La Paloma Generating Plant

POB175 (Mail)
1760 W. Skyline Road (Deliveries)
McKittrick, CA 93251

661.762.6000
Fax: 661.762.6041

DOCKET
98-AFC-2C
DATE MAR 31 2010
RECD. APR 05 2010

March 31, 2010

Mary Dyas
Compliance Project Manager
La Paloma Generating Project (Docket No. 98-AFC-2)
California Energy Commission
Energy Facility Siting Division
1516 Ninth Street MS-2000
Sacramento, CA 95814-5512

Subject: Petition for Amendment
Condition of Certification AQ-51: Cooling Tower PM_{10} Emission Limit
Docket No. 98-AFC-2

Dear Ms. Dyas,

La Paloma Generating Company, LLC (LPGC) herewith submits the attached petition for Amendment to Condition of Certification AQ-51. The purpose of the amendment is to update the PM_{10} emission limit for consistency with the San Joaquin Valley Air Pollution Control District Authority to Construct Permits that were issued March 1, 2010 for the cooling towers and the pending modification of the respective Title V Permits to Operate. Included in this petition is supporting information necessary for the CEC staff analysis. The petition references several documents that the CEC already has on file related to permits for the cooling towers.

Please do not hesitate to call Zenis Walley at 661.762.6003 or Bill Steiner (URS) at 503.948.7222 if there are any questions, need for clarification, or request for additional support data.

Sincerely,

Tom Romesberg
General Manager
La Paloma Generating Plant

cc: w/attachment Z. Walley L. Scandura (SJVAPCD) W. Steiner (URS)
w/o attachment N. Park M. Wooten W. Riley P. Oseguera

File 705.02.05/705.2.27

LA PALOMA GENERATING PLANT
LA PALOMA GENERATING COMPANY, LLC

PETITION FOR AMENDMENT TO CALIFORNIA ENERGY COMMISSION DECISION – DOCKET NO. 98-AFC-2 CONDITION OF CERTIFICATION: AQ-51

Prepared for submittal to
California Energy Commission
Sacramento, California

March 31, 2010

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INTRODUCTION AND BACKGROUND INFORMATION

La Paloma Generating Company, LLC (LPGC) is filing this petition for an amendment to the Commission Decision on the La Paloma Generating Project as part of Docket 98-AFC-2 (California Energy Commission (CEC), October 1999). As the CEC is aware, particulate matter (PM_{10}) emissions from the La Paloma Generating Plant's (Plant) cooling towers are a function of total dissolved solids (TDS) in the incoming water supply. Over time, LPGC has experienced increased TDS in the supply water source received from the California Aqueduct that is the result of northern California river and delta conditions beyond the control of LPGC. The increased TDS occasionally jeopardizes compliance with PM_{10} emission limits in the San Joaquin Valley Air Pollution Control District (SJVAPCD) air permits and CEC Condition AQ-51. Additional details are provided below.

This petition to amend Commission Decision Docket No. 98-AFC-2 is submitted pursuant to Section 1769 of Title 20 of the California Code of Regulations.

Changing Water Supply Conditions

On January 19, 2009, daily conductivity measurements of the Plant's incoming supply water identified conductivity at a level significantly higher than normal. Normal levels are in the range of 400-450 microSiemens/centimeter (mS/cm); the January 19, 2009 levels were between 760-800 mS/cm. The increased conductivity is indicative of the increase in TDS, which, according to communications with the California Department of Water Resources (DWR) and the West Kern Water District, is the result of salt water intrusion into the southern end of the Sacramento Delta due to long-term drought conditions. According to these two agencies, elevated TDS levels are expected to continue for the forseable future.

Affect on Cooling Tower Emissions

Higher TDS in the water leads to higher PM_{10} emissions as the water drift from the cooling towers evaporates to small aerosol. The only way to reduce the TDS (hence PM_{10}) is to "blowdown" the water, or remove it from the cooling towers and replace it with fresh water from the California Aqueduct at a faster rate. Blowdown is defined as the portion of the recirculating water flow within each cooling tower that is removed and replaced with fresh water in order to maintain the amount of TDS and other impurities at an acceptable level within the cooling tower recirculation water. The Plant's water treatment facility is designed to handle a specific amount of cooling tower blowdown along with other Plant waste waters. As the CEC is aware, a USEPA Class I non-hazardous UIC well was recently installed by LPGC and commenced operation in 2009 to augment waste water LPGC's disposal options. However, the resultant disposal capacity is not adequate to handle the substantial increase in cooling tower blowdown water that would be required to maintain peak cooling tower TDS levels at their historic levels. Additional details were documented in the SJVAPCD variance petition and air permit applications identified below. Thus, LPGC would not be able to maintain compliance with existing PM_{10} emission limits during days when elevated source water TDS levels are experienced.

Unless TDS in the aqueduct source water increases substantially above last year's levels, actual cooling tower emissions are expected to remain be well below 20 lb/day, which was established to provided a reasonable margin for compliance. Concentrations of TDS and cooling tower emissions were monitored daily during the one-year variance period (March 11, 2009 through March 10, 2010). Results were recently reported by LPGC in a March 17, 2010 letter to the SJVAPCD, and a copy was sent to the CEC. During the reporting period, daily PM10 emissions averaged 10.4 lb from each cooling tower; peak emissions rates were 16.0 lb/day and 14.1 lb/day for cooling towers 1 and 2, respectively, which is well below the new permit limit. The previous 11.2 lb/day permit limit was exceeded less than half of the year (154 and 141 days for cooling towers 1 and 2, respectively).

Air Permit Modifications

On February 2, 2009, LPGC petitioned the SJVAPCD for a one-year variance to allow further research into the TDS issue and allow time for a permit modification, if needed. The SJVAPCD Hearing Board approved a Regular Variance, Docket No. S-09-10R, on March 11, 2009 to temporarily relieve LPGC from the relevant emission limit conditions in the facility-wide Permit to Operate (PTO) and for the two cooling tower PTO, i.e., PTO S-3412-0-1, PTO S-3412-5-3, and PTO S-3412-6-3, respectively. Condition 3 of both PTO S-3412-5-3 and PTO S-3412-6-3 limited PM_{10} emissions to 11.2 lb/day from each unit. The one-year variance allowed for continued operation of the entire generating facility with potential excess PM_{10} emissions from the two cooling towers. The CEC received copies of the petition and variance.

The original purpose of the variance was to provide LPGC time to research the TDS issue, quantify PM_{10} emissions from the cooling towers based on 2009 water data, and, if possible, to find a resolution to the increased emissions, bringing them back into compliance with the permit limits. However, LPGC concluded that increased TDS levels in the water supply will be a long-term condition that cannot be resolved by power plant modifications. The variance expired on March 10, 2010. Prior to that date, LPGC took the following actions to modify PTO S-3412-5-3, and PTO S-3412-6-3:

- On October 13, 2009, LPGC submitted an Authority to Construct (ATC) application for a minor permit modification to increase the daily PM_{10} emission limit for each unit from 11.2 lb/day to 20 lb/day in Condition 3.

- In compliance with the applicable SJVAPCD new source review rules, LPGC also subsequently purchased and surrendered the required amount of PM_{10} Emission Reduction Credits (ERC) to mitigate the requested emission increase from both cooling towers. Offsets were retired at a 1.5:1 ratio; thus, the retired ERC amount was 50 percent greater than the increase in permitted emissions, providing for a net air quality benefit to the air basin according to SJVAPCD rules and the State Implementation Plan (SIP).

- On March 1, 2010, the SJVAPCD issued final ATC Permit S-3412-5-5 and ATC Permit S-3412-6-5 to implement the revised 20 lb/day PM_{10} emission limit in Condition 3 (see Attachment 1). These ATC Permits were reviewed by U.S. EPA Region 9, and they include a Title V Certification of Compliance.

- On March 8, 2010, LPGC submitted an application to SJVAPCD to administratively amend Title V PTO S-3412-5-3 and PTO S-3412-6-3 to incorporate the emission limit change in ATC Permit S-3412-5-5 and ATC Permit S-3412-6-5. The ATC Permits temporarily serve as the facility's cooling tower PTO until revised Title V PTO are issued by the SJVAPCD.

The CEC received copies of each application listed above.

A. DESCRIPTION OF PROPOSED AMENDMENT

a. Description of Amendment

The requested Commission Decision amendment would change the language of Condition of Certification AQ-51 to incorporate the recent modification to the cooling tower air permits described above.

b. New Language

The following is the only proposed change to the Conditions of Certification:

AQ-51: PM10 emission rate for each cooling tower shall not exceed ~~11.2~~ 20 lb/day. [District Rule 2201]

Verification: [No change]

B. NECESSITY OF AMENDMENT

The requested amendment would assure consistency between the Commission Decision and LPGC current air permits, and is necessary to allow future compliance with cooling tower emission limits in the Commission Decision.

C. INFORMATION KNOWN AT TIME OF CERTIFICATION PROCESS

Information that forms the basis for this amendment was not known at the time of the original certification process.

D. NEW INFORMATION

New information, since initiation of commercial operation in 2003, based on actual operating experience has revealed that TDS levels in California Aqueduct water is increasing beyond LPGC control. In January 2009, LPGC became aware of the elevated TDS levels.

Without the requested change in Conditions of Certification, the Plant will be unable to operate entirely in compliance with the current cooling tower emission limit. Based on this new information, the Commission Decision should be amended.

E. IMPACT ANALYSIS OF AMENDMENT

a. Applicable Conditions of Certification

The following Condition of Certification is applicable: AQ-51.

b. Impact Analysis

The January 26, 2010 SJVAPCD Authority to Construct Application Review for ATC Permit S-3412-5-5 and ATC Permit S-3412-6-5 (see Attachment 2), concluded on page 18 that the cooling tower permit modification will not have a significant effect on the environment, and that the action was categorically exempt from the provisions of the California Environmental Quality Act (CEQA).

1. Air Quality

The requested increase in permitted emissions has been fully mitigated through the purchase and retirement of qualified SJVAPCD ERC, as described above. The 1.5:1 offset ration required by SJVAPCD rules provides for a net air quality benefit to the air basin.

2. Biological Resources

The proposed increase in maximum daily cooling tower emissions will have no known impact on biological resources surrounding the Plant. Please note that cooling tower PM_{10} emissions continue to be less than the originally permitted 11.2 lb/day emission limit during most days of the year. Emissions above 11.2 lb/day only occurred during limited instances in 2009, and remained well below 20.0 lb/day.

No modifications to the Biological Resources conditions in the Commission Decision will be required.

3. Public Health and Worker Safety

The proposed amendment does not present significant potential impacts related to public health or worker safety that were not contemplated by the AFC or the Commission Decision. The proposed Condition amendment will not significantly affect toxic emissions from the cooling tower. California Aqueduct water, used as source water for the cooling towers, is not known to contain significant levels of toxic compounds. As the CEC is aware, toxic metals such as chromium are not added to the cooling tower water. Water pH is adjusted with sulfuric acid and biological growth is controlled sodium hypochlorite. The use of these two chemicals will not change as a result of the proposed

Condition amendment. Furthermore, during processing of the LPGC ATC Permit, SJVAPCD staff evaluated potential air toxic emissions and impacts, and found that no significant air toxic impacts will occur. Please see Appendix E in the ATC Application Review Attachment 2).

No modifications to the Public Health or Worker Safety conditions in the Commission Decision will be required.

4. Visual Resources

The proposed amendment will have no effect on visual resources. Increased PM_{10} emissions have been offset with ERC by a 1.5:1 ratio to produce a net benefit within the air basin as noted above.

No modifications to Visual Resources conditions in the Commission Decision will be required.

5. Soil and Water Resources

The proposed amendment will have no significant effect on soil and water resources. Any increase in PM_{10} deposition will be minimal and the contents will essentially be dried California Aqueduct dissolved solids.

No modifications to Soil and Water Resources conditions in the Commission Decision will be required.

6. Other Resource Areas

Finally, other resource areas, including cultural resources, noise, traffic and transportation, hazardous material management, waste management, land use, and socioeconomics, impacts will not be affected by the proposed amendment. Therefore, no modification to the Commission Decision for these resources topics will be required.

F. COMPLIANCE WITH LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS)

The proposed modification to Condition AQ-51 does not represent any change to facility design elements or present any significant new environmental impacts. The SJVAPCD has previously approved the requested increase in permitted emissions. The ATC Permits issued by SJVAPCD include a Title V Certification of Compliance, documenting that U.S. Environmental Protection Region 9 concurs with the permit change. Therefore, the requested amendment will not affect the ability of LPGC to comply with all applicable LORS.

G. EFFECTS OF AMENDMENT ON THE PUBLIC

The amendment will not present any significant additional impacts that would have an adverse affect on the public. Allowing the Plant to continue operating in compliance with air emission limits will enable LPGC to continue to provide reliable electric power to the grid system, thereby, resulting in a positive affect on the public.

H. LIST OF PROPERTY OWNERS

The following is a list of property owners adjacent to the project area:

APN	Owner	Address
157-110-05	USA/BLM	3801 Pegasus Drive Bakersfield, CA 93308-6837
157-110-20	Berry Petroleum Company	5201 Truxtun Avenue, No. 300 Bakersfield, CA 93309-6409 1999 Broadway, Suite 3700 Denver, CO 80202
157-210-05	Crimson Resource Management Corporation	410 17th Street, No. 1010 Denver, CO 80202
157-220-02	Chevron USA, Inc.	P.O. Box 1392 Bakersfield, CA 93302-1392
157-220-03	Pagels Family Survivor Trust A	2031 New Brunswick Drive San Mateo, CA 94402
157-220-05	USA/BLM	3801 Pegasus Drive Bakersfield, CA 93308-6837
157-230-03	Chevron USA, Inc.	P.O. Box 1392 Bakersfield, CA 93302-1392
157-230-15	Chevron USA, Inc.	P.O. Box 1392 Bakersfield, CA 93302-1392
157-260-03	Chevron USA, Inc.	P.O. Box 1392 Bakersfield, CA 93302-1392
157-260-04	Zollars Family Trust	3024 Lewis Street Placerville, CA 95667-5601
157-270-01	Occidental of Elk Hills, Inc.	P.O. Box 27570 Houston, TX 77277-7570

I. EFFECTS ON NEARBY PROPERTY OWNERS, THE PUBLIC, AND PARTIES TO THE APPLICATION

The amendment will not result in any additional impacts. The nearest residences are 1.5 miles west of the Plant. Therefore, there will be no adverse impacts on nearby property owners, the public, or parties in the application proceedings.

ATTACHMENT 1

Modified Authority to Construct Permits – ATC Permit S-3412-5-5 and ATC Permit S-3412-6-5

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MAR 0 3 2010

LA PALOMA GENERATING PLANT
FILE# 705.01.06

Mr. Nick Park
La Paloma Generating Company, LLC
PO Box 175
McKittrick, CA 93251

Re: Final - Authority to Construct / Certificate of Conformity (Minor Mod)
Project # S-1095023

Dear Mr. Park:

The Air Pollution Control Officer has issued Authorities to Construct (S-3412-5-5 and S-3412-6-5) with Certificates of Conformity to La Paloma Generating Company, LLC. PM10 emissions from the cooling towers will increase due to an increase in total disolved solids in the facility water supply.

Enclosed are the Authorities to Construct and invoice. The application and proposal were sent to US EPA Region IX on February 16, 2010. No comments were received following the District's preliminary decision on this project.

Prior to operating with modifications authorized by the Authority to Construct, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

David Warner
Director of Permit Services

Enclosures
dk

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

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AUTHORITY TO CONSTRUCT

PERMIT NO: S-3412-5-5 **ISSUANCE DATE:** 03/01/2010

LEGAL OWNER OR OPERATOR: LA PALOMA GENERATING CO LLC
MAILING ADDRESS: PO BOX 175
MCKITTRICK, CA 93251

LOCATION: 1760 W SKYLINE ROAD
MCKITTRICK, CA 93251

SECTION: NE27 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
MODIFICATION OF COOLING TOWER #1 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR:INCREASE PM10 LIMIT

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
4. Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. PM10 emission rate shall not exceed 20.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Daily PM10 emissions shall be calculated as follows: PM10 lb/day = cooling water recirculation rate * total dissolved solids concentration in the blowdown water * design drift rate * 0.5. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
S-3412-5-5 Mar 1 2010 10:39AM – KLEVANND Joint Inspection NOT Required

7. PM10 emissions shall be determined by quarterly cooling water sample analysis. If any quarterly testing results indicate noncompliance, weekly testing shall be conducted until eight (8) consecutive weeks of testing have demonstrated compliance, at which time quarterly sampling may resume. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of cooling water sample analysis. All records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4201 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4202 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. Upon implementation of this ATC emission offsets shall be provided to offset the following increases in emissions PM10-Q1: 803 lbs, Q2: 803 lbs, Q3: 803 lbs, and Q4: 803 lbs. The offset ratio used shall be as specified in District Rule 2201 (amended 09/21/06) Table 4-2. [District Rule 2201] Federally Enforceable Through Title V Permit
12. ERC Certificate Number C-1054-4 shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

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AUTHORITY TO CONSTRUCT

PERMIT NO: S-3412-6-5 **ISSUANCE DATE:** 03/01/2010

LEGAL OWNER OR OPERATOR: LA PALOMA GENERATING CO LLC
MAILING ADDRESS: PO BOX 175
MCKITTRICK, CA 93251

LOCATION: 1760 W SKYLINE ROAD
MCKITTRICK, CA 93251

SECTION: NE27 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
MODIFICATION OF COOLING TOWER #2 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR: INCREASE PM10 LIMIT

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
4. Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. PM10 emission rate shall not exceed 20.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Daily PM10 emissions shall be calculated as follows: PM10 lb/day = cooling water recirculation rate * total dissolved solids concentration in the blowdown water * design drift rate * 0.5. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
S-3412-6-5 Mar 1 2010 10:39AM -- KLEVANND Joint Inspection NOT Required

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7. PM10 emissions shall be determined by quarterly cooling water sample analysis. If any quarterly testing results indicate noncompliance, weekly testing shall be conducted until eight (8) consecutive weeks of testing have demonstrated compliance, at which time quarterly sampling may resume. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

8. The operator shall maintain records of cooling water sample analysis. All records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

9. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4201 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4202 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. Upon implementation of this ATC emission offsets shall be provided to offset the following increases in emissions PM10-Q1: 803 lbs, Q2: 803 lbs, Q3: 803 lbs, and Q4: 803 lbs. The offset ratio used shall be as specified in District Rule 2201 (amended 09/21/06) Table 4-2. [District Rule 2201] Federally Enforceable Through Title V Permit

12. ERC Certificate Number C-1054-4 shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct [District Rule 2201] Federally Enforceable Through Title V Permit

ATTACHMENT 2

SJVAPCD Authority to Construct Application Review for ATC Permit S-3412-5-5 and ATC Permit S-3412-6-5

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LA PALOMA GENERATING PLANT
FILE# 705.01.06

Nick Park
La Paloma Generating Company, LLC
P O Box 175
McKittrick, CA 93251

Re: Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)
District Facility # S-3412
Project # S-1095023

Dear Mr. Park:

Enclosed for your review is the District's analysis of your application for Authorities to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. PM10 emissions from the cooling towers will increase due to an increase in total disolved solids in the facility water supply.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures
cc: Dan Klevann, Permit Services

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

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34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Increase PM10 emissions from cooling towers

Facility Name:	La Paloma Generating Company LLC	Date:	January 26, 2010
Mailing Address:	1760 West Skyline Road	Engineer:	Dan Klevann
	McKittrick, CA 93251	Lead Engineer:	Richard Karrs
Contact Person:	Nick Park		
Telephone:	661-762-6047		
Fax:	661-762-6041		
E-Mail:	npark@complete-energy.com		
Application #s:	S-3412-5-5, S-3412-6-5		
Project #:	S-1095023		
Deemed Complete:	October 29, 2009		

I. Proposal

The primary business of La Paloma Generating Company LLC (LPGC) is power generation. LPGC has submitted an Authority to Construct (ATC) application for the following:

- Increase the PM10 emission limit for the cooling tower from 11.2 lb/day to 20 lb/day.

The increase is required because the source of the facilities water is now providing water with a higher level of total dissolved solids than what they have supplied in the past. LPGC has a regular variance from the District at this time. LPGC needs to resolve the issue before the variance expires. The facility is not able to adjust their process enough to absorb the new levels. Therefore, they are applying to increase the amount of PM10 they can emit. The facility is providing offsets for the increase in PM10 emissions.

LPGC received their Title V Permit on January 1, 2005. This modification can be classified as a Title V minor modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. LPGC must apply to administratively amend their Title V Operating Permit to include the requirements of the ATCs issued with this project.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (9/21/06)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4801	Sulfur Compounds (12/17/92)

Rule 7102 Hexavalent Chromium (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The facility is located at 1760 W Skyline Road in McKittrick, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

The LPGC facility consists of four Asea Brown Bovari (ABB) model GT-24 natural gas fired combined cycle gas turbine engines (GTEs) with steam turbines and electrical generators. The GTEs utilize dry low NOx combustors and steam power augmentation. All four of the GTEs (S-3412-1, '2, 3, and '4) are equipped with selective catalytic reduction (SCR) and an oxidation catalyst.

Auxiliary equipment includes two cooling towers, four emergency diesel fired IC engines driving electrical generators used during grid power outages and one emergency diesel fired IC engine driving a firewater pump.

Two cooling towers provide heat rejection for the GTEs and steam turbines. Each cooling tower will consists of 8 cells and have a water flow rate of 104,000 gal/min and an air flow rate of 155,380 acf/sec. Each cooling tower is equipped with a high efficiency mist eliminator to minimize cooling tower drift and the resultant PM10 emissions. The PM10 emissions are due to total dissolved solids (TDS) in the cooling water.

V. Equipment Listing

Pre-Project Equipment Description:

S-3412-5-3: COOLING TOWER #1 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

S-3412-6-3: COOLING TOWER #2 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

Proposed Modification:

Allow for an increase in the PM10 emissions due to a change in water supply TDS. The ATC equipment description will read as follows:

S-3412-5-5: COOLING TOWER #1 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR: INCREASE PM10 LIMIT

S-3412-6-5: COOLING TOWER #2 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR: INCREASE PM10 LIMIT

Post Project Equipment Description:

S-3412-5-5: COOLING TOWER #1 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

S-3412-6-5: COOLING TOWER #2 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

VI. Emission Control Technology Evaluation

Cooling tower control technology:

The cooling towers are a source of PM10 emissions. PM10 emissions are due to the total dissolved solids (TDS), mostly salts, in the cooling water. In the cooling process, some of the cooling water (and TDS) is carried out. This is referred to as drift. Some portion of the drift dries in the air before settling to ground, and its TDS content can thereby become airborne PM. Applicant has conservatively assumed that all drift will remain suspended in the air and will dry to PM10. This approach overstates PM10 emissions.

Cooling water drift is controlled by using drift eliminators in each of the cooling tower cells. These drift eliminators act as a coalescer for the evolved cooling water to collect on and drop back into the process stream. The proposed drift eliminators have a drift rate of 0.0006 %, i.e. 0.0006% of the cooling water circulated is emitted.

VII. General Calculations

A. Assumptions and Emission Factors

Cooling Towers:

Cooling tower water circulation rate = 104,000 gal/min

Density of water = 8.34 lb/gal

Cooling water drift total dissolved solids (TDS) = 1500 ppmw

TDS is predominately sodium chloride.

Cooling tower drift eliminator has a drift rate of 0.0006% (0.0006% of circulated water is emitted)

B. Calculations

1. Pre-Project Potential to Emit (PE1)

Cooling Towers S-3412-5 and '6:

Because the cooling towers are identical, only one set of calculations will be performed.

Cooling towers are the source of PM10 emissions only.

PM10 per cooling tower = water circulation rate * drift rate * TDS concentration * density of water

PM10 PE1 = 104,000 gal/min * 60 min/hr * 24 hr/day * 0.0006 * 1500 E-6 * 8.34 lb/gal / 100
= 11.2 lb/day
= 4,088 lb/yr

S-3412-5 Pre-Project Potential to Emit (PE1)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO_X	0	0
SO_X	0	0
PM_{10}	11.2	4,088
CO	0	0
VOC	0	0

S-3412-6 Pre-Project Potential to Emit (PE1)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO_X	0	0
SO_X	0	0
PM_{10}	11.2	4,088
CO	0	0
VOC	0	0

2. Post Project Potential to Emit (PE2)

The applicant has proposed a PM10 emission rate of 20 lb/day. The water supply for the makeup water is being subject to variability and could change from TDS concentration of 500 ppm to 1000 ppm. The applicant has determined that their system will function at various TDS rates and various blowdown rates. The applicant will continue to calculate the PM10 emissions as currently.

S-3412-5 Post Project Potential to Emit (PE2)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO_X	0	0
SO_X	0	0
PM_{10}	20	7,300
CO	0	0
VOC	0	0

S-3412-6 Post Project Potential to Emit (PE2)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO_X	0	0
SO_X	0	0
PM_{10}	20	7,300
CO	0	0
VOC	0	0

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)					
Permit Unit	NO_X	SO_X	PM_{10}	CO	VOC
S-3412-1	146001	30517	96360	217921	25063
S-3412-2	146001	30517	96360	217921	25063
S-3412-3	146001	30517	96360	217921	25063
S-3412-4	146001	30517	96360	217921	25063
S-3412-5	0	0	4088	0	0
S-3412-6	0	0	4088	0	0
S-3412-8	144	3	8	177	20
S-3412-9	144	3	8	177	20
S-3412-10	144	3	8	177	20

S-3412-11	144	3	8	177	20
S-3412-13	815	0	377	2006	710
S-3412-14	444	18	15	47	13
Pre-Project SSPE (SSPE1)	585839	122098	394040	874445	101055

4. Post Project Stationary Source Potential to Emit (SSPE2)

Post-Project Stationary Source Potential to Emit [SSPE2] (lb/year)					
Permit Unit	NO_X	SO_X	PM_{10}	CO	VOC
S-3412-1	146001	30517	96360	217921	25063
S-3412-2	146001	30517	96360	217921	25063
S-3412-3	146001	30517	96360	217921	25063
S-3412-4	146001	30517	96360	217921	25063
S-3412-5	0	0	7300	0	0
S-3412-6	0	0	7300	0	0
S-3412-8	144	3	8	177	20
S-3412-9	144	3	8	177	20
S-3412-10	144	3	8	177	20
S-3412-11	144	3	8	177	20
S-3412-13	815	0	377	2006	710
S-3412-14	444	18	15	47	13
Post-Project SSPE (SSPE2)	585839	122098	400464	874445	101055

5. Major Source Determination

Pursuant to Section 3.24 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.24.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site."

This source is an existing Major Source for PM10 emissions and will remain a Major Source for PM10. No change in other pollutants are proposed or expected as a result of this project.

6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project, to calculate the QNEC and if applicable, to determine the amount of offsets required.

Pursuant to Section 3.7 of District Rule 2201, BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.22 of District Rule 2201.

a. BE PM10

Pursuant to Rule 2201, Section 3.12, a Clean Emissions Unit is defined as an emissions unit that is "equipped with an emissions control technology with a minimum control efficiency of at least 95% or is equipped with emission control technology that meets the requirements for achieved-in-practice BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application.

This emissions unit is equipped with a high efficiency drift eliminator, which meets the requirements for technologically feasible BACT. Therefore, Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1).

BE = PE1
=104,000 gal/min * 60 min/hr * 24 hr/day * 0.0006 * 365 days * 1500 E-6 * 8.34 lb/gal / 100
= 4,088 lb PM10/year

7. Major Modification

Major Modification is defined in 40 CFR Part 51.165 as "*any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.*"

As discussed in Section VII.C.5 above, the facility is an existing Major Source for PM10; however, the project by itself would need to be a significant increase in order to trigger a Major Modification. The emissions units within this project do not have a total potential to emit which is greater than Major Modification thresholds (see table below). Therefore, the project cannot be a significant increase and the project does not constitute a Major Modification.

Major Modification Thresholds (Existing Major Source)			
Pollutant	Project PE (lb/year)	Threshold (lb/year)	Major Modification?
NO_x	0	50,000	No
SO_x	0	80,000	No
PM_{10}	6424	30,000	No
VOC	0	50,000	No

8. Federal Major Modification

As shown above, this project does not constitute a Major Modification. Therefore, in accordance with District Rule 2201, Section 3.17, this project does not constitute a Federal Major Modification and no further discussion is required.

9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix F.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in a Major Modification.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

As discussed in Section I above, there are no new emissions units associated with this project; therefore BACT for new units with PE > 2 lb/day purposes is not triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

AIPE = PE2 – HAPE

Where,
AIPE = Adjusted Increase in Permitted Emissions, (lb/day)
PE2 = Post-Project Potential to Emit, (lb/day)
HAPE = Historically Adjusted Potential to Emit, (lb/day)

HAPE = PE1 x (EF2/EF1)

Where,
PE1 = The emissions unit's Potential to Emit prior to modification or relocation, (lb/day)
EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1
EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

AIPE = PE2 – (PE1 * (EF2 / EF1))

S-3412-5:
Cooling tower:
AIPE = 20 – 11.2
= 8.8 lb/day

As demonstrated above, the AIPE is greater than 2.0 lb/day for PM_{10} emissions for the cooling tower; therefore BACT is triggered.

d. Major Modification

As discussed in Section VII.C.7 above, this project does not constitute a Major Modification; therefore BACT is not triggered.

2. BACT Guideline

BACT Guideline 8.3.10, applies to the cooling tower. [Cooling Tower - Induced Draft, Evaporative Cooling] (See Appendix C)

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see Appendix D), BACT has been satisfied with the following:

PM_{10}: Cellular type drift eliminator

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post Project Stationary Source Potential to Emit (SSPE2) equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

Offset Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
Post Project SSPE (SSPE2)	585839	122098	400464	874445	101055
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	Yes	Yes	Yes	Yes

2. Quantity of Offsets Required

As seen above, the facility is an existing Major Source for PM10 and the SSPE2 is greater than the offset thresholds; therefore offset calculations will be required for this project.

Per Sections 4.7.1 and 4.7.3, the quantity of offsets in pounds per year for PM10 is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = $(\Sigma[PE2 - BE] + ICCE) \times DOR$, for all new or modified emissions units in the project,

Where,
PE2 = Post Project Potential to Emit, (lb/year)
BE = Baseline Emissions, (lb/year)
ICCE = Increase in Cargo Carrier Emissions, (lb/year)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE)

As calculated in Section VII.C.6 above, the Baseline Emissions (BE) from this unit are equal to the Pre-Project Potential to Emit (PE1) since the unit is a Clean Emissions Unit. Also, there is only one emissions unit associated with this project and there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

For each of the cooling towers:

Offsets Required (lb/year) = ([PE2 – BE] + ICCE) x DOR

PE2 (PM10) = 7,300 lb/year
BE (PM10) = 4,088 lb/year
ICCE = 0 lb/year

Offsets Required (lb/year) = ([7,300 – 4,088] + 0) x 1.5
= 4,818 lb PM10/year

As demonstrated in the calculation above, the amount of offsets is 4,818 lb PM10/yr for each of the cooling towers for a total amount of offsets for this project of 9636 lb PM10/yr.

LPGC has identified ERC certificate C-1054-4 as the certificate to use for the project. The emissions are all in the 4th quarter currently and will be spread across each quarter equally to account for the increase. The ERC will be surrendered as it is created to provide the offsets now.

C. Public Notification

1. Applicability

Public noticing is required for:

a. Any new Major Source, which is a new facility that is also a Major Source,
b. Major Modifications,
c. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
d. Any project which results in the offset thresholds being surpassed, and/or
e. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a. New Major Source

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

b. Major Modification

As demonstrated in VII.C.7, this project does not constitute a Major Modification; therefore, public noticing for Major Modification purposes is not required.

c. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project; therefore public noticing is not required for this project for Potential to Emit Purposes.

d. Offset Threshold

The facility was already over the offset threshold pre-project. Therefore, no offset threshold has been surpassed.

e. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e. SSIPE = SSPE2 – SSPE1. The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively. PM10 is the only pollutant increasing in this project. The increase is 6,424 lb/yr therefore public noticing for SSIPE purposes is not required.

2. Public Notice Action

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest

PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

For the cooling towers, the DELs are stated in the form of cooling water recirculation, drift rate, and TDS.

Proposed Rule 2201 (DEL) Conditions:

Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Y

Daily PM10 emissions shall be calculated as follows: PM10 lb/day = cooling water recirculation rate * total dissolved solids concentration in the blowdown water * design drift rate * 0.5. [District NSR Rule] Y

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) will appear on the permit to operate:

- PM10 emissions shall be determined by quarterly cooling water sample analysis. If any quarterly testing results indicate noncompliance, weekly testing shall be conducted until eight (8) consecutive weeks of testing have demonstrated compliance, at which time quarterly sampling may resume. [District NSR Rule and District Rule 2520, 9.3.2]

- The operator shall maintain records of cooling water sample analysis. All records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit pursuant to Section 3.20 of this rule:

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
    a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
    b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an adrministrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. However, no subparts of 40 CFR Part 60 apply to cooling towers.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to cooling tower operations.

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). The cooling towers are not expected to have visible emissions, excluding uncombined water vapor, greater than 20% opacity.

Also, based on past inspections of the facility continued compliance is expected.

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (Appendix E), the total facility prioritization score including this project was less than or equal to one. Therefore, no future analysis is required to determine the impact from this project and compliance with the District's Risk Management Policy is expected.

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

$$\text{PM Conc. (gr/scf)} = \frac{\text{(PM emission rate) x (7,000 gr/lb)}}{\text{(Air flow rate) x (60 min/hr) x (24 hr/day)}}$$

PM Emissions = 1.67 lb/hr (double the actual PM10 emission limit as worst case)

Exhaust Gas Flow, dscfm = 1,612,745 acf/sec (for the purposes of this calculation, assume acf = dscf; temperatures expected to be ambient, and acf rating based on fan airflow)

$$\text{Grain Loading} = \frac{(1.67\ \text{lb/hr} \times 1\ \text{hour}/60\ \text{min} \times 7000\ \text{grains/lb})}{1{,}612{,}745\ \text{dscf}} = 0.0001\ \text{gr/dscf}$$

As shown above, PM emissions for the cooling tower will be less than 0.1 gr/dscf. Compliance is expected.

Rule 4202 PM emission rate

Rule 4202 establishes PM emission limits as a function of process weight rate in tons/hr. Below are calculations demonstrating that the cooling towers will not violate the calculated Rule 4202 PM emission limit.

Weight rate/cooling tower = 104,000 gal/min * 60 min/hr * 8.34 lb/gal / 2000 lb/ton
= 26,020 ton/hr

Rule 4202 emission limit = 17.31 * 26,020^ 0.16
= 88 lb/hr

Each cooling tower has a PM10 emission rate of 0.83 lb/hr (20.0 lb/day / 24 hr/day). All cooling tower PM emissions are PM10.

As seen above, the cooling towers have a PM emission rate less than that allowed by Rule 4202. Compliance is expected.

Rule 7012 Hexavalent Chromium - Cooling Towers

The cooling tower will not use hexavalent chromium and meets the exemption criteria in section 4.1.2. Therefore, the cooling towers are exempt from the requirements of Rule 7012 except for the 5.2.1, 6.1, and 7.1.

Section 5.2.1 requires that no hexavalent chromium compounds be added after 9/16/91 (intended to apply to cooling towers that previously used hexavalent chromium).

Section 6.1 requires that the owner/operator of a new cooling tower submit a compliance plan at least 90 days before it is operated containing business information, location of cooling tower, type and materials of construction, and a statement regarding the use or non use of hexavalent chromium. This information has already been submitted to the District as required for past projects.

Section 7.1 requires that the permittee pay permit filing fees associated with cooling tower. EHP has paid such fees.

Compliance is expected

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful EPA 45 day Noticing period, issue Authorities to Construct S-3412-5-5 and S-3412-6-5 subject to the permit conditions on the attached draft ATC's in Appendix B.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-3412-5-5	999-99	part of elec gen process, no add'l fees	$0.00
S-3412-6-5	999-99	part of elec gen process, no add'l fees	$0.00

Appendices

A: Current PTO(s)
B: Draft ATC(s)
C: BACT Guideline
D: BACT Analysis
E: HRA Summary
F: Quarterly Net Emissions Change
G: Emission Profile(s)

APPENDIX A
Current PTOs

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-3412-5-3 **EXPIRATION DATE:** 01/31/2010

SECTION: NE27 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
COOLING TOWER #1 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
2. Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Federally Enforceable Through Title V Permit
3. PM10 emission rate shall not exceed 11.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Daily PM10 emissions shall be calculated as follows: PM10 lb/day = cooling water recirculation rate * total dissolved solids concentration in the blowdown water * design drift rate * 0.5. [District NSR Rule] Federally Enforceable Through Title V Permit
5. PM10 emissions shall be determined by quarterly cooling water sample analysis. If any quarterly testing results indicate noncompliance, weekly testing shall be conducted until eight (8) consecutive weeks of testing have demonstrated compliance, at which time quarterly sampling may resume. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The operator shall maintain records of cooling water sample analysis. All records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4201 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4202 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-3412-6-3 **EXPIRATION DATE:** 01/31/2010

SECTION: NE27 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
COOLING TOWER #2 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
2. Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Federally Enforceable Through Title V Permit
3. PM10 emission rate shall not exceed 11.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Daily PM10 emissions shall be calculated as follows: PM10 lb/day = cooling water recirculation rate * total dissolved solids concentration in the blowdown water * design drift rate * 0.5. [District NSR Rule] Federally Enforceable Through Title V Permit
5. PM10 emissions shall be determined by quarterly cooling water sample analysis. If any quarterly testing results indicate noncompliance, weekly testing shall be conducted until eight (8) consecutive weeks of testing have demonstrated compliance, at which time quarterly sampling may resume. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The operator shall maintain records of cooling water sample analysis. All records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4201 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4202 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

APPENDIX B
Draft ATC's

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-3412-5-5 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: LA PALOMA GENERATING CO LLC
MAILING ADDRESS: PO BOX 175
MCKITTRICK, CA 93251

LOCATION: 1760 W SKYLINE ROAD
MCKITTRICK, CA 93251

SECTION: NE27 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
MODIFICATION OF COOLING TOWER #1 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR:INCREASE PM10 LIMIT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
4. Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. PM10 emission rate shall not exceed 20.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Daily PM10 emissions shall be calculated as follows: PM10 lb/day = cooling water recirculation rate * total dissolved solids concentration in the blowdown water * design drift rate * 0.5. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DRAFT

DAVID WARNER, Director of Permit Services
S-3412-5-5 : Feb 9 2010 10:46AM – KLEVANND : Joint Inspection NOT Required

7. PM10 emissions shall be determined by quarterly cooling water sample analysis. If any quarterly testing results indicate noncompliance, weekly testing shall be conducted until eight (8) consecutive weeks of testing have demonstrated compliance, at which time quarterly sampling may resume. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

8. The operator shall maintain records of cooling water sample analysis. All records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

9. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4201 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. Compliance with permit conditions in the Title V permit for this unit shall be deemed compliance with the applicable requirements of District Rule 4202 (as amended 12/17/92). A permit shield from these requirements is granted to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. Upon implementation of this ATC emission offsets shall be provided to offset the following increases in emissions PM10-Q1: 803 lbs, Q2: 803 lbs, Q3: 803 lbs, and Q4: 803 lbs. The offset ratio used shall be as specified in District Rule 2201 (amended 09/21/06) Table 4-2. [District Rule 2201] Federally Enforceable Through Title V Permit

12. ERC Certificate Number C-1054-4 shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-3412-6-5 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: LA PALOMA GENERATING CO LLC
MAILING ADDRESS: PO BOX 175
MCKITTRICK, CA 93251

LOCATION: 1760 W SKYLINE ROAD
MCKITTRICK, CA 93251

SECTION: NE27 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
MODIFICATION OF COOLING TOWER #2 WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR: INCREASE PM10 LIMIT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
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CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DRAFT

DAVID WARNER, Director of Permit Services

S-3412-6-5 : Feb 9 2010 10:46AM -- KLEVANND : Joint Inspection NOT Required

7. PM10 emissions shall be determined by quarterly cooling water sample analysis. If any quarterly testing results indicate noncompliance, weekly testing shall be conducted until eight (8) consecutive weeks of testing have demonstrated compliance, at which time quarterly sampling may resume. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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DRAFT

APPENDIX C
BACT Guideline

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 8.3.10*

Last Update: 6/19/2000

Cooling Tower - Induced Draft, Evaporative Cooling

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10		Cellular Type Drift Eliminator	

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in s a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is requried for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source - Permit Specific BACT Determinations on Next Page(s)**

APPENDIX D
BACT analysis

BACT for PM10 emissions:

Step 1 - Identify All Control Technologies

A review of the District Guideline 8.3.10 shows:

Cellular type drift eliminator (Technologically Feasible)

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

There is only one feasible control technology, cellular type drift eliminator, so a ranking is not required.

Step 4 - Cost Effectiveness Analysis

The applicant already has a cellular type drift eliminator, which satisfies technologically feasible BACT; therefore, a cost effectiveness analysis is not required.

Step 5 - Select BACT

The applicant is proposing the most stringent alternative identified in step 3 that was not eliminated in step 4: cellular type drift eliminator. Therefore, BACT is satisfied for PM10.

APPENDIX E
HRA Summary

San Joaquin Valley Air Pollution Control District
Risk Management Review

To:	Dan Klevann – Permit Services
From:	Yu Vu – Technical Services
Date:	January 21, 2010
Facility Name:	La Paloma Generating Co., LLC
Location:	S26-T30S-R22E
Application #(s):	S-3412-5-5, -6-5
Project #:	S-1095023

A. RMR SUMMARY

RMR Summary				
Categories	**Cooling Tower (Unit 5-5)**	**Cooling Tower (Unit 6-5)**	**Project Totals**	**Facility Totals**
Prioritization Score	0.055	0.055	0.11	0.61
Acute Hazard Index	N/A[1]	N/A[1]	N/A[1]	N/A
Chronic Hazard Index	N/A[1]	N/A[1]	N/A[1]	N/A
Maximum Individual Cancer Risk (10^{-6})	N/A[1]	N/A[1]	N/A[1]	1.02
T-BACT Required?	**No**	**No**		
Special Permit Conditions?	**No**	**No**		

1 Cancer risk, Acute and Chronic Hazard Indices were not calculated since the prioritization score was less than 1.0.

B. RMR REPORT

I. Project Description

Technical Services received a request on January 12, 2010, to perform a Risk Management Review for a proposed modification to two (2) cooling towers (units 5-5 and 6-5). The applicant is proposing to increase the PM10 emission limit for each of these units from 11.2 lb/day to 20 lb/day. Sulfuric acid and sodium hypochlorite are the materials used in the cooling towers. Of these, sulfuric acid is the only hazardous air pollutant (HAP), therefore it will be the only substance analyzed.

II. Analysis

Toxic emissions for this proposed unit were calculated using emissions calculated by the engineer and MSDSs provided by the applicant. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs

database. The prioritization score for this proposed unit was less than 1.0 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

Analysis Parameters Units 5-5 and 6-5			
PM Increase (lb/hr)	0.37	**Max Hours per Year**	8760
PM Increase (lb/yr)	3,212	**Closest Receptor (m)**	2,414

III. Conclusion

The prioritization score is less than 1.0. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

Attachments:

A. RMR request from the project engineer
B. Additional information from the applicant/project engineer
C. Toxic emissions summary
D. Prioritization score

APPENDIX F
Quarterly Net Emissions Change (QNEC)

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

For each cooling tower the emissions are the same.

$PE2_{quarterly}$ = $PE2_{annual}$ ÷ 4 quarters/year
= 7,300 lb/year ÷ 4 qtr/year
= 1,825 lb PM_{10}/qtr

$PE1_{quarterly}$ = $PE1_{annual}$ ÷ 4 quarters/year
= 4,088 lb/year ÷ 4 qtr/year
= 1,022 lb PM_{10}/qtr

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO_X	0	0	0
SO_X	0	0	0
PM_{10}	1,825	1,022	803
CO	0	0	0
VOC	0	0	0

APPENDIX G
Emissions Profiles

Application Emissions

Permit #: S-3412-5-5	**Last Updated**
Facility: LA PALOMA GENERATING CO LLC	01/27/2010 KLEVANND

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	0.0	0.0	7300.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	20.0	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	803.0	0.0	0.0
Q2:	0.0	0.0	803.0	0.0	0.0
Q3:	0.0	0.0	803.0	0.0	0.0
Q4:	0.0	0.0	803.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio			1.5		
Quarterly Offset Amounts (lb/Qtr)					
Q1:			1205.0		
Q2:			1205.0		
Q3:			1205.0		
Q4:			1205.0		

Application Emissions

Permit #: S-3412-6-5	**Last Updated**
Facility: LA PALOMA GENERATING CO LLC	01/27/2010 KLEVANND

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	0.0	0.0	7300.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	20.0	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	803.0	0.0	0.0
Q2:	0.0	0.0	803.0	0.0	0.0
Q3:	0.0	0.0	803.0	0.0	0.0
Q4:	0.0	0.0	803.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio			1.5		
Quarterly Offset Amounts (lb/Qtr)					
Q1:			1205.0		
Q2:			1205.0		
Q3:			1205.0		
Q4:			1205.0		