GAS, TODD, WITH LOW NOX BURNER, 12 TOTAL; 1785 MMBTU/HR TURBINE, STEAM GENERATOR, 175 MW	D7		NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981] ; SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997]	1-2, 29-1, 29-2, 29-3, 40-2, 61-1, 90-1, 331-1, 425-1
BOILER, UNIT NO. 2, NATURAL GAS, REFINERY/NATURAL GAS, BABCOCK & WILCOX, 1785 MMBTU/HR WITH A/N: 380627 Permit to Construct Issued: 04/27/01 BURNER, NATURAL GAS, REFINERY/NATURAL GAS, TODD, WITH LOW NOX BURNER, 12 TOTAL; 1785 MMBTU/HR TURBINE, STEAM	D9		NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981] ; SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997]	1-2, 29-1, 29-2, 29-3, 40-2, 61-1, 90-1, 331-1, 425-1

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : EXTERNAL COMBUSTION					
GENERATOR, 175 MW					
BOILER, UNIT NO. 3, FUEL OIL, NATURAL GAS, REFINERY GAS, COMBUSTION ENGINEERING, WITH 24 COMBUSTION ENGINEERING BURNERS, 3350 MMBTU/HR WITH A/N: 372264 Permit to Construct Issued: 01/19/01	D11	C39	NOX: MAJOR SOURCE**	CO: 300 PPMV NATURAL GAS (5) [RULE 1303(b)(2)-Offset,5-10-1996] ; CO: 250 PPMV FUEL OIL (5) [RULE 1303(b)(2)-Offset,5-10-1996] CO: 300 PPMV REFINERY GAS (5) [RULE 1303(b)(2)-Offset,5-10-1996] ; CO: 2000 PPMV (5A) [RULE 407,4-2-1982] NOX: 10.75 LBS/1000 GAL FUEL OIL (1) [RULE 2012,12-7-1995;RULE 2012,3-16-2001] ; PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981] SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997] ; SOX: 500 PPMV FUEL OIL (5) [RULE 407,4-2-1982]	1-2, 1-4, 28-2, 28-4, 40-1, 61-1, 90-1, 193-1, 305-1, 331-1, 371-1
TURBINE, STEAM					
GENERATOR, 335 MW					

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : EXTERNAL COMBUSTION					
SELECTIVE CATALYTIC REDUCTION, SERVING BOILER NO. 3, NORTH DUCT, MITSUBISHI HEAVY INDUSTRIES, TITANIUM/VANADIUM, 2029 CU.FT.; HEIGHT: 15 FT 8 IN; LENGTH: 31 FT 1.5 IN; WIDTH: 6 FT 4 IN WITH A/N: 372265 Permit to Construct Issued: 01/19/01 AMMONIA INJECTION, GRID, WITH 150 INJECTION NOZZLES	C39	D11		NH3: 10 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996]	12-3, 12-4, 12-5, 12-6, 28-3, 73-1, 179-2, 179-3, 193-1, 195-1
SELECTIVE CATALYTIC REDUCTION, SERVING BOILER NO. 3, SOUTH DUCT, MITSUBISHI HEAVY INDUSTRIES, TITANIUM/VANADIUM, 2029 CU.FT.; HEIGHT: 15 FT 8 IN; LENGTH: 31 FT 1.5 IN; WIDTH: 6 FT 4 IN WITH A/N: 372265 Permit to Construct Issued: 01/19/01 AMMONIA INJECTION, GRID, WITH 150 INJECTION NOZZLES	C41			NH3: 10 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996]	12-3, 12-4, 12-5, 12-6, 28-3, 73-1, 179-2, 179-3, 193-1, 195-1

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
System 1 : DIESEL ENGINES					
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, DIESEL FUEL, CLARKE, MODEL JDFP 06WA, WITH AFTERCOOLER, TURBOCHARGER, 265 BHP A/N:	D45		NOX: PROCESS UNIT**	NOX: 6.9 GRAM/BHP-HR DIESEL (4) [RULE 2005,4-9-1999;RULE 2005,4-20-2001] ; NOX: 284 LBS/1000 GAL DIESEL (1) [RULE 2012,12-7-1995 RULE 2012,3-16-2001] ; PM: (9) [RULE 404,2-7-1986] ; PM10: 0.38 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT,5-10-1996] VOC: 1 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT,5-10-1996]	1-5, 193-3
System 2 : GAS TURBINE POWER GENERATION					
TURBINE, GAS, NO. 5, COMBINED CYCLE, NATURAL GAS, GENERAL ELECTRIC, MODEL 7241FA, WITH DRY LOW NOX COMBUSTORS AND STEAM INJECTION FOR POWER AUGMENTATION, 1896 MMBTU/HR A/N:	D46	C51	NOX: MAJOR SOURCE**	CO: 6 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996] ; CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; NOX: 80 LBS/HR (7) [RULE 2005,4-9-1999	29-5, 29-6, 40-3, 57-1, 63-1, 67-4, 82-1, 82-2, 99-1, 99-2, 99-3, 99-4, 99-6, 193-3, 195-2, 195-3, 195-5, 296-1

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
GENERATOR, 179 MW GENERATOR, HEAT RECOVERY STEAM				<i>RULE 2005,4-20-2001</i> ; NOX: 33.9 LBS/MMCF NATURAL GAS (1) [<i>RULE 2012,12-7-1995;RULE 2012,3-16-2001</i>] ; NOX: 114 PPMV (8) [40CFR 60 Subpart GG,3-6-1981] NOX: 2.5 PPMV (4) [<i>RULE 2005,4-9-1999;RULE 2005,4-20-2001</i>] ; NOX: 109 LBS/MMCF (1) [<i>RULE 2012,12-7-1995 RULE 2012,3-16-2001</i>] ; PM: 0.05 GRAINS/SCF (5A) [<i>RULE 475,10-8-1976;RULE 475,8-7-1978</i>] ; PM: 0.1 GRAINS/SCF (5) [<i>RULE 409,8-7-1981</i>] SO ₂ : (9) [40CFR 72 - Acid Rain Provisions,11-24-1997] ; SOX: 150 PPMV (8) [40CFR 60 Subpart GG,3-6-1981] VOC: 2 PPMV (4) [<i>RULE 1303(a)(1)-BACT,5-10-1996</i>]	

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
TURBINE, STEAM, COMMON TO UNITS 5 AND 7, 288 MW					
BURNER, DUCT, NATURAL GAS, 600 MMBTU/HR A/N:	D48	C51	NOX: MAJOR SOURCE**	<p>CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; CO: 6 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996] ; NOX: 102 LBS/MMCF (1) [RULE 2012,12-7-1995</p> <p>RULE 2012,3-16-2001] ; NOX: 114 PPMV (8B) [40CFR 60 Subpart GG,3-6-1981] ; NOX: 0.2 LBS/MMBTU (8A) [40CFR 60 Subpart Da,10-4-1991]</p> <p>NOX: 2.5 PPMV (4) [RULE 2005,4-9-1999;RULE 2005,4-20-2001] ; PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981]</p> <p>PM: 0.03 LBS/MMBTU (8A) [40CFR 60 Subpart Da,10-4-1991] ; PM: 0.05 GRAINS/SCF (5A) [RULE 475,10-8-1976 RULE 475,8-7-1978] ; SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997] ; SO2: 0.2 LBS/MMBTU (8A) [40CFR 60 Subpart Da,10-4-1991]</p>	29-5, 29-6, 40-3, 57-1, 63-1, 67-4, 82-1, 82-2, 99-1, 99-2, 99-3, 99-5, 193-3, 195-2, 195-3, 195-5, 296-1

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
				SOX: 150 PPMV (8B) [40CFR 60 Subpart GG,3-6-1981] ; VOC: 2 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996]	
CO OXIDATION CATALYST, SERVING UNIT 5, WITH 1000 CUBIC FEET CATALYST VOLUME, ENGELHARD, HEIGHT 3 FT. LENGTH 44 FT, WIDTH 41 FT A/N:	C51	D46 D48 C52			
SELECTIVE CATALYTIC REDUCTION, SERVING UNIT 5. CORMETECH, TITANIUM-VANADIUM, 4379 CU.FT.; HEIGHT: 3 FT; LENGTH: 44 FT; WIDTH: 41 FT WITH A/N: AMMONIA INJECTION, GRID	C52	C51 S54		NH3: 5 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996]	12-7; 12-8, 12-9, 29-4, 73-3, 82-3, 179-4, 193-3, 195-6
STACK, NO 5, DIAMETER: 19 FT; HEIGHT: 215 FT A/N:	S54	C52			
TURBINE, GAS, NO. 7. COMBINED CYCLE, NATURAL GAS. GENERAL ELECTRIC, MODEL 7241FA, WITH DRY LOW NOX COMBUSTORS AND STEAM INJECTION FOR POWER AUGMENTATION, 1896 MMBTU/HR WITH A/N:	D55	C60	NOX: MAJOR SOURCE**	CO: 6 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996] ; CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; NOX: 80 LBS/HR (7) [RULE 2005,4-9-1999	29-5, 29-6, 40-3, 57-1, 63-1, 67-4, 82-1, 82-2, 99-1, 99-2, 99-3, 99-4, 99-6, 193-3, 195-2, 195-3, 195-5, 296-1

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
GENERATOR, 179 MW GENERATOR, HEAT RECOVERY STEAM				<i>RULE 2005,4-20-2001</i> ; NOX: 33.9 LBS/MMCF NATURAL GAS (1) [<i>RULE 2012,12-7-1995;RULE 2012,3-16-2001</i>] ; NOX: 114 PPMV (8) [40CFR 60 Subpart GG,3-6-1981] NOX: 2.5 PPMV (4) [<i>RULE 2005,4-9-1999;RULE 2005,4-20-2001</i>] ; NOX: 109 LBS/MMCF (1) [<i>RULE 2012,12-7-1995 RULE 2012,3-16-2001</i>] ; PM: 0.05 GRAINS/SCF (5A) [<i>RULE 475,10-8-1976;RULE 475,8-7-1978</i>] ; PM: 0.1 GRAINS/SCF (5) [<i>RULE 409,8-7-1981</i>] SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997] ; SOX: 150 PPMV (8) [40CFR 60 Subpart GG,3-6-1981] VOC: 2 PPMV (4) [<i>RULE 1303(a)(1)-BACT,5-10-1996</i>]	

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
TURBINE, STEAM, COMMON TO UNITS 5 AND 7, 288 MW					
BURNER, DUCT, NATURAL GAS, 600 MMBTU/HR A/N:	D57	C60	NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; CO: 6 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996] ; NOX: 102 LBS/MMCF (1) [RULE 2012,12-7-1995 RULE 2012,3-16-2001] ; NOX: 114 PPMV (8B) [40CFR 60 Subpart GG,3-6-1981] ; NOX: 0.2 LBS/MMBTU (8A) [40CFR 60 Subpart Da,10-4-1991] NOX: 2.5 PPMV (4) [RULE 2005,4-9-1999;RULE 2005,4-20-2001] ; PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981] PM: 0.03 LBS/MMBTU (8A) [40CFR 60 Subpart Da,10-4-1991] ; PM: 0.05 GRAINS/SCF (5A) [RULE 475,8-7-1978] SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997] ; SO2: 0.2 LBS/MMBTU (8A) [40CFR 60 Subpart Da,10-4-1991]	29-5, 29-6, 40-3, 57-1, 63-1, 67-4, 82-1, 82-2, 99-1, 99-2, 99-3, 99-5, 193-3, 195-2, 195-3, 195-5, 296-1

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
				SOX: 150 PPMV (8B) [40CFR 60 Subpart GG,3-6-1981] ; VOC: 2 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996]	
CO OXIDATION CATALYST, SERVING UNIT 7, WITH 1000 CUBIC FEET CATALYST VOLUME, ENGELHARD, HEIGHT 3 FT, LENGTH 44 FT, WIDTH 41 FT A/N:	C60	D55 D57 C61			
SELECTIVE CATALYTIC REDUCTION, SERVING UNIT 7, CORMETECH, TITANIUM-VANADIUM, 4379 CU.FT.; HEIGHT: 3 FT; LENGTH: 44 FT; WIDTH: 41 FT WITH A/N: AMMONIA INJECTION, GRID	C61	C60 S63		NH3: 5 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996]	12-7, 12-8, 12-9, 29-4, 73-3, 82-3, 179-4, 193-3, 195-6
STACK, NO. 7, DIAMETER: 19 FT; HEIGHT: 215 FT A/N:	S63	C61			
Process 5 : INORGANIC CHEMICAL STORAGE					
STORAGE TANK, UNDERGROUND, TK-001, AQUEOUS AMMONIA, CARBON STEEL, DOUBLE WALLED, WITH 3 TRANSFER PUMPS AND A PRV SET AT 50 PSIG, 20000 GALS; DIAMETER: 10 FT 2 IN; LENGTH: 37 FT 10 IN WITH A/N:	D30				157-1, 193-2, 193-3

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 5 : INORGANIC CHEMICAL STORAGE					
SCRUBBER, VENTURI, TWO STAGE	C64	D30			

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

**FACILITY PERMIT TO OPERATE
EL SEGUNDO POWER, LLC**

SECTION H: DEVICE ID INDEX

**The following sub-section provides an index
to the devices that make up the facility
description sorted by device ID.**

**FACILITY PERMIT TO OPERATE
 EL SEGUNDO POWER, LLC**

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D7	1	1	2
D9	1	1	2
D11	2	1	2
D30	10	5	0
C39	3	1	2
C41	3	1	2
D45	4	2	1
D46	4	2	2
D48	6	2	2
C51	7	2	2
C52	7	2	2
S54	7	2	2
D55	7	2	2
D57	9	2	2
C60	10	2	2
C61	10	2	2
S63	10	2	2

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F9-1. 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 Ringelmann 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, 3-2-1984; RULE 401, 9-11-1998]

F14-1. The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

F14-2. The operator shall not purchase fuel oil containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

[RULE 431.2, 9-15-2000]

F16-1. The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

purchase records of fuel oil and sulfur content of the fuel

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

F18-1. Acid Rain SO2 Allowance Allocation for affected units are as follows:

Device ID	Boiler ID	Contaminant	Tons in any year
D7	Boiler No. 1	SO2	437
D9	Boiler No. 2	SO2	90
D11	Boiler No. 3	SO2	182
D13	Boiler No. 4	SO2	370

- a). The allowance allocation(s) shall apply to calendar years 2000 through 2009.
- b). The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO2 allowance allocations identified in this permit (see 40 CFR 72.84)

[40CFR 73 Subpart B, 1-11-1993]

F24-1. Accidental release prevention requirements of Section 112(r)(7):

- a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).
- b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

DEVICE CONDITIONS

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 1-2. The operator shall limit the refinery gas fuel usage to no more than 34 MM cubic feet per day.

This limit shall be based on the total combined limit for equipment D7, D9, D11, D13.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D7, D9, D11]

- 1-4. The operator shall limit the operating time to no more than 2 hour(s) in any one day.

The purpose(s) of this condition is to insure that there is no increase in PM10 emissions requiring BACT. This condition shall only apply when the equipment is firing fuel oil.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D11]

- 1-5. The operator shall limit the operating time to no more than 199 hour(s) in any one year.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

The records shall include date of operation, the elapsed time in hours, and the reason for operation. Records shall be kept and maintained on file for a minimum of 5 years and made available to AQMD upon request.

[RULE 1110.2, 11-14-1997; RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : D45]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 12-3. The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH₃).

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : C39, C41]

- 12-4. The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the ammonia-to-emitted-NO_x mole ratio applied to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : C39, C41]

- 12-5. The operator shall install and maintain a(n) pressure gauge to accurately indicate the pressure across the SCR catalyst bed in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : C39, C41]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 12-6. The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the boiler exhaust at the inlet of the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : C39, C41]

- 12-7. The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected NH₃.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : C52, C61]

- 12-8. The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : C52, C61]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 12-9. The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[**RULE 1303(a)(1)-BACT, 5-10-1996**]

[Devices subject to this condition : C52, C61]

- 28-2. The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted to determine the CO emissions at the outlet.

The test shall be conducted at least annually.

The test shall be conducted to demonstrate compliance with Rule 1303 concentration limit.

The test shall be conducted when the equipment is operating under normal conditions. No test shall be required in any one year for which the equipment is not in operation.

The test shall be conducted to determine compliance with the CO emissions by either: (a) conducting a source test using District method 100.1 measured over a 30 minute averaging time, or (b) using a portable analyzer and a District-approved test method.

[**RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition : D11]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

28-3. The operator shall conduct source test(s) in accordance with the following specifications:

The District shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit.

The test shall be conducted to determine the NH₃ emissions using District Methods 207.1 and 5.3, or EPA Method 17 measured over a 60 minute averaging time period. The NO_x concentration, as determined by reading the CEMS, shall be simultaneously recorded during the test. If the CEMS is inoperable, a test shall be conducted to determine the NO_x emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted and the results submitted to the District within 45 days after the test date.

The test shall be conducted shall be conducted at least quarterly during the first 12 months of operation of the SCR, and at least annually thereafter.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1401, 3-17-2000]

[Devices subject to this condition : C39, C41]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

28-4. The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted to determine the NOX emissions using District method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to determine the CO emissions using District method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to determine the SOX emissions using District method 6.1 measured over a 60 minute averaging time period.

The test shall be conducted to determine the ROG emissions using approved District method measured over a 60 minute averaging time period.

The test shall be conducted to determine the PM emissions using District method 5.2 measured over a 60 minute averaging time period.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the NH3 emissions using District Methods 207.1 and 5.3, or EPA Method 17 measured over a 60 minute averaging time period.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas rate, flue gas temperature, and the generator power output (MW).

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days prior to the proposed test date. The source test protocol shall include the proposed operating conditions of the boiler during the tests, identity of the testing lab, a statement from the test lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted with and without ammonia injection when this equipment is operating at loads of 100, 75, and 50 percent and the minimum load at which ammonia injection occurs during the NOx and PM tests. For CO, SOx, and ROG, the test shall be conducted at 100 percent load with ammonia injection only.

The test shall be conducted after approval of the source test protocol, but no later than 180 days after initial start-up of the SCR control system.

The test shall be conducted with ammonia injection when this equipment is operating at loads of 100, 75, and 50 percent and the minimum load at which ammonia injection occurs during the NH3 tests.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1401, 3-17-2000; RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : D11]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

29-1. The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet
CO emissions	District method 100.1	1 hour	Outlet
SOX emissions	District method 6.1	1 hour	Outlet
ROG emissions	Approved District method	1 hour	Outlet
PM10 emissions	District method 5.2	1 hour	Outlet

In addition to the source test requirements of Section E of this facility permit, the facility permit holder shall submit the protocol to the AQMD engineer no later than 45 days prior to the proposed test date, and notify the District of the date and time of the test at least 10 days prior to the test.

During the source test(s), the facility permit holder shall also measure the oxygen levels in the exhaust, flue flow rate (CFH), the flue gas rate, flue gas temperature, and the generator output (MW).

The test(s) shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up.

The test shall be conducted when the equipment is operating under at loads of 100, 75 and 50 percent while burning natural gas.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : D7, D9]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

29-2. The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet
CO emissions	District method 100.1	1 hour	Outlet
SOX emissions	District method 6.1	1 hour	Outlet
ROG emissions	Approved District method	1 hour	Outlet
PM10 emissions	District method 5.2	1 hour	Outlet

In addition to the source test requirements of Section E of this facility permit, the facility permit holder shall submit the protocol to the AQMD engineer no later than 45 days prior to the proposed test date, and notify the District of the date and time of the test at least 10 days prior to the test.

During the source test(s), the facility permit holder shall also measure the oxygen levels in the exhaust, flue flow rate (CFH), the flue gas rate, flue gas temperature, and the generator output (MW).

During the source test(s), the facility permit holder shall also analyze the natural gas and refinery gas mixture sulfur content in accordance with District Method 307.91.

The test(s) shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up.

The test shall be conducted when the equipment is operating under at loads of 100, 75 and 50 percent while burning the mixture of natural gas and refinery gas.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : D7, D9]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

29-3. The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
PM10 emissions	District method 5.2	1 hour	Outlet

The test(s) shall be conducted at least once every three years.

The test shall be conducted when the equipment is operating under normal conditions. However, no test shall be required in any one year if the equipment is not in operation.

The test shall be conducted to demonstrate compliance with the Rule 409 limit.

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D7, D9]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

29-4. The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet

The test shall be conducted and the results submitted to the AQMD within 45 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted at least quarterly during the first 12 months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit.

[RULE 1303(a)(1)-BACT, 5-10-1996]

{ Devices subject to this condition : C52, C61}

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

29-5. The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet of the SCR
CO emissions	District method 100.1	1 hour	Outlet of the SCR
SOX emissions	Approved District method	District-approved averaging time	Fuel Sample
ROG emissions	Approved District method	1 hour	Outlet of the SCR
PM emissions	Approved District method	District-approved averaging time	Outlet of the SCR
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet of the SCR

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine and steam turbine generating output in MW.

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the District engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the test, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of R304, and a description of all sampling and analytical procedures.

The test shall be conducted for all pollutants 1) when the gas turbine and duct burner are operating simultaneously at 100 percent of maximum heat input and 2) when the gas turbine is operating alone at 100 percent of maximum heat input. In addition, test shall be conducted when the gas turbine is operating alone at loads of 75 and 50 percent of maximum heat input for the NOx, CO, VOC and NH3 tests.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2005, 4-9-1999; RULE 2005, 4-20-2001**]

[Devices subject to this condition : D46, D48, D55, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

29-6. The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
SOX emissions	Approved District method	District-approved averaging time	Fuel Sample
ROG emissions	Approved District method	1 hour	Outlet of the SCR
PM emissions	Approved District method	District-approved averaging time	Outlet of the SCR

The test(s) shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the AQMD within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted 1) when the gas turbine and duct burner are operating simultaneously at 100 percent of maximum heat input and 2) when the gas turbine is operating alone at 100 percent of maximum heat input.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and emissions limits.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D46, D48, D55, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

40-1. The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 3 percent oxygen, dry basis.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 3 percent oxygen.

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

Source test results shall also include fuel flow rate (CFH) and generator output (MW) under which the test was conducted.

Emission data shall be expressed in terms of lbs/MM cubic feet.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1401, 3-17-2000; RULE 2012, 12-7-1995; RULE 2012, 3-16-2001**]

[Devices subject to this condition : D11]

40-2. The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 3 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 3 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2012, 12-7-1995; RULE 2012, 3-16-2001**]

[Devices subject to this condition : D7, D9]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

40-3. The operator shall provide to the District a source test report in accordance with the following specifications:

- Source test results shall be submitted to the District no later than 60 days after the source test was conducted.
- Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.
- All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).
- All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.
- Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2005, 4-9-1999; RULE 2005, 4-20-2001**]

[Devices subject to this condition : D46, D48, D55, D57]

57-1. The operator shall vent this equipment to the CO oxidation and SCR control whenever this equipment is in operation.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2005, 4-9-1999; RULE 2005, 4-20-2001**]

[Devices subject to this condition : D46, D48, D55, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

61-1. The operator shall not use refinery gas containing the following specified compounds:

Compound		ppm by volume
sulfur compounds calculated as hydrogen sulfide	greater than	40

The 40 ppm limit is averaged over 4 hours

[RULE 431.1, 6-12-1998]

[Devices subject to this condition : D7, D9, D11]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

63-1. The operator shall limit emissions from this equipment as follows

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 20566 LBS IN ANY ONE MONTH
PM10	Less than or equal to 20336 LBS IN ANY ONE MONTH
VOC	Less than or equal to 7588 LBS IN ANY ONE MONTH
SOX	Less than or equal to 2342 LBS IN ANY ONE MONTH

The operator shall calculate the emission limit(s) by using monthly fuel use data and the following emissions factors: PM10: 6.26 lbs/MMscf, VOC: 2.39 lbs/MMscf, and SOx: 0.72 lbs/MMscf. Written records of startups shall be maintained and made available to the AQMD.

The operator shall calculate the emission limit(s) for CO, during the commissioning period using fuel use data and the following emissions factors: 501 lbs/MMscf during the full speed no load tests and the part load tests when the turbine is operating at or below 60 percent load, and 14 lbs/MMscf during the full load tests when the turbine is operating above 60 percent load.

The operator shall calculate the emission limit(s) for CO, after the commissioning period and prior to the CO CEMS certification, using fuel use data and the following emission factors: 100 lbs per startup and 4.55 lbs/MMscf for all other operations.

The operator shall calculate the emission limit(s) for CO, after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan.

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from combined cycle gas turbines No. 5 and No. 7.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D46, D48, D55, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 67-4. The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas fuel use during the commissioning period.

Natural Gas usage after the commissioning period and prior to CEMS certification.

Natural Gas usage after the CEMS certification.

[**RULE 2012, 12-7-1995; RULE 2012, 3-16-2001**]

[Devices subject to this condition : D46, D48, D55, D57]

- 73-1. The operator may, at his discretion, choose not to use ammonia injection if any of the following requirement(s) are met:

the inlet exhaust temperature to the SCR reactor is below 500 degrees F

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1401, 3-17-2000; RULE 402, 5-7-1976**]

[Devices subject to this condition : C39, C41]

- 73-3. The operator may, at his discretion, choose not to use ammonia injection if any of the following requirement(s) are met:

The inlet exhaust temperature to the SCR is 450 degrees F or less, not to exceed 3 hours during a cold start-up, 2 hours during a warm start-up, and 1 hour during a hot start-up

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2005, 4-9-1999; RULE 2005, 4-20-2001**]

[Devices subject to this condition : C52, C61]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

82-1. The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated in accordance with an approved AQMD 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD. The CO CEMS shall be installed and operated within 90 days after initial start-up (first firing) of the gas turbines.

The CEMS shall be installed and operated to measure CO concentrations over a 15 minute averaging time period.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D46, D48, D55, D57]

82-2. The operator shall install and maintain a CEMS to measure the following parameters:

NOX concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operating no later than 12 months after the initial start-up of the turbine and shall comply with all requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within 2 weeks of the turbine start-up date, the operator shall provide written notification to the District of the exact date of start-up

[RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : D46, D48, D55, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

82-3. The operator shall install and maintain a CEMS to measure the following parameters:

NH₃ concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated to measure NH₃ concentration over a 15 minute averaging time period.

The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine.

The CEMS shall be installed and operated, in accordance with an AQMD approved CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : C52, C61]

90-1. The operator shall sample and analyze the sulfur content of the blended refinery-natural gas according to the following specifications:

The operator shall sample once per month or once per batch when burning blended refinery-natural gas. The draw time for the sample shall be at least 15 minutes. The analysis shall be conducted using District Method 307.91.

[40CFR 72 - Acid Rain Provisions, 11-24-1997]

[Devices subject to this condition : D7, D9, D11]

99-1. The 2.5 PPM NOX emission limit(s) shall not apply during turbine commissioning and startup periods. Startup time shall not exceed 3 hrs per day. The commissioning period shall not exceed 33 operating days from the initial startup. The operator shall provide the AQMD written notification of the startup date. No more than one turbine shall be in startup mode at any one time. Written records of commissioning and startups shall be maintained and made available upon request from AQMD.

[RULE 2005, 4-9-1999; RULE.2005, 4-20-2001]

[Devices subject to this condition : D46, D48, D55, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 99-2. The 6 PPM CO emission limit(s) shall not apply during turbine commissioning and startup periods. Startup time shall not exceed 3 hrs per day. The commissioning period shall not exceed 33 operating days from the initial startup. The operator shall provide the AQMD written notification of the startup date. No more than one turbine shall be in startup mode at any one time. Written records of commissioning and startups shall be maintained and made available upon request from AQMD.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D46, D48, D55, D57]

- 99-3. The 109 LBS/MMCF NOX emission limit(s) shall only apply during the turbine commissioning period during the full speed no load tests and the part load tests when the turbine is operating at or below 60 percent load to report RECLAIM emissions.

[RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : D46, D48, D55, D57]

- 99-4. The 33.9 LBS/MMCF NOX emission limit(s) shall only apply during the turbine commissioning period during the full load tests when the turbine is operating above 60 percent load to report RECLAIM emissions. This emission limit shall also apply during the interim reporting period to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from the initial startup date.

[RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : D46, D55]

- 99-5. The 102 LBS/MMCF NOX emission limit(s) shall only apply to report RECLAIM emissions during the interim period for the duct burner. The interim reporting period shall not exceed 12 months from the initial startup date.

[RULE 2012, 12-7-1995; RULE 2012, 3-16-2001]

[Devices subject to this condition : D48, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 99-6. The 80 Lbs/hr NOX emission limit(s) shall only apply during turbine startups. Only one turbine shall be in startup mode at any one time. Startups shall not exceed 3 hours per day per turbine.

[**RULE 2005, 4-9-1999; RULE 2005, 4-20-2001**]

[Devices subject to this condition : D46, D55]

- 157-1. The operator shall install and maintain a pressure relief valve set at 50 psig.

[Devices subject to this condition : D30]

- 179-2. For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition Number 12-3
Condition Number 12-4
Condition Number 12-6

[**RULE 2012, 12-7-1995; RULE 2012, 3-16-2001**]

[Devices subject to this condition : C39, C41]

- 179-3. For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every month and shall be calculated based upon the average of the continuous monitoring for that month.

Condition Number 12-5

[**RULE 2012, 12-7-1995; RULE 2012, 3-16-2001**]

[Devices subject to this condition : C39, C41]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 179-4. For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition Number 12-7

Condition Number 12-8

Condition Number 12-9

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : C52, C61]

- 193-1. The operator shall construct, operate, and maintain this equipment according to the following specifications:

In compliance with all mitigation measures as stipulated by the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" final subsequent Environmental Impact Report dated January, 1994 (SCH No. 88032315) for the El Segundo Generating Station ammonia storage and selective catalytic reduction project.

The schedule for installation of air pollution control (APC) equipment shall be done in consultation with the California Energy Commission (CEC) and the California Independent System Operator (CISO) to ensure that compliance with air pollution laws and requirements can be achieved with no significant power interruption.

For facilities operating under an Order of Abatement or a Settlement Agreement, in the event the specified schedule of installation of APC equipment under these agreements cannot be met, the operator must seek amendment of the Order of Abatement or Settlement Agreement at SCAQMD discretion.

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D11, C39, C41]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 193-2. The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In compliance with all mitigation measures as stipulated by the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" final subsequent Environmental Impact Report dated January, 1994 (SCH No. 88032315) for the El Segundo Generating Station ammonia storage and selective catalytic reduction project.

[Devices subject to this condition : D30]

- 193-3. The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In compliance with all Conditions of Certification included in the California Energy Commission Staff Assessment dated June 2001 (00-AFC-14) for the El Segundo Power Redevelopment Project.

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D30, D45, D46, D48, C52, D55, D57, C61]

- 195-1. The 10 PPMV NH₃ emission limit(s) are averaged over 60 minutes at 3 percent oxygen, dry. This limit shall be determined and measured in the combined exhaust from the North and South ducts.

[**RULE 1303(a)(1)-BACT, 5-10-1996**]

[Devices subject to this condition : C39, C41]

- 195-2. The 2.5 PPMV NO_x emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry.

[**RULE 2005, 4-9-1999; RULE 2005, 4-20-2001**]

[Devices subject to this condition : D46, D48, D55, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

195-3. The 6 PPMV CO emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D46, D48, D55, D57]

195-5. The 2 PPMV VOC emission limit(s) are averaged over 1 hour at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D46, D48, D55, D57]

195-6. The 5 PPMV NH₃ emission limit(s) are averaged over 60 mins at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : C52, C61]

296-1. This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

[RULE 2005, 4-9-1999; RULE 2005, 4-20-2001]

[Devices subject to this condition : D46, D48, D55, D57]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 305-1. Whenever this equipment is in operation, control devices C39 and C41 may be operated at any control efficiency provided that the emission concentrations being monitored by the certified CEMS serving this equipment is below the valid upper range specified in the approved CEMS plan.

[RULE 2012, 12-7-1995; RULE 2012, 4-9-1999]

[Devices subject to this condition : D11]

- 331-1. The conditions and requirements for this device in Section H shall take effect, and shall supersede those in Section D, when the modifications authorized in Section H are completed. The operator shall notify the AQMD when the modifications are completed.

[RULE 202, 5-7-1976]

[Devices subject to this condition : D7, D9, D11]

- 371-1. The operator shall conduct an inspection for visible emissions 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, the operator shall:

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 working days (or during the next fuel oil firing period if the unit ceases firing on fuel oil within the three working day time frame) 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 record by a certified smoke reader.

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D11]

FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 425-1. The operator shall have the existing CEMS monitoring this device recertified within 90 days of the start-up of the modification of this device. If the CEMS is not recertified within 90 days of start-up of this device, the facility permit holder shall calculate and report NOx emissions in accordance with Rule 2012, Appendix A, Chapter 2, Paragraph (B)(16) - Recertification Requirements.

[**RULE 2012, 12-7-1995; RULE 2012, 3-16-2001**]

[Devices subject to this condition : D7, D9]

STATE OF CALIFORNIA
Energy Resources Conservation
and Development Commission

In the Matter of:

**Application for Certification
of the El Segundo Power Plant
Redevelopment Project**

Docket No. 00-AFC-14

PROOF OF SERVICE LIST
*[*Revised 7/25/02]*

I, Pat Owen, declare that on January 31, 2003, I deposited copies of the attached letter dated February 14, 2002 from SOUTH COAST, AIR QUALITY MANAGEMENT DISTRICT TO MR. ROBERT L. THERKELSEN REGARDING EL SEGUNDO POWER REDEVELOPMENT PROJECT (00-AFC-14), in the United States mail at Sacramento, CA with first class postage thereon fully prepaid and addressed to the following:

DOCKET UNIT

*Send the original signed document plus
the required 12 copies to the address
below:*

CALIFORNIA ENERGY COMMISSION
DOCKET UNIT, MS-4
***Attn: Docket No. 00-AFC-14**
1516 Ninth Street
Sacramento, CA 95814-5512
E-mail:doCKET@energy.state.ca.us

* * * *

*In addition to the documents sent to the
Commission Docket Unit, also send
individual copies of any documents to:*

APPLICANT

Ron Cabe
El Segundo Power II LLC
301 Vista del Mar
El Segundo, CA 90245
ron.cabe@nrgeenergy.com

COUNSEL FOR APPLICANT

John McKinsey
Livingston & Mattesich, LLP
1201 K Street, 11th Floor

Sacramento, CA 95814
Jmckinsey@lmlaw.net
INTERESTED AGENCIES

***Jeff Miller**
California Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
***jmillier@caiso.com**

Katherine S. Poole
CURE
Adams, Broadwell, Joseph & Cardozo
651 Gateway Boulevard, Suite 900
South San Francisco, CA 94080
Kpoole@adamsbroadwell.com

John Theodore Yee, P.E.
South Coast Air Quality Mgmt. District
21865 E. Copley Drive
Diamond Bar, CA 91765-4182
Jyee@agmd.gov

City of El Segundo
Paul Garry (Planning)
350 Main Street
El Segundo, CA 90245
Pgarry@elsegundo.org

California State Lands Commission

***Attn: Dwight Sanders**

100 Howe Ave, Suite 100-South

Sacramento, CA 95825

***sanderd@slc.ca.gov**

INTERVENORS

William C. Reid

Utility Workers Union of America Local

246

10355 Los Alamitos Blvd.

Los Alamitos, CA 90720

Wmreid@earthlink.net

Mark D. Hensley

City Attorney, City of El Segundo

350 Main Street

El Segundo, CA 90245

Mhensley@bwsllaw.com

Michelle A. Murphy

Robert E. Perkins

4420 The Strand

Manhattan Beach, CA 90266

Murphyperkins@cs.com

City of Manhattan Beach

Community Development Dept.

Laurie Jester

1400 Highland Avenue

Manhattan Beach, CA 90266

Ljester@ci.manhattan-beach.ca.us

Robert Wadden

City Attorney

City of Manhattan Beach

1400 Highland Avenue

Manhattan Beach, CA 90266

Rwadden@ci.manhattan-beach.ca.us

Lyle & Elsie Cripe

4421 Ocean Drive

Manhattan Beach, CA 90266

cripe@adelphia.net

Richard G. Nickelson

4421 Crest Drive

Manhattan Beach, California 90266

***nickmf@adelphia.net**

I declare under penalty of perjury that the foregoing is true and correct.



[signature]

INTERNAL DISTRIBUTION LIST

FOR YOUR INFORMATION ONLY! Parties **DO NOT** mail to the following individuals. The Energy Commission Docket Unit will internally distribute documents filed in this case to the following:

ROBERT PERNELL
Commissioner & Presiding Member
MS-33

WILLIAM J. KEESE, Chairman
Associate Member
MS-32

Garret Shean
Hearing Officer
MS-9

James Reede
Project Manager
MS-15

David Abelson
Staff Counsel
MS-14

PUBLIC ADVISER

Roberta Mendonca
Public Adviser's Office
1516 Ninth Street, MS-12
Sacramento, CA 95814
Email: pao@energy.state.ca.us