



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

OCT 26 2012

Mr. Joel Lepoutre
Kingsburg Cogen Facility
P.O. Box 217
Kingsburg, CA 93631

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # C-722
Project # C-1121330**

Dear Mr. Lepoutre:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. The applicant is requesting that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The modification will consist of the removal of raisin rinse water from the existing cooling tower.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority 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. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures

c: Derek Fukuda, Permit Services

Dan Welch
Sierra Research
1801 J Street
Sacramento, CA 95811

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



OCT 26 2012

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # C-722
Project # C-1121330**

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for Kingsburg Cogen Facility located at 11765 Mountain View Avenue in Kingsburg, which has been issued a Title V permit. Kingsburg Cogen Facility is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The modification will consist of the removal of raisin rinse water from the existing cooling tower.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authority to Construct # C-722-5-4 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures

c: Derek Fukuda, Permit Services

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OCT 26 2012

Mike Tollstrup, Chief
Project Assessment Branch
Air Resources Board
P O Box 2815
Sacramento, CA 95812-2815

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # C-722
Project # C-1121330**

Dear Mr. Tollstrup:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. The applicant is requesting that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The modification will consist of the removal of raisin rinse water from the existing cooling tower.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authority to Construct # C-722-5-4 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 30-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures

c: Derek Fukuda, Permit Services

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**NOTICE OF PRELIMINARY DECISION
FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT AND
THE PROPOSED SIGNIFICANT MODIFICATION OF FEDERALLY
MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed significant modification of Kingsburg Cogen Facility for its electric power generation facility located at 11765 Mountain View Avenue in Kingsburg, California. The modification will consist of the removal of raisin rinse water from the existing cooling tower.

The District's analysis of the legal and factual basis for this proposed action, project #C-1121330, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. There are no emission increases associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested by the public, the District will hold a public hearing regarding issuance of this modification. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.

San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
(Cogeneration Facility)

Facility Name:	Kingsburg Cogen Facility	Date:	October 1, 2012
Mailing Address:	11765 Mountain View Kingsburg, CA 93631	Engineer:	Derek Fukuda
Contact Person:	Dan Welch	Lead Engineer:	Joven Refuerzo
Telephone:	(916) 273-5130		
Fax:	(916) 444-8373		
E-Mail:	dwelch@sierraresearch.com		
Application #(s):	C-722-5-4		
Project #:	C-1121330		
Deemed Complete:	June 28, 2012		

I. Proposal

Kingsburg Cogen Facility is requesting an Authority to Construct (ATC) permit for the modification to their existing cooling tower, Permit to Operate (PTO) C-722-5-3 (see Appendix B). The modification will consist of removing the use of raisin rinse water in their cooling tower.

Kingsburg Cogen Facility received their Title V Permit on November 30, 2004. This modification can be classified as a Title V significant modification pursuant to Rule 2520, Section 3.29, 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. Kingsburg Cogen Facility must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC issued with this project.

Background

The facility has stated that they are no longer under contract with their previous cogeneration partner (Sun Maid Growers). Previously the facility has received raisin rinse water from Sun Maid and has used this water in their cogeneration operation. In response to the facility no longer receiving raisin rinse water from Sun Maid Growers, and no longer being in contract to provide steam to Sun Maid Growers, several changes, in addition to the modification to their cooling tower, were proposed. These proposed modifications are listed below:

- Shutdown of the auxiliary boiler (permit unit C-722-1).
- Shutdown of the fructose reclamation system (permit unit C-722-8).
- Change the condensate storage tank listed in permit C-722-9-2 to a well water storage tank. This modification will result in the cancellation of permit unit C-722-9.

The shutdown and modification listed above will result in actual emission reductions. The facility has applied for emission reduction credits from the shutdown of these permit units. Their proposal will be evaluated in Project C-1121333.

Based on conversations with the facility, the method of operation of the turbine at this facility, unit C-722-2-15, will not be changed by the modification proposed in this ATC project. Therefore, no modifications to unit C-722-2-15 need to be performed.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (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 11765 Mountain View in Kingsburg, 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

Excess steam (from the cogeneration) is condensed in a water-cooled surface condenser. The cooling (circulating) water is sent to an induced draft counter-flow cooling tower, where a portion is evaporated to lower the temperature of the water before pumping it back to the condenser. The cooling tower consists of two adjacent cells, each 30 ft. wide, 24 ft. deep, 20 ft. high. The hot circulating water is pumped into both cells, in parallel, through distributors near the top of the cells, which spray the water onto fill material. Air is drawn upwards through the fill by horizontally-mounted fans, one per cell, located above the distributors. Some of the water evaporates into the rising air stream, which then passes through the fan, and exhausts to the atmosphere through a drift eliminator. The drift eliminator is a system of baffles designed to reduce water droplets from the air stream. The remainder of the circulating water is cooled by the evaporation, and falls by gravity through the fill material into the tower basin, from which most of it is pumped back to the turbine condenser, and to the other plant systems for process

cooling. The loss of water by evaporation is made up by pumping a number of process streams to the tower basin.

V. Equipment Listing

Pre-Project Equipment Description:

C-722-5-3: ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION

ATC Equipment Description:

C-722-5-4: MODIFICATION OF ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION: REMOVE THE USE OF RAISIN RINSSE WATER FROM THE OPERATION

Post Project Equipment Description:

C-722-5-4: ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION

VI. Emission Control Technology Evaluation

The cooling tower is 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. The District has conservatively assumed that all drift will remain suspended in the air and will dry to PM₁₀.

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 0.005%, i.e. 0.005% of the cooling water circulated is emitted.

VII. General Calculations

A. Assumptions

- The only pollutants emitted by the cooling tower pre project are PM₁₀ and VOC.
- The only pollutant emitted by the cooling tower post project is PM₁₀.
- The maximum cooling tower circulation rate = 23,152 gallons per minute (existing permit).
- The drift eliminator has a drift rate of 0.005% (per project C-970922).
- The maximum pre project total dissolved solids (TDS) content in the recirculated water will be limited to 1,750 ppm (per applicant).
- The maximum post project total dissolved solids (TDS) content in the recirculated water will be limited to 1,400 ppm (per applicant).

B. Emission Factors

Pre-Project Emission Factors:

The PM₁₀ emissions from the cooling tower can be quantified using the drift of the circulating water flow rate, 0.005%, the concentration of total dissolved solids in the water, 1,750 ppmw.

Drift Rate = 0.005%
TDS = 1,750 ppmw

Post-Project Emission Factors:

The PM₁₀ emissions from the cooling tower can be quantified using the drift of the circulating water flow rate, 0.005%, the concentration of total dissolved solids in the water, 1,400 ppmw.

Drift Rate = 0.005%
TDS = 1,400 ppmw

C. Calculations

1. Pre-Project Potential to Emit (PE1)

The potential to emit for the cooling tower is calculated as follows, and summarized in the table below:

VOC:

Daily PE1 = 609 lb-VOC/day (existing permit condition)

Annual PE1 = 53,800 lb-VOC/year (existing facility wide limit)

PM₁₀:

The applicant has proposed that the maximum water flow rate through the cooling tower is 15,200 gallons per minute. Therefore, the PM₁₀ emissions from the cooling tower can be estimated using the emission factor listed above and the water flow rate.

$$\begin{aligned}
 \text{Daily PM}_{10} \text{ PE1} &= \text{Drift rate} \times \text{TDS (ppmw)} \times \text{density of water} \times \text{water throughput (gal/min)} \\
 &\quad \times 60 \text{ min/hr} \times 24 \text{ hr/day} \\
 &= 0.00005 \times 1,750 \text{ ppmw} \times 8.34 \text{ lb/gal} \times 15,200 \text{ gal/min} \times 60 \text{ min/hr} \times 24 \\
 &\quad \text{hr/day} \\
 &= \mathbf{16.0 \text{ lb/day}}
 \end{aligned}$$

$$\begin{aligned}
 \text{Annual PM}_{10} \text{ PE1} &= 16.0 \text{ lb/day} \times 365 \text{ day/year} \\
 &= \mathbf{5,840 \text{ lb/year}}
 \end{aligned}$$

PE1		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	0	0
SO _x	0	0
PM ₁₀	16.0	5,840
CO	0	0
VOC	609	53,800

2. Post Project Potential to Emit (PE2)

The potential to emit for the cooling tower is calculated as follows:

VOC:

The VOC emission from this operation was solely due to the processing of raisin rinse water. Since the facility has proposed to remove the use of raisin rinse water in the cooling tower, there will be not post project VOC emissions.

PM₁₀:

The applicant has proposed that the maximum water flow rate through the cooling tower is 15,200 gallons per minute. Therefore, the PM₁₀ emissions from the cooling tower can be estimated using the emission factor listed above and the water flow rate.

$$\begin{aligned}
 \text{Daily PM}_{10} \text{ PE2} &= \text{Drift rate} \times \text{TDS (ppmw)} \times \text{density of water} \times \text{water throughput} \\
 &\quad (\text{gal/min}) \times 60 \text{ min/hr} \times 24 \text{ hr/day} \\
 &= 0.00005 \times 1,400 \text{ ppmw} \times 8.34 \text{ lb/gal} \times 15,200 \text{ gal/min} \times 60 \text{ min/hr} \times 24 \\
 &\quad \text{hr/day} \\
 &= \mathbf{12.8 \text{ lb/day}}
 \end{aligned}$$

$$\begin{aligned} \text{Annual PM}_{10} \text{ PE2} &= 12.8 \text{ lb/day} \times 365 \text{ day/year} \\ &= \mathbf{4,672 \text{ lb/year}} \end{aligned}$$

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

Pursuant to District Rule 2201, the 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 (AER) that have occurred at the source, and which have not been used on-site. The emission in the table below were taken from project C-1092715.

SSPE1 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
C-722-1-9	1,080	86	300	4,368	53,800*
C-722-2-15	54,422	8,541	13,505	183,851	
C-722-4-1	0	0	0	0	
C-722-5-3	0	0	5,840	0	
C-722-6-2	0	0	0	0	
C-722-7-2	0	0	0	0	
C-722-8-2	0	0	0	0	
C-722-9-2	0	0	0	0	
SSPE1	55,502	8,627	19,645	188,219	

* Per facility wide permit condition, VOC emissions shall not exceed 26.9 tons-VOC/year (53,800 lb-VOC/year)

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

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

SSPE2 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
C-722-2-15	54,422	8,541	13,505	183,851	53,800*
C-722-4-1	0	0	0	0	
C-722-5-4 (project)	0	0	4,672	0	
C-722-6-2	0	0	0	0	
C-722-7-2	0	0	0	0	
SSPE2	54,422	8,541	18,177	183,851	53,800

* Per facility wide permit condition, VOC emissions shall not exceed 26.9 tons-VOC/year (53,800 lb-VOC/year)

5. Major Source Determination

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. However, for the purposes of determining major source status, the SSPE2 shall not include the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.”

Major Source Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	55,502	8,627	19,645	188,219	53,800
SSPE2	54,422	8,541	18,177	183,851	53,800
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	No	No	No	Yes

As seen in the table above, the facility is an existing Major Source for NO_x and VOC.

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 District Rule 2201, BE = PE1 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 District Rule 2201.

PM₁₀ is the only post project pollutant emitted by the cooling tower. As shown in Section VII.C.5 above, the facility is not a Major Source for PM₁₀. The facility is a Major Source for VOC, however VOC BE will not be determined since the emissions unit will not have the potential to emit any VOCs.

Therefore BE = PE1.

C-722-5-4:

As calculated in Section VII.C.1 above, PE1 is summarized in the following table:

BE (lb/year)	
	PM₁₀
C-722-5-4	5,840

7. SB 288 Major Modification

SB 288 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."

Since the only pollutant emitted by the cooling tower in this project is PM₁₀, and this facility is not a major source for PM₁₀, this project does not constitute an SB 288 major modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

Since the only pollutant emitted by the cooling tower in this project is PM₁₀, and this facility is not a major source for PM₁₀, this project does not constitute a Federal Major Modification. Additionally, since the facility is not a major source for PM₁₀ (140,000 lb/year), it is not a major source for PM_{2.5} (200,000 lb/year).

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. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- 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 an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*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

$$\text{AIPE} = \text{PE2} - \text{HAPE}$$

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)

$$\text{HAPE} = \text{PE1} \times (\text{EF2}/\text{EF1})$$

Where,

- PE1 = The emissions unit's PE 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

$$AIPE = PE2 - (PE1 * (EF2 / EF1))$$

Adjusted Increase in Permitted Emissions (AIPE)					
Pollutant	PE2 (lb/day)	PE1 (lb/day)	EF2/EF1	AIPE	BACT Triggered?
NO _x	0	0	0.8	0	No
SO _x	0	0	0.8	0	No
PM ₁₀	12.8	16.0	0.8	0	No
CO	0	0	0.8	0	No
VOC	0	609	0.8	-609	No

As demonstrated above, the AIPE is not greater than 2.0 lb/day for PM₁₀ emissions for any baghouse. Therefore BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does not constitute an SB 288 and/or Federal Major Modification for NO_x emissions. Therefore BACT is not triggered for any pollutant.

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	54,422	8,541	18,177	183,851	53,800
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	No	No	No	Yes

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for NO_x and VOC emissions. The cooling tower in this project will not have post project emissions of NO_x or VOC therefore; offset calculations are not necessary and offsets will not be required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.
- e. Any project which meets the definition of a Significant Permit Modification as defined in District Rule 2520.

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

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. PE > 100 lb/day

Applications which include a new emissions unit with a PE 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 PE > 100 lb/day.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	55,502	54,422	20,000 lb/year	No
SO _x	8,627	8,541	54,750 lb/year	No
PM ₁₀	19,645	18,177	29,200 lb/year	No
CO	188,219	183,851	200,000 lb/year	No
VOC	53,800	53,800	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	54,422	55,502	-1,080	20,000 lb/year	No
SO _x	8,541	8,627	-86	20,000 lb/year	No
PM ₁₀	18,177	19,645	-1,468	20,000 lb/year	No
CO	183,851	188,219	-4,368	20,000 lb/year	No
VOC	53,800	53,800	0	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

e. Significant Modification

Public notification is required for any project that meets the definition of a Significant Permit Modification in District Rule 2520. Since the modification in this project meets the definition of a Significant Permit Modification, public noticing will be required.

2. Public Notice Action

As discussed above, this project meets the definition of a Significant Permit Modification in District Rule 2520. Therefore, public notice will be required for this project.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. 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.

Proposed Rule 2201 (DEL) Conditions:

- Drift eliminator drift rate shall not exceed 0.005%. [District Rule 2201]
- PM₁₀ emission rate for the cooling tower shall not exceed 16.0 lb/day. [District Rule 2201]
- Compliance with the PM₁₀ daily emission limit shall demonstrated as follows: PM₁₀ lb/day = circulating water recirculation rate x total dissolved solids concentration in the blowdown water x design drift rate. [District Rule 2201]

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

The following condition will be added to the permit to ensure compliance with monitoring requirements:

- Compliance with the PM₁₀ emission limit shall be determined by blowdown water sample analysis by independent laboratory at least once per quarter. [District Rule 1081]

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) are listed on the permit to operate:

- Daily records of the PM₁₀ emission rate shall be maintained, retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 1070]

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. Section 3.29 defines a significant permit modification as a “permit amendment that does not qualify as a minor permit modification or administrative amendment.”

Section 3.20.2 states that a minor permit modification is a permit modification that does not relax monitoring, reporting or recordkeeping requirements and are not significant changes in existing monitoring permit terms or conditions. As discussed above, the facility’s proposed modifications will result in the removal of their VOC monitoring and recordkeeping requirements. Therefore, the proposed project results in a relaxing of monitoring and recordkeeping requirements and does not meet the definition of a minor modification to the Title V permit. As a result, the proposed project constitutes a Significant Modification to the Title V Permit pursuant to Section 3.29.

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 administrative amendment, prior to operating with the proposed modifications. The facility’s compliance certification for is included in Appendix C. Continued compliance with this rule is expected. The facility shall not implement the changes requested until the final permit is issued. The following conditions will be included on the ATC to ensure continued compliance:

- 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]
- 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]

Rule 2530 Federally Enforceable Potential to Emit

The purpose of this rule is to restrict the emissions of a stationary source so that the source may elect to be exempt from the requirements of Rule 2520. Since this facility has not elected exemption from the requirements of Rule 2520, the requirements of this rule are not applicable to the units at this facility.

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.

The requirements of 40 CFR Part 63, Subpart Q (National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans) are applicable to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals and are either major sources or are integral parts of facilities that are major sources as defined in §63.401. However, since the cooling tower in this project is not operated with chromium based water treatment chemicals, it is not subject to the requirements of this rule.

No other subparts of 40 CFR Part 61 or 40 CFR Part 63 applies to the cooling tower in this project.

Rule 4101 Visible Emissions

Rule 4101 states that 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). Based on past inspections of the facility continued compliance is expected. The following condition will be added to the permit to assure compliance with this rule.

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

Rule 4102 Nuisance

Rule 4102 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. The following condition will be placed on the permit to ensure compliance with this section.

- {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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.

As demonstrated above, there are no increases in emissions associated with this project, therefore a health risk assessment is not necessary and no further risk analysis is required.

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.

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

PM₁₀ emission rate = 16.0 lb/day. Assuming 100% of PM is PM₁₀
Exhaust Gas Flow = 390,149 cfm (per project C-970922).

$$\text{PM Conc. (gr/scf)} = \frac{[(16.0 \text{ lb/day}) \times (7,000 \text{ gr/lb})]}{[(390,149 \text{ ft}^3/\text{min}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})]}$$

$$\text{PM Conc.} = 0.0002 \text{ gr/scf}$$

The following permit condition will be added to the permit to ensure compliance with this rule:

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

Rule 7012 Hexavalent Chromium – Cooling Towers

The purpose of this rule is to limit emissions of hexavalent chromium from circulating water in cooling towers and to prohibit the use or sale of products containing these compounds for treating cooling tower water.

Section 4.1 states that if a tower circulating water has hexavalent chromium concentration levels less than 0.15 mg/l as determined by Section 6.3.1, or never had hexavalent chromium containing compounds added. The cooling tower shall be exempt from the provisions of this rule except for Sections 5.2.1, 6.1, and 7.1.

The cooling tower is an existing unit and has never had hexavalent chromium containing compounds added. Therefore, it is exempt from the requirements of this rule. Furthermore, the requirements in Sections 6.1, and 7.1 were satisfied when the unit was originally installed. The following condition will be added to ensure further compliance with this rule:

- No compound containing hexavalent chromium shall be added to the cooling tower. [District Rule 7012]

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)

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 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; and
- 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 all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District

conducted a Risk Management Review and concludes that potential health impacts are less than significant.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue ATC C-722-5-4 subject to the permit conditions on the attached draft ATC in Appendix A.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
C-722-5-4	3020-06-A	Miscellaneous	\$105.00

Appendixes

- A: Draft ATC
- B: Current PTO
- C: Compliance Certification

APPENDIX A

Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: C-722-5-4

LEGAL OWNER OR OPERATOR: KINGSBURG COGEN FACILITY
MAILING ADDRESS: PO BOX 217
KINGSBURG, CA 93631

LOCATION: 11765 MOUNTAIN VIEW
KINGSBURG, CA 93631

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION: REMOVE THE USE OF RAISIN RINSE WATER IN THE COOLING TOWER

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 Rule 2201] 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. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
6. No compound containing hexavalent chromium shall be added to the cooling tower [District Rule 7012]
7. Drift eliminator drift rate shall not exceed 0.005%. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 YAPCO

DRAFT

DAVID WARNER, Director of Permit Services
C-722-5-4 : Oct 1 2012 1:11PM - FUKUDAD : Joint Inspection NOT Required

8. PM10 emission rate for the cooling tower shall not exceed 16.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Compliance with the PM10 daily emission limit shall demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} \times \text{total dissolved solids concentration in the blowdown water} \times \text{design drift rate}$. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with the PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory at least once per quarter. [District Rule 1081] Federally Enforceable Through Title V Permit
11. Daily records of the PM10 emission rate shall be maintained, retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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APPENDIX B

Current PTO

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-722-5-3

EXPIRATION DATE: 04/30/2016

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION

PERMIT UNIT REQUIREMENTS

1. No compound containing hexavalent chromium shall be added to the cooling tower. [District Rule 7012]
2. Owner/operator shall operate and maintain a Data Acquisition System (DAS) for the necessary information to calculate the VOC emissions as required by the approved Monitoring Plan. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. DAS shall include records of the temperature of incoming circulating water in the cooling tower on a continuous basis, averaged on an hourly basis. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. DAS shall record the operating schedule and speed of the cooling tower fan (full-speed, half-speed) on an hourly basis. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Owner/operator shall perform weekly sampling of the cooling tower blowdown water for laboratory analysis of ethanol concentration. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Owner/operator shall maintain in good working order a flow meter that measures the total flow of raisin rinse water received from Sun-Maid facility, and flow monitoring device that measures the amount of water flowing from raw water storage to this cooling tower operation. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All records shall be maintained, retained for at least five years, and made available for District inspection upon request. [District Rules 2201, 2520, 9.3.2 and 1070] Federally Enforceable Through Title V Permit
8. A report shall be submitted to the District within 30 days of the end of each calendar quarter. The report shall include average daily VOC (ethanol) emissions from the cooling tower (C-722-5), gas turbine (C-722-2), and total facility for the previous calendar quarter. The report shall also summarize total facility VOC emissions for the four calendar quarters immediately prior to the report. [District Rules 2201, 2520, 9.5.2 and 1070] Federally Enforceable Through Title V Permit
9. VOC emissions from the cooling tower operation shall not exceed 609 pounds per day averaged over a calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

APPENDIX C

Compliance Certification

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

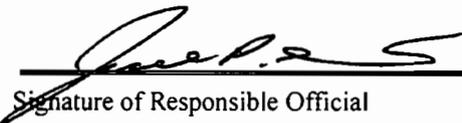
- SIGNIFICANT PERMIT MODIFICATION** **ADMINISTRATIVE AMENDMENT**
 MINOR PERMIT MODIFICATION

COMPANY NAME: KES-Kingsburg L.P.	FACILITY ID: C - 722
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input checked="" type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: KES-Kingsburg L.P.	
3. Agent to the Owner:	

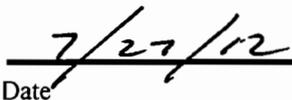
II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:



Signature of Responsible Official



Date

Joel LePoutre

Name of Responsible Official (please print)

Asset Manager

Title of Responsible Official (please print)