



NOV 20 2012

Roger Messier
Ralcorp Frozen Bakery Products
1831 S. Stockton Street
Lodi, CA 95241

Re: Notice of Preliminary Decision - Authority to Construct
Project Number: N-1120945

Dear Mr. Messier:

Enclosed for your review and comment is the District's analysis of Ralcorp Frozen Bakery Products's application for an Authority to Construct for modifications to the bakery ovens, at 40 E. Neuharth Drive, Lodi, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jag Kahlon of Permit Services at (209) 557-6452.

Sincerely,

David Warner
Director of Permit Services

DW: JK/st

Enclosures

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
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Central Region (Main Office)
1990 E. Gettysburg Avenue
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NOV 20 2012

Mike Tollstrup, Chief
Project Assessment Branch
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812-2815

Re: Notice of Preliminary Decision - Authority to Construct
Project Number: N-1120945

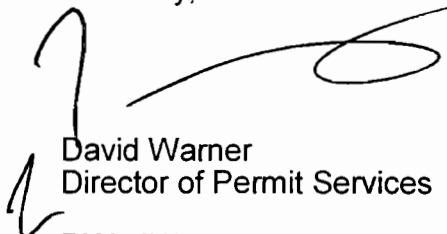
Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Ralcorp Frozen Bakery Products's application for an Authority to Construct for modifications to the bakery ovens, at 40 E. Neuharth Drive, Lodi, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

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**NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED ISSUANCE OF
AN AUTHORITY TO CONSTRUCT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Authority to Construct to Ralcorp Frozen Bakery Products for modifications to the bakery ovens, at 40 E. Neuharth Drive, Lodi, California.

The analysis of the regulatory basis for this proposed action, Project #N-1120945, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to **DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CA 95356-8718.**

San Joaquin Valley Air Pollution Control District Authority to Construct Application Review

Facility Name: Ralcorp Frozen Bakery Products	Date: September 26, 2012
Mailing Address: 1831 S. Stockton Street Lodi, CA 95241	Engineer: Jagmeet Kahlon Lead Engineer: Nick Peirce
Contact Person: Roger Messier	
Telephone: (209) 333-8044	
Fax: (209) 333-7428	
Application #(s): N-8069-7-1, '-8-1, '-9-1, '-10-1, '-13-1, '-14-1, '-15-1, '-16-1	
Project #: N-1120945	
Deemed Complete: August 2, 2012	

I. PROPOSAL

Ralcorp Frozen Bakery (Ralcorp) was issued Authority to Construct (ATC) permits for an existing bakery in February, 2010. These ATCs were for the various operations including flour receiving operations, bread baking ovens, cake baking ovens, and other unbaked products such as bagels and Danish making operations. The proposed modifications to some of these units are as follows:

N-8069-7-1, '-8-1 and '-9-1: Bread baking ovens 1, 2 and 3

1. Reduce testing frequency at inlet natural draft openings (NDOs).

Ralcorp has proposed to reduce ALT-20 (<http://www.epa.gov/ttn/emc/approval/alt-020.pdf>) testing frequency for inlet NDOs of each oven since it is difficult to place a dry ice bucket close to the inlet opening due to the presence of robotic/automatic feeding systems. Ralcorp has proven that the inlet NDOs are slightly under negative pressure during a source test in May 2011. Therefore, the frequency of ALT-20 test will be reduced from annual to at least once every five years, or sooner upon discretion from the EPA or the District.

2. Re-establish heat input rating for the ovens under permit N-8069-8 and '-9.

Ralcorp has changed the original oven burners with 0.8 MMBtu/hr (each) Maxon Cyclomax low-NOx burners between November 2010 and January 2011. Subsequent to this, the facility had replaced 0.8 MMBtu/hr burner #4 in oven #2 (N-8069-8) with 1.6 MMBtu/hr in May 2011, and a 0.8 MMBtu/hr burner #4 in oven #3 (N-8069-9) with 1.6 MMBtu/hr in February 2012 since they were unable to maintain the required temperature in these compartments for some bread recipes. Therefore, they have proposed to modify the

equipment description of permits N-8069-8 and '-9 to reflect that the total heat input is 4.0 MMBtu/hr (4 Maxon's Cyclomax burners, three rated at 0.8 MMBtu/hr and one rated at 1.6 MMBtu/hr).

3. Require oven pressure monitoring using a sensor installed at the tie-in of exhaust from these ovens.

Ralcorp has proposed to modify condition 32, item (c) of ATC N-8069-7-0, '-8-0 and '-9-0 that requires to record the operating pressure of the oven. Ralcorp states that they have one pressure transmitter installed at the tie-in of the three ovens that indicates the negative pressure. Additionally, this pressure is recorded continuously as part of the RTO system. Therefore, the facility would like to replace the language of item (c) to state that "operating pressure as measured by the pressure transmitter at the tie-in of oven #1, #2 and #3 (in inches of water or mercury)".

4. Establish an average RTO combustion chamber temperature

Ralcorp has supplied a chart showing RTO chamber temperature between 9:15 to 13:00 on May 31, 2012 (latest source testing day). This chart indicates that the average RTO combustion chamber over a 30 consecutive minute block is above 1,595°F. Therefore, this temperature will be established in the permit.

5. Ralcorp has proposed to re-establish NO_x limits using 2.0 pounds per day for each burner system.

The ovens are custom made to bake several different types of artisan breads. Each bread type has a specific temperature profile that must be followed to achieve the required quality as the bread conveyor passes through the four compartments in each oven. The temperature profiles are maintained by having a burner in each compartment along with a control system and a dedicated combustion stack. The burner for each compartment pulsates from low fire to high fire, that is, 25% of the maximum heat input to 100% of the maximum rated burner capacity, depending on the temperature required in each compartment, and also drop below low fire where majority of NO_x generates and Maxon (burner manufacturer) warranty for 30 ppmvd @ 3% O₂ do not apply. Ralcorp originally proposed to meet 30 ppmvd @ 3% O₂. The results of the source test conducted on 9/28/2011 and 2/21/2012 indicate that majority of the burners were unable to achieve this limit because the burners operate below low fire a majority of the time. However, the emissions from each burner system are at or below 2.0 pounds per day for all the burners (except for burner #4 in bread baking oven #2 for which they are proposing to take a daily heat input limit); therefore, Ralcorp proposes to re-adjust NO_x limits using mass emissions of 2.0 pounds per day. Given that the burners operate independent of each other to maintain the required temperature at a

particular instant of time in each compartment and have their own exhaust stacks to discharge combustion products, these burner systems are therefore considered as independent emission units for the purpose of this project.

6. Establish CO emissions based on the latest source test results for each burner system.

N-8069-10-1: Cake oven 4

1. Ralcorp has proposed to re-establish NO_x limits using 2.0 pounds per day for each burner system.
2. Establish CO emissions based on the latest source test results for each burner system.

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

Ralcorp has proposed the following modifications to the cake ovens:

1. Ralcorp switched the use of liquid flavors to powder flavors. Powdered flavors do not contain VOC typically found in liquid flavorings, i.e., ethanol, propylene glycol, or glycerol type compounds. Therefore, they have proposed to include a condition that the "Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheets for each flavoring or other similar additives to demonstrate compliance with this condition". A similar condition was included in permit N-8069-10-0.
2. Remove daily VOC emissions limit for baking process from both permits since cake baking process is not expected to result VOC emissions (see item 1).
3. Ralcorp has proposed to determine combustion VOC emissions using 0.0055 lb/MMBtu, maximum heat input rate (0.56 MMBtu/hr), and hours of operation that will be measured using hour meter. The permit will be modified to include an equation to estimate natural gas fuel use.

N-8069-15-1: Bread/Cake oven

Ralcorp has proposed the following modifications to the cake ovens:

1. Correct manufacturer name to "Revent" in the equipment description.
2. Ralcorp switched the use of liquid flavors to powder flavors. Powdered flavors do not contain VOC typically found in liquid flavorings, i.e., ethanol, propylene glycol, or glycerol type compounds. Therefore, they have proposed to include a condition that the "Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheets for each flavoring or other similar additives to demonstrate compliance with this condition". A similar condition was included in permit N-8069-10-0.

3. Remove VOC flavor component from the equation mentioned in condition 10 of N-8069-15-0.
4. Ralcorp has proposed to determine combustion VOC emissions using 0.0055 lb/MMBtu, maximum heat input rate (0.375 MMBtu/hr), and hours of operation measured using hour meter. Therefore, the equation mentioned in condition 10 of N-8069-15-0 should be revised accordingly.

N-8069-16-1: Electric oven

Ralcorp has proposed the following modifications to the electric oven:

1. Ralcorp switched the use of liquid flavors to powder flavors. Powdered flavors do not contain VOC typically found in liquid flavorings, i.e., ethanol, propylene glycol, or glycerol type compounds. Therefore, they have proposed to include a condition that the "Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheets for each flavoring or other similar additives to demonstrate compliance with this condition". A similar condition was included in permit N-8069-10-0.
2. Remove VOC flavor component from the equation mentioned in condition 5 of N-8069-16-0.

II. APPLICABLE RULES

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 4101 Visible Emissions (02/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4201 Particulate Matter Concentration (12/17/92)
Rule 4301 Fuel Burning Equipment (12/17/92)
Rule 4693 Bakery Ovens (5/16/02)
Rule 4801 Sulfur Compounds (12/17/92)
California Health & Safety Code 41700 (Public Nuisance)
California Health & Safety Code 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

This facility is located at 40 E. Neuharth Dr, Lodi, California. This location is not within 1,000 feet of any K-12 school. Thus, public notice under California Health & Safety Code 42301.6 is not required for this project.

IV. PROCESS DESCRIPTION

The applicant is not proposing any changes to existing processes. Therefore, no further discussion is necessary.

V. EQUIPMENT LISTING

Permit	Equipment Description
N-8069-7-1	BREAD BAKING OVEN #1: 3.2 MMBTU/HR (4 MAXON'S CYCLOMAX BURNERS, EACH RATED AT 0.8 MMBTU/HR) SASIB TURBOTHERMAL OVEN VENTED TO A 2.2 MMBTU/HR ADWEST TECHNOLOGIES INC, RETOX 7.4 RTO95, WITH TWO CHAMBERS, NATURAL GAS-FIRED, REGENERATIVE THERMAL OXIDIZER (RTO). THIS RTO SERVES PERMIT UNITS N-8069-7, '-8, AND '-9.
N-8069-8-1	BREAD BAKING OVEN #2: 4.0 MMBTU/HR (4 MAXON'S CYCLOMAX, 3 BURNERS RATED AT 0.8 MMBTU/HR EACH, 1 BURNER RATED AT 1.6 MMBTU/HR) GOUET STONE SOLE TUNNEL OVEN VENTED TO A 2.2 MMBTU/HR ADWEST TECHNOLOGIES INC, RETOX 7.4 RTO95, WITH TWO CHAMBERS, NATURAL GAS-FIRED, REGENERATIVE THERMAL OXIDIZER (RTO). THIS RTO SERVES PERMIT UNITS N-8069-7, '-8, AND '-9.
N-8069-9-1	BREAD BAKING OVEN #3: 4.0 MMBTU/HR (4 MAXON'S CYCLOMAX, 3 BURNERS RATED AT 0.8 MMBTU/HR EACH, 1 BURNER RATED AT 1.6 MMBTU/HR) GOUET STONE SOLE TUNNEL OVEN VENTED TO A 2.2 MMBTU/HR ADWEST TECHNOLOGIES INC, RETOX 7.4 RTO95, WITH TWO CHAMBERS, NATURAL GAS-FIRED, REGENERATIVE THERMAL OXIDIZER (RTO). THIS RTO SERVES PERMIT UNITS N-8069-7, '-8, AND '-9.
N-8069-10-1	CAKE BAKING OVEN #4: 3.2 MMBTU/HR (4 MAXON'S CYCLOMAX, OR OTHER MANUFACTURER AND MODEL BURNERS, EACH RATED AT 0.8 MMBTU/HR) MEINCKE OVEN
N-8069-13-1	0.56 MMBTU/HR NATURAL GAS-FIRED REVENT ECONOMITE CAKE OVEN #1
N-8069-14-1	0.56 MMBTU/HR NATURAL GAS FIRED REVENT ECONOMITE CAKE OVEN #2
N-8069-15-1	0.375 MMBTU/HR NATURAL GAS FIRED BREAD/CAKE OVEN
N-8069-16-1	ELECTRIC BAKING OVEN

VI. EMISSION CONTROL TECHNOLOGY EVALUATION

The applicant is not replacing or adding any emission control technologies. Therefore, no further discussion is necessary.

VII. GENERAL CALCULATIONS

A. Assumptions

Assumptions will be stated as they are made.

B. Emission Factors (EF)

1. Pre-Project Emission Factors (EF1)

N-8069-7-0, '8-0 and '9-0: Bread baking ovens 1, 2 and 3
N-8069-10-0: Cake oven 4

These ATCs cannot be implemented into Permit to Operate. Therefore, emission factor in these permits are not listed here.

N-8069-13-0: Cake oven 1

N-8069-14-0: Cake oven 2

N-8069-15-0: Bread/Cake oven

Pollutant	EF1 (lb/MMBtu)	Source
NO _x	0.1	PTOs N-8069-13-0, '14-0 and '15-0
SO _x	0.00285	
PM ₁₀	0.0076	
CO	0.084	
VOC	0.0055	

N-8069-16-0: Electric oven

This permit does not list any emission factor. It contains daily VOC emissions limit.

2. Post-Project Emission Factors (EF2)

N-8069-7-1, '8-1 and '9-1: Bread baking ovens 1, 2 and 3

Baking Fermented Dough:

Ralcorp processes several types of bread. EF established for one product may not be a representative of another and vice versa. To overcome this situation, the daily VOC emission limit will be established.

Natural Gas Combustion:

Pollutant	EF2	Source
NO _x	--	See table footnote 1 and 3
SO _x	0.00285 lb/MMBtu	ATC N-8069-7-0, '8-0, '9-0
PM ₁₀	0.0076 lb/MMBtu	
CO	--	See table footnote 2 and 3
VOC	0.0055 lb/MMBtu	ATC N-8069-7-0, '8-0, '9-0

¹NO_x emissions factor will be based on an emission limit of 2.0 lb/day.

²CO emissions are established using source test (2/21/12 test for oven #1 and 9/28/11 for oven #2 and 3) plus 20% margin of compliance.

³Please refer to Appendix III of this document for NO_x and CO emission factors.

Regenerative Thermal Oxidizer:

Pollutant	EF2	Source
NO _x	30 ppmv @ 3% O ₂ (0.036 lb/MMBtu)	ATC N-8069-7-0, '-8-0, '-9-0
SO _x	0.00285 lb/MMBtu	
PM ₁₀	0.0076 lb/MMBtu	
CO	400 ppmv @ 3% O ₂ (0.295 lb/MMBtu)	
VOC	--	See table footnote 1

¹VOC emissions are included in the baking process emissions.

N-8069-10-1: Cake oven 4

The facility has proposed to use non-VOC flavors in cakes. Therefore, no VOC emissions are expected from these flavors. The potential emissions from the oven would be from natural gas combustion only. The emission factors are as follows:

Pollutant	EF2	Source
NO _x	--	See table footnote 1 and 3
SO _x	0.00285 lb/MMBtu	ATC N-8069-7-0, '-8-0, '-9-0
PM ₁₀	0.0076 lb/MMBtu	
CO	--	See table footnote 2 and 3
VOC	0.0055 lb/MMBtu	ATC N-8069-10-0

¹NO_x emissions factor will be based on an emission limit of 2.0 lb/day.

²CO emissions are established using source test (2/21/12 test for oven #1 and 9/28/11 for oven #2 and 3) plus 20% margin of compliance.

³Please refer to Appendix III of this document for NO_x and CO emission factors.

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

EF2 will be same as EF1.

N-8069-16-1: Electric oven

This permit does not list any emission factor. It contains daily VOC emissions limit.

C. Potential Emissions

1. Pre-Project Potential to Emit (PE1)

N-8069-7-0, '-8-0 and '-9-0: Bread baking ovens 1, 2 and 3

N-8069-10-0: Cake oven 4

These emission units are treated as new units. Therefore, PE1 is not estimated here.

N-8069-13-0: Cake oven 1

N-8069-14-0: Cake oven 2

These ovens are used for making 'mini mascarpone cake layers' and 'angel food cake'. These ovens have indirect-fired configuration. The flavors used in these cakes do not contain any VOCs.

$$PE1 \text{ (lb/day)} = (EF1 \text{ lb/MMBtu})(0.56 \text{ MMBtu/hr})(24 \text{ hr/day})$$

$$PE1 \text{ (lb/yr)} = (PE1 \text{ lb/day})(365 \text{ days/yr})$$

Pollutant	EF1 (lb/MMBtu)	PE1 (lb/day)	PE1 (lb/yr)
NO _x	0.1	1.3	475
SO _x	0.00285	0.0	0
PM ₁₀	0.0076	0.1	37
CO	0.084	1.1	402
VOC	0.0055	0.1	37

Further, each permit limits VOC emissions from baking and natural gas combustion to 2.0 pounds per day. Thus, the total VOC emissions from each oven would be:

$$PE2 = 2.0 \text{ lb-VOC/day, } 730 \text{ lb-VOC/yr}$$

N-8069-15-0: Bread/Cake oven

This oven is used to make Danish, bagel, cakes/muffins, bread, cookies etc. The proposed emissions from baking process are 2.0 lb/day or less for VOCs. The potential emissions for other pollutants are estimated using following equations:

$$PE1 \text{ (lb/day)} = (EF1 \text{ lb/MMBtu})(0.375 \text{ MMBtu/hr})(24 \text{ hr/day})$$

$$PE1 \text{ (lb/yr)} = (PE1 \text{ lb/day})(365 \text{ days/yr})$$

Pollutant	EF1 (lb/MMBtu)	PE1 (lb/day)	PE1 (lb/yr)
NO _x	0.1	0.9	329
SO _x	0.00285	0.0	0
PM ₁₀	0.0076	0.1	37
CO	0.084	0.8	292
VOC	--	2.0	730

N-8069-16-0: Electric oven

This oven is used to bake ciabatta rolls/sandwich breads, artisan loaves, French baguettes etc. The applicant has proposed to limit the baking emissions to 2.0 pounds per day for VOCs.

2. Post-Project Potential to Emit (PE2)

N-8069-7-1: Bread baking oven 1

Baking Fermented Dough:

VOC emissions from baking and natural gas are limited to 23.0 lb/day from this oven per ATC N-8069-7-0. The applicant is not proposing any changes to this limit. Thus,

PE2 = 23.0 lb-VOC/day

Natural Gas Combustion:

The following table summarizes the daily and annual emissions from this oven. Please refer to Appendix III for detailed calculations.

Pollutant	PE2 (lb/day)	PE2 (lb/yr)
NO _x	8.0	2,920
SO _x	0.4	146
PM ₁₀	0.4	146
CO	2.7	987
VOC	0.4	146

N-8069-8-1: Bread baking oven 2

Baking Fermented Dough:

VOC emissions from baking and natural gas are limited to 23.0 lb/day from this oven per ATC N-8069-8-0. The applicant is not proposing any changes to this limit. Thus,

PE2 = 23.0 lb-VOC/day

Natural Gas Combustion:

The following table summarizes the daily and annual emissions from this oven. Please refer to Appendix III for detailed calculations.

Pollutant	PE2 (lb/day)	PE2 (lb/yr)
NO _x	8.0	2,920
SO _x	0.4	146
PM ₁₀	0.5	183
CO	66.8	24,383
VOC	0.4	146

N-8069-9-1: Bread baking oven 3

Baking Fermented Dough:

VOC emissions from baking and natural gas are limited to 23.0 lb/day from this oven per ATC N-8069-9-0. The applicant is not proposing any changes to this limit. Thus,

PE2 = 23.0 lb-VOC/day

Natural Gas Combustion:

The following table summarizes the daily and annual emissions from this oven. Please refer to Appendix III for detailed calculations.

Pollutant	PE2 (lb/day)	PE2 (lb/yr)
NO _x	8.0	2,920
SO _x	0.4	146
PM ₁₀	0.6	219
CO	45.5	16,608
VOC	0.5	183

Regenerative Thermal Oxidizer Serving Bread Ovens 1, 2 and 3:

The heat input to RTO is 2.2 MMBtu/hr. The potential emissions would be:

PE2 (lb/day) = (EF lb/MMBtu)(2.2 MMBtu/hr)(24 hr/day)

PE2 (lb/yr) = (PE2 lb/day)(365 days/yr)

Pollutant	EF (lb/MMBtu)	PE2 (lb/day)	PE2 (lb/yr)
NO _x	0.036	1.9	694
SO _x	0.00285	0.2	73
PM ₁₀	0.0076	0.4	146
CO	0.295	15.6	5,694
VOC	--	--	--

¹VOC emissions are included in the baking process emissions.

N-8069-10-1: Cake oven 4

The following table summarizes the daily and annual emissions. Please refer to Appendix III for detailed calculations.

Pollutant	PE2 (lb/day)	PE2 (lb/yr)
NO _x	8.0	2,920
SO _x	0.4	146
PM ₁₀	0.4	146
CO	30.4	11,097
VOC	0.4	146

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

Per applicant, cake batter will not contain any VOC containing additive; therefore, no VOCs are expected from the baking process. The potential emissions from natural gas would be same as determined under permits N-8069-13-0 and '-14-0 (above). These emissions are summarized in the following table.

Pollutant	EF2 (lb/MMBtu)	PE2 (lb/day)	PE2 (lb/yr)
NO _x	0.1	1.3	475
SO _x	0.00285	0.0	0
PM ₁₀	0.0076	0.1	37
CO	0.084	1.1	402
VOC	0.0055	0.1	37

N-8069-15-1: Bread/Cake oven

N-8069-16-1: Electric oven

PE2 will be same as PE1 for each permit unit.

Facility-wide VOC Emissions:

The facility has proposed to establish 19,999 pounds of VOCs per year. Thus,

$$PE2 = 19,999 \text{ lb-VOC/yr}$$

3. Quarterly Emissions Changes (QEC)

QEC is required for application's emission profile, which is used for the District's internal tracking purposes. Typically QEC are calculated as follows: $QEC = (PE2 - PE1) \text{ lb/year} \div 4 \text{ quarters/yr}$.

N-8069-7-1: Bread baking oven 1

QEC includes emissions from natural gas combustion in the oven, RTO emissions, and emissions from baking fermented dough.

Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)
NO _x	903	903	904	904
SO _x	54	55	55	55
PM ₁₀	73	73	73	73
CO	1,670	1,670	1,670	1,671
VOC	4,999	5,000	5,000	5,000

N-8069-8-1: Bread baking oven 2

QEC includes emissions from natural gas combustion.

Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)
NO _x	730	730	730	730
SO _x	36	36	37	37
PM ₁₀	45	46	46	46
CO	6,095	6,096	6,096	6,096
¹ VOC	--	--	--	--

²VOC emissions are included in the facility-wide SLC

N-8069-9-1: Bread baking oven 3

QEC includes emissions from natural gas combustion.

Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)
NO _x	730	730	730	730
SO _x	36	36	37	37
PM ₁₀	54	55	55	55
CO	4,152	4,152	4,152	4,152
¹ VOC	--	--	--	--

⁴VOC emissions are included in the facility-wide SLC

N-8069-10-1: Cake oven 4

QEC includes emissions from natural gas combustion.

Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)
NO _x	730	730	730	730
SO _x	36	36	37	37
PM ₁₀	36	36	37	37
CO	2,774	2,774	2,774	2,775
¹ VOC	--	--	--	--

⁴VOC emissions are included in the facility-wide SLC

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

For each oven, QEC includes emissions from natural gas combustion.

Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)
NO _x	0	0	0	0
SO _x	0	0	0	0
PM ₁₀	0	0	0	0
CO	0	0	0	0
¹ VOC	--	--	--	--

¹VOC emissions are included in the facility-wide SLC

N-8069-15-1: Bread/Cake oven

QEC includes emissions from natural gas combustion.

Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)
NO _x	0	0	0	0
SO _x	0	0	0	0
PM ₁₀	0	0	0	0
CO	0	0	0	0
¹ VOC	--	--	--	--

¹VOC emissions are included in the facility-wide SLC

N-8069-16-1: Electric oven

Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)
¹ VOC	--	--	--	--

¹VOC emissions are included in the facility-wide SLC

4. Adjusted Increase in Permitted Emissions (AIPE)

AIPE is used to determine if BACT is required for emission units that are being modified. AIPE is calculated using the equations mentioned in Section 4.3 and 4.4 of Rule 2201.

$$AIPE = PE2 - \left(\frac{EF2}{EF1} \right) (PE1)$$

N-8069-7-1, '-8-1 and '-9-1: Bread baking ovens 1, 2 and 3

N-8069-10-1: Cake oven 4

These ovens are treated as new emission units. Therefore, AIPE is not determined for these units.

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

N-8069-16-1: Electric oven

EF1 = EF2, and PE2 = PE1. Therefore, AIPE = 0 for each pollutant for these permits.

D. Facility Emissions

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

Pursuant to Section 4.9 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) 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.

Potential emissions for units N-8069-1 to '-6, '-11, '-12 and '-18 and '-19 are taken from the application review prepared under project N-1113607 and the potential emissions for N-8069-17 are from the application review under project N-1093808.

SSPE1 (lb/yr)					
Permit Number	NO _x	SO _x	PM ₁₀	CO	VOC
N-8069-1-1	0	0	788	0	0
N-8069-2-1	0	0		0	0
N-8069-3-1	0	0		0	0
N-8069-4-1	0	0		0	0
N-8069-5-1	0	0		0	0
N-8069-6-1	0	0		0	0
N-8069-11-1	0	0	263	0	0
N-8069-12-1	0	0	92	0	0
N-8069-13-0	475	0	37	402	-- ⁽¹⁾
N-8069-14-0	475	0	37	402	-- ⁽¹⁾
N-8069-15-0	329	0	37	292	-- ⁽¹⁾
N-8069-16-0	0	0	0	0	-- ⁽¹⁾
N-8069-17-0	0	0	13	0	0
N-8069-18-1	0	0	2	0	0
N-8069-19-0	0	0	237	0	0
ERC	0	0	0	0	0
Total	1,279	0	1,506	1,096	19,999
Major Source Thresholds	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	No

¹Emissions are included in the facility-wide VOC emission limit of 19,999 lb/yr.

2. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) 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.

Ralcorp Frozen Bakery Products
N-8069-7-1 to '-10-1, '-13-1 to '-16-1, N-1120945

SSPE2 (lb/yr)					
Permit Number	NO _x	SO _x	PM ₁₀	CO	VOC
N-8069-1-1	0	0	788	0	0
N-8069-2-1	0	0		0	0
N-8069-3-1	0	0		0	0
N-8069-4-1	0	0		0	0
N-8069-5-1	0	0		0	0
N-8069-6-1	0	0		0	0
N-8069-7-1	2,920	146	146	987	19,999
N-8069-8-1	2,920	146	183	24,383	
N-8069-9-1	2,920	146	219	16,608	
N-8069-10-1	2,920	146	146	11,097	
RTO serving N-8069-7, '-8, '-9	694	73	146	5,694	
N-8069-11-1	0	0	263	0	0
N-8069-12-1	0	0	92	0	0
N-8069-13-1	475	0	37	402	-- ⁽¹⁾
N-8069-14-1	475	0	37	402	-- ⁽¹⁾
N-8069-15-1	329	0	37	292	-- ⁽¹⁾
N-8069-16-1	0	0	0	0	-- ⁽¹⁾
N-8069-17-0	0	0	13	0	0
N-8069-18-1	0	0	2	0	0
N-8069-19-0	0	0	237	0	0
ERC	0	0	0	0	0
Total	13,653	657	2,346	59,865	19,999
Major Source Thresholds	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	No

3. Stationary Source Increase in Permitted Emissions (SSIPE)

SSIPE = SSPE2 - SSPE1

Pollutant	SSPE2 (lb/yr)	SSPE1 (lb/yr)	SSIPE (lb/yr)
NO _x	13,653	1,279	12,374
SO _x	657	0	657
PM ₁₀	2,346	1,506	840
CO	59,865	1,096	58,769
VOC	19,999	19,999	0

4. SB 288 Major Modification

The purpose of Major Modification calculations is to determine the following:

- A. If Best Available Control Technology (BACT) is triggered for a new or modified emission unit that results in a Major Modification (District Rule 2201, §4.1.3); and
- B. If a public notification is triggered (District Rule 2201, §5.4.1).

Per table in section VII.D.2 of this document, this facility is not a Major Source for any pollutant. Thus, this project cannot trigger SB-288 Major Modification.

5. Federal Major Modification

The purpose of Federal Major Modification calculations is to determine the following:

- A. If a Rule-compliance project qualifies for District Rule 2201's Best Available Control Technology (BACT) and offset exemptions (District Rule 2201, §4.2.3.5); and
- B. If an Alternate Siting analysis must be performed (District Rule 2201, §4.15.1);
- C. If the applicant must provide certification that all California stationary sources owned, operated, or controlled by the applicant that are subject to emission limits are in compliance with those limits or are on a schedule for compliance with all applicable emission limits and standards; and
- D. If a public notification is triggered. (District Rule 2201, §5.4.1)

Per table in section VII.D.2 of this document, this facility is not a Major Source for any pollutant. Thus, this project cannot trigger Federal Major Modification.

VIII. COMPLIANCE

Rule 2201 New and Modified Stationary Source Review Rule

1. Best Available Control Technology (BACT)

BACT requirements shall be triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless exempted pursuant to Section 4.2, BACT shall be required for the following actions*:

- Any new emissions unit or relocation from one Stationary Source to another of an existing emissions unit with a Potential to Emit (PE2) exceeding 2.0 pounds in any one day;
- Modifications to an existing emissions unit with a valid Permit to Operate resulting in an Adjusted Increase in Permitted Emissions (AIPE) exceeding 2.0 pounds in any one day;
- 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 in this 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.

N-8069-7-1, '-8-1 and '-9-1: Bread baking ovens 1, 2 and 3

Baking Fermented Dough:

Per section VII.C.2 of this document, PE2 is greater than 2.0 lb/day for VOC from each compartment. Thus, BACT is triggered for VOC emissions.

BACT Guideline 1.6.24 – Commercial Bakery Oven, requires the use of a thermal/catalytic oxidizer to reduce VOCs by at least 95%. There is no technologically feasible option, or alternative equipment for controlling VOCs.

The facility vents all compartments from each oven to an RTO and has demonstrated over 95% control for VOC emissions in 2011 test. Thus, BACT requirements for VOC are satisfied.

Natural Gas Combustion:

Per worksheet in Appendix III of this document, except for CO, the potential emissions from each burner system are not greater than 2.0 lb/day threshold for any pollutant. CO emissions from the facility are less than 200,000 lb/yr (refer to section VII.D.2 of this document). Furthermore, the project is not major modification (Federal or SB-288). Thus, BACT is not triggered for any pollutant.

N-8069-10-1: Cake oven 4

Natural Gas Combustion:

Per worksheet in Appendix III of this document, except for CO, the potential emissions from each burner system are not greater than 2.0 lb/day threshold for any pollutant. CO emissions from the facility are less than 200,000 lb/yr (refer to section VII.D.2 of this document). Furthermore, the project is not major modification (Federal or SB-288). Thus, BACT is not triggered for any pollutant.

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

N-8069-16-1: Electric oven

The potential emissions from each oven are not in excess of 2.0 lb/day threshold (refer to section VII.C.2 of this document) for any pollutant. Furthermore, the project is not major modification (Federal or SB-288). Thus, BACT is not triggered for any pollutant.

2. Offsets

Offsets are examined on pollutant-by-pollutant basis. The following table summarizes SSPE2, offset thresholds, and whether or not offsets are triggered.

Category	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2 (lb/yr)	13,653	657	2,346	59,865	19,999
Offset Thresholds (lb/yr)	20,000	54,750	29,200	200,000	20,000
Offsets Triggered?	No	No	No	No	No

3. Public Notification

District Rule 2201, section 5.4, requires a public notification for the affected pollutants from the following types of projects:

- New Major Sources
- Major Modifications
- New emission units with a PE>100 lb/day of any one pollutant
- Modifications with SSPE1 below an Offset threshold and SSPE2 above an Offset threshold on a pollutant-by-pollutant basis
- New stationary sources with SSPE2 exceeding Offset thresholds
- Any permitting action with a SSIPE exceeding 20,000 lb/yr for any one pollutant

Per section VII.D.3 of this document, SSIPE is greater than 20,000 lb/yr for CO. Thus, public notice is required for this project.

4. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required to restrict a unit's maximum daily emissions. DELs for each permit unit are as follows:

N-8069-7-1: Bread baking oven 1

Baking Fermented Dough:

- VOC emissions shall not exceed 23.0 pounds in any one day. These emissions include bread baking process emissions from this oven and natural gas combustion emissions in the RTO chambers. [District Rule 2201]

Natural Gas Combustion:

- NO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.104 lb/MMBtu referenced as NO₂. [District Rule 2201]
- SO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
- PM₁₀ emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
- CO emissions from natural gas combustion shall not exceed any of the following limits: 0.126 lb/MMBtu for burner #1, 0.007 lb/MMBtu for burner #2, 0.005 lb/MMBtu for burner #3, and 0.007 lb/MMBtu for burner #4. [District Rule 2201]
- VOC emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]

N-8069-8-1: Bread baking oven 2

Baking Fermented Dough:

- VOC emissions shall not exceed 23.0 pounds in any one day. These emissions include bread baking process emissions from this oven and natural gas combustion emissions in the RTO chambers. [District Rule 2201]

Natural Gas Combustion:

- NO_x emissions from natural gas combustion shall not exceed any of the following limits: 0.104 lb/MMBtu for burner #1, 2 and 3 and 0.086 lb/MMBtu for burner #4 referenced as NO₂. [District Rule 2201]
- Heat input rate to burner #4 in this oven shall not exceed 23.3 MMBtu in any one day. [District Rule 2201]

- SO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
- PM₁₀ emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
- CO emissions from natural gas combustion shall not exceed any of the following limits: 0.724 lb/MMBtu for burner #1, 0.195 lb/MMBtu for burner #2, 0.594 lb/MMBtu for burner #3, and 0.985 lb/MMBtu for burner #4. [District Rule 2201]
- VOC emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]

N-8069-9-1: Bread baking oven 3

Baking Fermented Dough:

- VOC emissions shall not exceed 23.0 pounds in any one day. These emissions include bread baking process emissions from this oven and natural gas combustion emissions in the RTO chambers. [District Rule 2201]

Natural Gas Combustion:

- NO_x emissions from natural gas combustion shall not exceed any of the following limits: 0.104 lb/MMBtu for burner #1, 2 and 3 and 0.052 lb/MMBtu for burner #4 referenced as NO₂. [District Rule 2201]
- SO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
- PM₁₀ emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
- CO emissions from natural gas combustion shall not exceed any of the following limits: 0.165 lb/MMBtu for burner #1, 0.439 lb/MMBtu for burner #2, 0.021 lb/MMBtu for burner #3, and 0.871 lb/MMBtu for burner #4. [District Rule 2201]
- VOC emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]

Regenerative Thermal Oxidizer Serving Bread Ovens 1, 2 and 3:

- Emissions from natural gas combustion in the RTO serving the baking process emissions shall not exceed any of the following limits: 30.0 ppmvd NO_x @ 3% O₂ (referenced as NO₂), 400 ppmvd CO @ 3% O₂, 0.00285 lb-SO_x/MMBtu, and 0.0076 lb-PM₁₀/MMBtu. [District Rule 2201]

N-8069-10-1: Cake oven 4

- Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheet for each flavoring or other similar additives to demonstrate compliance with this condition. [District Rule 2201]
- NO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.104 lb/MMBtu referenced as NO₂. [District Rule 2201]
- SO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
- PM₁₀ emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
- CO emissions from natural gas combustion shall not exceed any of the following limits: 0.010 lb/MMBtu for burner #1, 0.583 lb/MMBtu for burner #2, 0.601 lb/MMBtu for burner #3, and 0.392 lb/MMBtu for burner #4. [District Rule 2201]
- VOC emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

- Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheet for each flavoring or other similar additives to demonstrate compliance with this condition. [District Rule 2201]
- Emissions from natural gas combustion in this oven shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 0.084 lb-CO/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]

N-8069-16-1: Electric oven

- VOC emissions from the baking process shall not exceed 2.0 pounds in any one day. [District Rule 2201]

5. Compliance Assurance

Source Testing

N-8069-7-1, '-8-1 and '-9-1: Bread baking ovens 1, 2 and 3

Baking Fermented Dough:

Per District Policy APR-1705 – Source Testing Frequency (10/9/97), Section II, Step 4, units equipped with afterburner, thermal incinerator, or catalytic incinerator for controlling VOCs must be tested upon initial start-up and annually thereafter.

VOC emissions from the baking process will be vented to an RTO. Ralcorp has already conducted an initial source test in 2011 following the RTO installation. Furthermore, they are not proposing any changes to the VOC emissions; therefore, another initial source testing is not required under this project. Ralcorp will be required to conduct annual source testing.

Natural Gas Combustion:

NO_x and CO

The emission factors are established using the latest source test information. Therefore, source testing is not considered for these pollutants.

SO_x, PM₁₀ and VOC

The emission factors are established using generally accepted emission factors from EPA's AP-42 for natural gas combustion. Therefore, source testing is not considered for these pollutants.

Regenerative Thermal Oxidizer Serving Bread Ovens 1, 2 and 3:

RTO will be used to reduce VOCs from bread baking process. The proposed NO_x and CO emissions are manufacturer guaranteed numbers. Therefore, source testing is not required.

N-8069-10-1: Cake oven 4

Natural Gas Combustion:

NO_x and CO

The emission factors are established using the latest source test information. Therefore, source testing is not considered for these pollutants.

SO_x, PM₁₀ and VOC

The emission factors are established using generally accepted emission factors from EPA's AP-42 for natural gas combustion. Therefore, source testing is not considered for these pollutants.

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

The emission factors are established using generally accepted emission factors from EPA's AP-42 for natural gas combustion. Therefore, source testing is not considered for these pollutants.

N-8069-16-1: Electric oven

This is an R&D oven used to bake breads or cakes, and is not used in mass production. Therefore, source testing is not considered for this oven.

Monitoring

N-8069-7-1, '-8-1 and '-9-1: Bread baking ovens 1, 2 and 3

The applicant is required to monitor the combustion chamber temperature of the RTO on each day the baking process operates.

N-8069-10-1: Cake oven 4

No monitoring is required.

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

N-8069-16-1: Electric oven

No monitoring is required.

Recordkeeping

N-8069-7-1, '-8-1 and '-9-1: Bread baking ovens 1, 2 and 3

The applicant is required to keep process rate (tons/day) records for each of the above units. Furthermore, record of the combustion chamber temperature of the RTO is also required for each day the baking process operates. In addition, burner tune-up records are also required to ensure on-going compliance with NO_x and CO concentrations.

N-8069-10-1: Cake oven 4

The applicant is required to keep records of an up to date material safety data sheets (MSDSs) of all flavorings used in cake batter. These MSDSs can be used to verify VOCs in each flavor. Furthermore, burner tune-up records are also required to ensure on-going compliance with NO_x and CO concentrations.

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

N-8069-16-1: Electric oven

The applicant is required to keep records of MSDS for flavorings used under permit N-8069-13, '-14 and '-15, and daily VOC emissions for oven under permit N-8069-16.

For each permit unit, records are required to be kept for at least five years from the day they logged in a maintenance record book.

Reporting

Source testing report is required to be submitted within 60-day period after conducting each source test.

6. Ambient Air Quality Analysis

Section 4.14.1 requires an AAQA to be performed for projects that trigger public notice. The following table shows the summary of AAQA:

Criteria Pollutant Modeling Results*

Ovens and RTO	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass ¹	X	X	X	Pass
SO _x	Pass	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass ²	Pass ²
PM _{2.5}	X	X	X	Pass ²	Pass ²

*Results were taken from the PSD spreadsheets.

¹The project was compared to the 1-hour NO₂ National Ambient Air Quality Standard that became effective on April 12, 2010, using the District's approved procedures.

²The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

The criteria modeling runs indicate that the emissions from the proposed equipment will not cause or significantly contribute to a violation of the State or National Ambient Air Quality Standards.

Compliance is expected with this Rule.

Rule 4101 Visible Emissions

Section 5.0, indicates that 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 dark or darker than Ringlemann 1 or equivalent to 20% opacity. The following condition will be placed on each permit:

- 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]

Compliance is expected with this Rule.

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants, which could cause injury, detriment, nuisance or annoyance to the public. The following condition will be placed on each permit:

- 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. The Risk Management Review summary is as follows:

Risk Management Review Summary			
Categories	Bakery with NG Ovens (Unit 7-1, '8-1, '9-1 & 10-1)	Project Totals	Facility Totals
Prioritization Score	0.2	0.2	0.2
Acute Hazard Index	N/A [†]	N/A [†]	N/A [†]
Chronic Hazard Index	N/A [†]	N/A [†]	N/A [†]
Maximum Individual Cancer Risk (10 ⁻⁶)	N/A [†]	N/A [†]	N/A [†]
T-BACT Required?	No		
Special Permit Conditions?	No		

[†]Prioritization score is less than 1. No further analysis is required.

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).

Compliance is expected with this Rule.

Rule 4201 Particulate Matter Concentration

Section 3.0 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.

N-8069-7-1, '8-1 and '9-1: Bread baking ovens 1, 2 and 3

Baking Fermented Dough:

The baking process is not expected to result any particulate matter emissions. Therefore, compliance assurance calculations are not performed for this process.

Natural Gas Combustion:

Regenerative Thermal Oxidizer Serving Bread Ovens 1, 2 and 3:

F-Factor for NG: 8,578 dscf/MMBtu at 60 °F

PM₁₀ Emission Factor: 0.0076 lb-PM₁₀/MMBtu (From Section VII.B)

Percentage of PM as PM₁₀ in Exhaust: 100%

$$PM \left(\frac{\text{gr}}{\text{dscf}} \right) = \frac{\left(0.0076 \frac{\text{lb - PM}}{\text{MMBtu}} \right) \left(7,000 \frac{\text{gr - PM}}{\text{lb - PM}} \right)}{\left(8,578 \frac{\text{ft}^3}{\text{MMBtu}} \right)} = 0.0 \frac{\text{gr - PM}}{\text{dscf}}$$

N-8069-10-1: Cake oven 4

F-Factor for NG: 8,578 dscf/MMBtu at 60 °F

PM₁₀ Emission Factor: 0.0076 lb-PM₁₀/MMBtu (From Section VII.B)

Percentage of PM as PM₁₀ in Exhaust: 100%

$$PM \left(\frac{\text{gr}}{\text{dscf}} \right) = \frac{\left(0.0076 \frac{\text{lb - PM}}{\text{MMBtu}} \right) \left(7,000 \frac{\text{gr - PM}}{\text{lb - PM}} \right)}{\left(8,578 \frac{\text{ft}^3}{\text{MMBtu}} \right)} = 0.0 \frac{\text{gr - PM}}{\text{dscf}}$$

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

F-Factor for NG: 8,578 dscf/MMBtu at 60 °F

PM₁₀ Emission Factor: 0.0076 lb-PM₁₀/MMBtu (From Section VII.B)

Percentage of PM as PM₁₀ in Exhaust: 100%

$$PM \left(\frac{\text{gr}}{\text{dscf}} \right) = \frac{\left(0.0076 \frac{\text{lb - PM}}{\text{MMBtu}} \right) \left(7,000 \frac{\text{gr - PM}}{\text{lb - PM}} \right)}{\left(8,578 \frac{\text{ft}^3}{\text{MMBtu}} \right)} = 0.0 \frac{\text{gr - PM}}{\text{dscf}}$$

N-8069-16-1:

This unit is not subject to the requirements of this rule.

Summary:

For each permit unit, grain loading factor (gr-PM/dscf) is not above 0.1 lb-PM/dscf limit. Therefore, each unit is expected to operate in compliance with this Rule.

Rule 4301 Fuel Burning Equipment

The requirements of section 5.0 are as follows:

- Combustion contaminants (TSP) - Not to exceed 0.1 gr/dscf @ 12% CO₂ and 10 lb/hr.
- SO_x emissions - Not to exceed 200 lb/hr
- NO_x emissions - Not to exceed 140 lb/hr

CO₂ based F-factor for natural gas combustion is assumed to be 1,024.2 dscf/MMBtu.

N-8069-7-1, '-8-1 and '-9-1: Bread baking ovens 1, 2 and 3

Baking Fermented Dough:

This rule is not applicable to this process.

Natural Gas Combustion:

$$\begin{aligned}
 \text{PM} \left(\frac{\text{gr}}{\text{dscf}} \right) &= \frac{\text{PM Emissions} \left(\frac{\text{lb - PM}}{\text{MMBtu}} \right) \times 7,000 \frac{\text{gr - PM}}{\text{lb - PM}}}{F_{\text{factor CO}_2} \left(\frac{\text{dscf}}{\text{MMBtu}} \right) \times \left(\frac{100\%}{12\%} \right)} \\
 &= \frac{\left(0.0076 \frac{\text{lb - PM}}{\text{MMBtu}} \right) \left(7,000 \frac{\text{gr - PM}}{\text{lb - PM}} \right)}{\left(1,024.2 \frac{\text{dscf}}{\text{MMBtu}} \right) \left(\frac{100\%}{12\%} \right)} \\
 &= 0.0062 \frac{\text{gr - PM}}{\text{dscf}}
 \end{aligned}$$

Permit#	PM (gr/dscf)	PM (lb/hr)	SO _x (lb/hr)	NO _x (lb/hr)
N-8069-7-1	0.0062	0.024	0.008	0.332
N-8069-8-1	0.0062	0.030	0.011	0.387
N-8069-9-1	0.0062	0.030	0.011	0.332

Regenerative Thermal Oxidizer:

This rule is not applicable to this unit since it is an emission control device.

N-8069-10-1: Cake oven 4

PM, SO_x and NO_x emissions will be same as estimated for permits N-8069- 7-1.

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

Permit#	PM (gr/dscf)	PM (lb/hr)	SO _x (lb/hr)	NO _x (lb/hr)
N-8069-13-1, '-14-1	0.0062	0.0	0.0	0.1
N-8069-15-1	0.0062	0.0	0.0	0.0

N-8069-16-1: Electric Oven

This unit is not subject to the requirements of this rule.

Summary:

The proposed emission rates for NO_x, SO_x, PM will be less the maximum allowable limits in this Rule. Therefore, the ovens are expected to operate in compliance with this Rule.

Rule 4693 Bakery Ovens

The requirements of this rule shall apply to bakery ovens operated at major source facilities, which emit VOCs during the baking of yeast-leavened products.

Per section VII.D.2 of this document, this facility is not a Major Source for VOC emissions. Thus, this rule does not apply.

Rule 4801 Sulfur Compounds

Section 3.1 states that a person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding a concentration of two-tenths (0.2) percent by volume calculated as sulfur dioxide (SO₂) at the point of discharge on a dry basis averaged over 15 consecutive minutes.

N-8069-7-1, '-8-1 and '-9-1: Bread baking ovens 1, 2 and 3

N-8069-10-1: Cake oven 4

N-8069-13-1: Cake oven 1

N-8069-14-1: Cake oven 2

N-8069-15-1: Bread/Cake oven

For natural gas combustion at a reference state of 60 °F, the Rule 4801 limit of 2,000 ppmvd is equivalent to:

$$\frac{(2000 \text{ ppmvd}) \left(8,578 \frac{\text{dscf}}{\text{MMBtu}} \right) \left(64 \frac{\text{lb} - \text{SO}_x}{\text{lb} - \text{mol}} \right)}{\left(379.5 \frac{\text{dscf}}{\text{lb} - \text{mol}} \right) (10^6)} \cong 2.9 \frac{\text{lb} - \text{SO}_x}{\text{MMBtu}}$$

SO_x emission rate of 0.00285 lb/MMBtu is used to determine potential emissions from the above listed ovens and the proposed RTO. Therefore, it is expected that each unit will have a SO_x emission concentration less than the 2000 ppmvd.

N-8069-16-1: Electric Oven

This unit is not subject to the requirements of this rule.

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.

Greenhouse Gas Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus, the District is the Lead Agency for this project.

Per calculations in Appendix IV of this document, there is no increase in GHG emissions from the proposed project. Therefore, this project is determined to have less than significant impact on the global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. 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

Previously issued ATC N-8069-7-0, '-8-0 and '-9-0 has the following conditions:

- VOC emissions (EF in lb-VOC/ton of bread baked), measured at the RTO stack, shall be established during the initial source test while producing saleable bread that results in the highest VOC emissions. The established number shall be listed in the Permit to Operate. These emissions include bread baking process emissions from this oven and natural gas combustion emissions in the RTO. [District Rule 2201]
- The permittee shall determine and record the daily VOC emissions by multiplying the total bread baked (tons/day) in this oven and the emission factor (EF, lb-VOC/ton of bread baked). [District Rule 2201]

However, under the proposed ATCs, the permittee is required to determine the VOC emission factor (lb-VOC/ton of baked bread) from the latest source test and use this factor along with the daily production to demonstrate compliance with the daily VOC limit. The draft permit condition in each permit is as follows:

- The permittee shall determine and record the daily VOC emissions by multiplying the total bread baked (tons/day) in this oven and the emission factor (EF, lb-VOC/ton of bread baked). The emission factor shall be determined using the results from the latest source test. [District Rule 2201]

Summary:

Compliance with all applicable regulations is expected. Therefore, issuance of ATCs is recommended after addressing comments from the Air Resources Board (ARB), and the applicant.

X. BILLING INFORMATION

Permit	Fee Schedule	Fee Description	Previous Fee Schedule
N-8069-7-1, '-10-1	3020-02F	3.2 MMBtu/hr	3020-02F
N-8069-8-1, '-9-1	3020-02F	4.0 MMBtu/hr	3020-02F
N-8069-13-0, '-14-0	3020-02C	0.56 MMBtu/hr	3020-02C
N-8069-15-0	3020-02B	0.375 MMBtu/hr	3020-02B
N-8069-16-0	3020-03A	3.5 kVA	3020-03A

APPENDICES

- Appendix I: Draft ATC Permits
- Appendix II: BACT Guideline 1.6.24 and Top-Down BACT Analysis
- Appendix III: Potential to Emit Calculations
- Appendix IV: GHG Analysis
- Appendix V: Risk Management Review and AAQA Summary
- Appendix VI: Permits to Operate N-8069-13-0 to '-16-0

Appendix I
Draft ATC Permits

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-8069-7-1

LEGAL OWNER OR OPERATOR: RALCORP FROZEN BAKERY PRODUCTS
MAILING ADDRESS: ATTN: ACCOUNTING
1831 S STOCKTON ST
LODI, CA 95240

LOCATION: 40 E. NEUHARTH DRIVE
LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF BREAD BAKING OVEN #1 TO REDUCE ALT-20 TESTING FREQUENCY FOR INLET NATURAL DRAFT OPENINGS; REQUIRE OVEN PRESSURE MONITORING USING A SENSOR INSTALLED AT THE TIE-IN OF EXHAUST FROM BREAD BAKING OVENS RATHER THAN INDIVIDUAL PRESSURE MONITORING SENSOR; ESTABLISH MINIMUM RTO CHAMBER TEMPERATURE; ESTABLISH NOX LIMITS USING 2.0 LB/DAY FOR EACH BURNER SYSTEM; ESTABLISH CO LIMITS USING LATEST SOURCE TEST RESULTS. THE POST-PROJECT EQUIPMENT DESCRIPTION WILL BE: BREAD BAKING OVEN #1: 3.2 MMBTU/HR (4 MAXON'S CYCLOMAX BURNERS, EACH RATED AT 0.8 MMBTU/HR) SASIB TURBOTHERMAL OVEN VENTED TO A 2.2 MMBTU/HR ADWEST TECHNOLOGIES INC, RETOX 7.4 RTO95, WITH TWO CHAMBERS, NATURAL GAS-FIRED, REGENERATIVE THERMAL OXIDIZER (RTO). THIS RTO SERVES PERMIT UNITS N-8069-7, '-8, AND '-9.

CONDITIONS

1. This Authority to Construct permit cancels and replaces ATC N-8069-7-0. [District Rule 2201]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {15} 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]
5. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
6. This oven and the RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 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

N-8069-7-1 : Sep 28 2012 8:42AM - KAHLOJ : Joint Inspection NOT Required

7. The average RTO combustion chamber temperature over a 30-consecutive-minute block shall be at or above 1,595°F when bread baking process operates. [District Rule 2201]
8. The RTO chambers shall be permanently equipped with temperature measurement devices to determine the average combustion temperature. The combustion temperature shall be continuously monitored and recorded at least every 15-minutes, as long as the bread baking process operates. The recorded temperature data shall be averaged over a 30-consecutive-minute block to demonstrate compliance with the RTO combustion chamber temperature. Upon detecting any excursion, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2201]
9. The combined capture and control efficiency of the RTO system shall be at least 95% for VOCs during the baking process. [District Rule 2201]
10. The direction of air flow through each natural draft opening (NDO) shall occur into an associated oven compartment, which is ducted to the RTO. Upon successful compliance demonstration, VOC capture efficiency can be assumed 100 percent for the NDO. [District Rule 2201]
11. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
12. VOC emissions shall not exceed 23.0 pounds in any one day. These emissions include bread baking process emissions from this oven and natural gas combustion emissions in the RTO chambers. [District Rule 2201]
13. NO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.104 lb/MMBtu referenced as NO₂. [District Rule 2201]
14. SO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
15. PM₁₀ emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
16. CO emissions from natural gas combustion shall not exceed any of the following limits: 0.126 lb/MMBtu for burner #1, 0.007 lb/MMBtu for burner #2, 0.005 lb/MMBtu for burner #3, and 0.007 lb/MMBtu for burner #4. [District Rule 2201]
17. VOC emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]
18. Emissions from natural gas combustion in the RTO serving the baking process emissions shall not exceed any of the following limits: 30.0 ppmvd NO_x @ 3% O₂ (referenced as NO₂), 400 ppmvd CO @ 3% O₂, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
19. {33} Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
20. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
21. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-lighting of the unit resulting from an unscheduled or unavoidable shut off of the fuel flow or electrical power to the unit. [District Rule 2201]
22. During source testing, the oven shall either be operated at or above 90% of its maximum hourly processing capability, or at or above 90% of its maximum hourly production in the previous year. [District Rule 2201]

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CONDITIONS CONTINUE ON NEXT PAGE

23. At least once every five years, or sooner if required by the EPA, ARB, or the District, source testing to determine the direction of air flow through each NDO shall be conducted using "Negative Pressure Enclosure Qualitative Test Method for Bakery Ovens" protocol (available at <http://www.epa.gov/ttn/emc/approal/alt-020.pdf>). Should the permittee decide to use different test methodology, the methodology must be approved by the District. [District Rule 2201]
24. At least once every five years, or sooner if required by the EPA, ARB, or the District, a presurvey must be done prior to source testing to determine VOC compound analytes present in the effluent stream using the methodology described in EPA Method 18, Section 16. The presurvey will be used to develop the appropriate sampling approach to ensure efficient collection of all VOCs present in the effluent and to develop a specific list of target compounds to be quantified during the subsequent total VOC source testing. Should the permittee decide to use a different test methodology, the methodology must be approved by the District and EPA. [District Rule 2201]
25. Annual source testing to determine compliance with each VOC emission limit shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 18, 25, 25A, or 308 to measure VOC emissions. EPA Methods 25 or 25A can be used to determine the total VOCs only if the analyzer is calibrated with ethanol, or appropriate compound as determined in the pre-survey of the latest source test, and the total carbon mass is scaled to the mole fraction of ethanol (or appropriate compound), with the balance being scaled to the relative mole fraction of other the identified compounds. The Method 25 or 25A scaling factor shall be listed in the Permit to Operate. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
26. The VOC control efficiency of the RTO (at least 95%) shall be conducted annually using EPA Methods 18, 25, 25A, or 308. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081 and 2201]
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
29. The permittee shall determine and record the daily VOC emissions by multiplying the total bread baked (tons/day) in this oven and the emission factor (EF, lb-VOC/ton of bread baked). The emission factor shall be determined using the results from the latest source test. [District Rule 2201]
30. The permittee shall keep records of the date and time of burner inspection, burner identification (e.g. compartment 1, 2, 3 or 4), name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
31. The permittee shall keep records of the date and time of oxidizer inspection, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
32. The permittee shall maintain a daily record of the following items: (a) total bread baked per day by bread product type (tons/day), (b) RTO combustion temperature data, (c) operating pressure as measured by the pressure transmitter at the tie-in of oven #1, #2 and #3 (in inches of water or mercury), (d) total fuel use in MMscf/day in this oven, (e) total fuel use in MMscf/day in the RTO, (f) number of ovens in operation, and (g) RTO downtime and the reason of downtime. [District Rule 2201]
33. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-8069-8-1

LEGAL OWNER OR OPERATOR: RALCORP FROZEN BAKERY PRODUCTS
MAILING ADDRESS: ATTN: ACCOUNTING
1831 S STOCKTON ST
LODI, CA 95240

LOCATION: 40 E. NEUHARTH DRIVE
LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF BREAD BAKING OVEN #2 TO REDUCE ALT-20 TESTING FREQUENCY FOR INLET NATURAL DRAFT OPENINGS; REQUIRE OVEN PRESSURE MONITORING USING A SENSOR INSTALLED AT THE TIE-IN OF EXHAUST FROM BREAD BAKING OVENS RATHER THAN INDIVIDUAL PRESSURE MONITORING SENSOR; ESTABLISH MINIMUM RTO CHAMBER TEMPERATURE; ESTABLISH NOX LIMITS USING 2.0 LB/DAY FOR EACH BURNER SYSTEM; ESTABLISH CO LIMITS USING LATEST SOURCE TEST RESULTS; RE-ESTABLISH HEAT INPUT RATING OF THE OVEN. THE POST-PROJECT EQUIPMENT DESCRIPTION WILL BE: BREAD BAKING OVEN #2: 4.0 MMBTU/HR (4 MAXON'S CYCLOMAX, 3 BURNERS RATED AT 0.8 MMBTU/HR EACH, 1 BURNER RATED AT 1.6 MMBTU/HR) GOUET STONE SOLE TUNNEL OVEN VENTED TO A 2.2 MMBTU/HR ADWEST TECHNOLOGIES INC, RETOX 7.4 RTO95, WITH TWO CHAMBERS, NATURAL GAS-FIRED, REGENERATIVE THERMAL OXIDIZER (RTO). THIS RTO SERVES PERMIT UNITS N-8069-7, '-8, AND '-9.

CONDITIONS

1. This Authority to Construct permit cancels and replaces ATC N-8069-8-0. [District Rule 2201]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {15} 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]
5. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
6. This oven and the RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 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.

Sayed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services

N-8069-8-1 : Sep 28 2012 8:42AM - KAHLOUJ : Joint Inspection NOT Required

7. The average RTO combustion chamber temperature over a 30-consecutive-minute block shall be at or above 1,595°F when bread baking process operates. [District Rule 2201]
8. The RTO chambers shall be permanently equipped with temperature measurement devices to determine the average combustion temperature. The combustion temperature shall be continuously monitored and recorded at least every 15-minutes, as long as the bread baking process operates. The recorded temperature data shall be averaged over a 30-consecutive-minute block to demonstrate compliance with the RTO combustion chamber temperature. Upon detecting any excursion, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2201]
9. The combined capture and control efficiency of the RTO system shall be at least 95% for VOCs during the baking process. [District Rule 2201]
10. The direction of air flow through each natural draft opening (NDO) shall occur into an associated oven compartment, which is ducted to the RTO. Upon successful compliance demonstration, VOC capture efficiency can be assumed 100 percent for the NDO. [District Rule 2201]
11. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
12. VOC emissions shall not exceed 23.0 pounds in any one day. These emissions include bread baking process emissions from this oven and natural gas combustion emissions in the RTO chambers. [District Rule 2201]
13. NO_x emissions from natural gas combustion shall not exceed any of the following limits: 0.104 lb/MMBtu for burner #1, 2 and 3 and 0.086 lb/MMBtu for burner #4 referenced as NO₂. [District Rule 2201]
14. SO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
15. PM₁₀ emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
16. CO emissions from natural gas combustion shall not exceed any of the following limits: 0.724 lb/MMBtu for burner #1, 0.195 lb/MMBtu for burner #2, 0.594 lb/MMBtu for burner #3, and 0.985 lb/MMBtu for burner #4. [District Rule 2201]
17. VOC emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]
18. Heat input rate to burner #4 in this oven shall not exceed 23.3 MMBtu in any one day. [District Rule 2201]
19. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in burner #4 shall be installed, utilized and maintained. [District Rule 2201]
20. Emissions from natural gas combustion in the RTO serving the baking process emissions shall not exceed any of the following limits: 30.0 ppmvd NO_x @ 3% O₂ (referenced as NO₂), 400 ppmvd CO @ 3% O₂, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
21. {33} Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
22. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
23. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-lighting of the unit resulting from an unscheduled or unavoidable shut off of the fuel flow or electrical power to the unit. [District Rule 2201]
24. During source testing, the oven shall either be operated at or above 90% of its maximum hourly processing capability, or at or above 90% of its maximum hourly production in the previous year. [District Rule 2201]

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CONDITIONS CONTINUE ON NEXT PAGE

25. At least once every five years, or sooner if required by the EPA, ARB, or the District, source testing to determine the direction of air flow through each NDO shall be conducted using "Negative Pressure Enclosure Qualitative Test Method for Bakery Ovens" protocol (available at <http://www.epa.gov/ttn/emc/approalt/alt-020.pdf>). Should the permittee decide to use different test methodology, the methodology must be approved by the District. [District Rule 2201]
26. At least once every five years, or sooner if required by the EPA, ARB, or the District, a presurvey must be done prior to source testing to determine VOC compound analytes present in the effluent stream using the methodology described in EPA Method 18, Section 16. The presurvey will be used to develop the appropriate sampling approach to ensure efficient collection of all VOCs present in the effluent and to develop a specific list of target compounds to be quantified during the subsequent total VOC source testing. Should the permittee decide to use a different test methodology, the methodology must be approved by the District and EPA. [District Rule 2201]
27. Annual source testing to determine compliance with each VOC emission limit shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 18, 25, 25A, or 308 to measure VOC emissions. EPA Methods 25 or 25A can be used to determine the total VOCs only if the analyzer is calibrated with ethanol, or appropriate compound as determined in the pre-survey of the latest source test, and the total carbon mass is scaled to the mole fraction of ethanol (or appropriate compound), with the balance being scaled to the relative mole fraction of other the identified compounds. The Method 25 or 25A scaling factor shall be listed in the Permit to Operate. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
28. The VOC control efficiency of the RTO (at least 95%) shall be conducted annually using EPA Methods 18, 25, 25A, or 308. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081 and 2201]
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. The permittee shall determine and record the daily VOC emissions by multiplying the total bread baked (tons/day) in this oven and the emission factor (EF, lb-VOC/ton of bread baked). The emission factor shall be determined using the results from the latest source test. [District Rule 2201]
32. The permittee shall keep records of the date and time of burner inspection, burner identification (e.g. compartment 1, 2, 3 or 4), name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
33. The permittee shall keep records of the date and time of oxidizer inspection, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
34. The permittee shall maintain a daily record of the following items: (a) total bread baked per day by bread product type (tons/day), (b) RTO combustion temperature data, (c) operating pressure as measured by the pressure transmitter at the tie-in of oven #1, #2 and #3 (in inches of water or mercury), (d) total fuel use in MMscf/day in this oven, (e) total fuel use in MMscf/day in the RTO, (f) number of ovens in operation, (g) RTO downtime and the reason of downtime, and (h) Heat input rate to burner #4 in this oven (MMBtu/day). [District Rule 2201]
35. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-8069-9-1

LEGAL OWNER OR OPERATOR: RALCORP FROZEN BAKERY PRODUCTS
MAILING ADDRESS: ATTN: ACCOUNTING
1831 S STOCKTON ST
LODI, CA 95240

LOCATION: 40 E. NEUHARTH DRIVE
LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF BREAD BAKING OVEN #3 TO REDUCE ALT-20 TESTING FREQUENCY FOR INLET NATURAL DRAFT OPENINGS; REQUIRE OVEN PRESSURE MONITORING USING A SENSOR INSTALLED AT THE TIE-IN OF EXHAUST FROM BREAD BAKING OVENS RATHER THAN INDIVIDUAL PRESSURE MONITORING SENSOR; ESTABLISH MINIMUM RTO CHAMBER TEMPERATURE; ESTABLISH NOX LIMITS USING 2.0 LB/DAY FOR EACH BURNER SYSTEM; ESTABLISH CO LIMITS USING LATEST SOURCE TEST RESULTS; RE-ESTABLISH HEAT INPUT RATING OF THE OVEN. THE POST-PROJECT EQUIPMENT DESCRIPTION WILL BE: BREAD BAKING OVEN #3: 4.0 MMBTU/HR (4 MAXON'S CYCLOMAX, 3 BURNERS RATED AT 0.8 MMBTU/HR EACH, 1 BURNER RATED AT 1.6 MMBTU/HR) GOUET STONE SOLE TUNNEL OVEN VENTED TO A 2.2 MMBTU/HR ADWEST TECHNOLOGIES INC, RETOX 7.4 RTO95, WITH TWO CHAMBERS, NATURAL GAS-FIRED, REGENERATIVE THERMAL OXIDIZER (RTO). THIS RTO SERVES PERMIT UNITS N-8069-7, '-8, AND '-9.

CONDITIONS

1. This Authority to Construct permit cancels and replaces ATC N-8069-9-0. [District Rule 2201]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {15} 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]
5. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
6. This oven and the RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 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

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DAVID WARNER, Director of Permit Services
N-8069-9-1 : Sep 28 2012 8:42AM - KAH:LOJ : Joint Inspection NOT Required

7. The average RTO combustion chamber temperature over a 30-consecutive-minute block shall be at or above 1,595°F when bread baking process operates. [District Rule 2201]
8. The RTO chambers shall be permanently equipped with temperature measurement devices to determine the average combustion temperature. The combustion temperature shall be continuously monitored and recorded at least every 15-minutes, as long as the bread baking process operates. The recorded temperature data shall be averaged over a 30-consecutive-minute block to demonstrate compliance with the RTO combustion chamber temperature. Upon detecting any excursion, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2201]
9. The combined capture and control efficiency of the RTO system shall be at least 95% for VOCs during the baking process. [District Rule 2201]
10. The direction of air flow through each natural draft opening (NDO) shall occur into an associated oven compartment, which is ducted to the RTO. Upon successful compliance demonstration, VOC capture efficiency can be assumed 100 percent for the NDO. [District Rule 2201]
11. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
12. VOC emissions shall not exceed 23.0 pounds in any one day. These emissions include bread baking process emissions from this oven and natural gas combustion emissions in the RTO chambers. [District Rule 2201]
13. NOx emissions from natural gas combustion shall not exceed any of the following limits: 0.104 lb/MMBtu for burner #1, 2 and 3 and 0.052 lb/MMBtu for burner #4 referenced as NO2. [District Rule 2201]
14. SOx emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
15. PM10 emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
16. CO emissions from natural gas combustion shall not exceed any of the following limits: 0.165 lb/MMBtu for burner #1, 0.439 lb/MMBtu for burner #2, 0.021 lb/MMBtu for burner #3, and 0.871 lb/MMBtu for burner #4. [District Rule 2201]
17. VOC emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]
18. Emissions from natural gas combustion in the RTO serving the baking process emissions shall not exceed any of the following limits: 30.0 ppmvd NOx @ 3% O2 (referenced as NO2), 400 ppmvd CO @ 3% O2, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
19. {33} Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
20. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
21. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-lighting of the unit resulting from an unscheduled or unavoidable shut off of the fuel flow or electrical power to the unit. [District Rule 2201]
22. During source testing, the oven shall either be operated at or above 90% of its maximum hourly processing capability, or at or above 90% of its maximum hourly production in the previous year. [District Rule 2201]

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CONDITIONS CONTINUE ON NEXT PAGE

23. At least once every five years, or sooner if required by the EPA, ARB, or the District, source testing to determine the direction of air flow through each NDO shall be conducted using "Negative Pressure Enclosure Qualitative Test Method for Bakery Ovens" protocol (available at <http://www.epa.gov/ttn/emc/approalt/alt-020.pdf>). Should the permittee decide to use different test methodology, the methodology must be approved by the District. [District Rule 2201]
24. At least once every five years, or sooner if required by the EPA, ARB, or the District, a presurvey must be done prior to source testing to determine VOC compound analytes present in the effluent stream using the methodology described in EPA Method 18, Section 16. The presurvey will be used to develop the appropriate sampling approach to ensure efficient collection of all VOCs present in the effluent and to develop a specific list of target compounds to be quantified during the subsequent total VOC source testing. Should the permittee decide to use a different test methodology, the methodology must be approved by the District and EPA. [District Rule 2201]
25. Annual source testing to determine compliance with each VOC emission limit shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 18, 25, 25A, or 308 to measure VOC emissions. EPA Methods 25 or 25A can be used to determine the total VOCs only if the analyzer is calibrated with ethanol, or appropriate compound as determined in the pre-survey of the latest source test, and the total carbon mass is scaled to the mole fraction of ethanol (or appropriate compound), with the balance being scaled to the relative mole fraction of other the identified compounds. The Method 25 or 25A scaling factor shall be listed in the Permit to Operate. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
26. The VOC control efficiency of the RTO (at least 95%) shall be conducted annually using EPA Methods 18, 25, 25A, or 308. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081 and 2201]
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
29. The permittee shall determine and record the daily VOC emissions by multiplying the total bread baked (tons/day) in this oven and the emission factor (EF, lb-VOC/ton of bread baked). The emission factor shall be determined using the results from the latest source test. [District Rule 2201]
30. The permittee shall keep records of the date and time of burner inspection, burner identification (e.g. compartment 1, 2, 3 or 4), name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
31. The permittee shall keep records of the date and time of oxidizer inspection, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
32. The permittee shall maintain a daily record of the following items: (a) total bread baked per day by bread product type (tons/day), (b) RTO combustion temperature data, (c) operating pressure as measured by the pressure transmitter at the tie-in of oven #1, #2 and #3 (in inches of water or mercury), (d) total fuel use in MMscf/day in this oven, (e) total fuel use in MMscf/day in the RTO, (f) number of ovens in operation, and (g) RTO downtime and the reason of downtime. [District Rule 2201]
33. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
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PERMIT NO: N-8069-10-1

LEGAL OWNER OR OPERATOR: RALCORP FROZEN BAKERY PRODUCTS
MAILING ADDRESS: ATTN: ACCOUNTING
1831 S STOCKTON ST
LODI, CA 95240

LOCATION: 40 E. NEUHARTH DRIVE
LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF CAKE BAKING OVEN #4 TO ESTABLISH NOX LIMITS USING 2.0 LB/DAY FOR EACH BURNER SYSTEM; ESTABLISH CO LIMITS USING LATEST SOURCE TEST RESULTS. THE POST-PROJECT EQUIPMENT DESCRIPTION WILL BE: CAKE BAKING OVEN #4: 3.2 MMBTU/HR (4 MAXON'S CYCLOMAX EACH RATED AT 0.8 MMBTU/HR) MEINCKE OVEN

CONDITIONS

1. This Authority to Construct permit cancels and replaces ATC N-8069-10-0. [District Rule 2201]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {15} 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]
5. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
6. This oven shall only be fired on PUC-regulated natural gas. [District Rule 2201]
7. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 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

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8. Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheet for each flavoring or other similar additives to demonstrate compliance with this condition. [District Rule 2201]
9. NO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.104 lb/MMBtu referenced as NO₂. [District Rule 2201]
10. SO_x emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
11. PM₁₀ emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
12. CO emissions from natural gas combustion shall not exceed any of the following limits: 0.010 lb/MMBtu for burner #1, 0.583 lb/MMBtu for burner #2, 0.601 lb/MMBtu for burner #3, and 0.392 lb/MMBtu for burner #4. [District Rule 2201]
13. VOC emissions from natural gas combustion in each burner system (1, 2, 3 or 4) shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]
14. The permittee shall maintain daily records of fuel use in MMscf/day in this oven. [District Rule 2201]
15. The permittee shall keep records of the date and time of burner inspection, burner identification (e.g. compartment 1, 2, 3 or 4), name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
16. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-8069-13-1

LEGAL OWNER OR OPERATOR: RALCORP FROZEN BAKERY PRODUCTS
MAILING ADDRESS:

ATTN: ACCOUNTING
1831 S STOCKTON ST
LODI, CA 95240

LOCATION: 40 E. NEUHARTH DRIVE
LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF CAKE OVEN #1 TO INCLUDE A CONDITION THAT CAKE BATTER SHALL NOT CONTAIN VOC CONTAINING INGREDIENTS; REMOVE DAILY VOC EMISSION LIMIT CALCULATION FOR BAKING PROCESS. THE POST-PROJECT DESCRIPTION WILL BE: 0.56 MMBTU/HR NATURAL GAS-FIRED REVENT ECONOMITE CAKE OVEN #1

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. {15} 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]
4. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
5. This oven shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
7. Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheet for each flavoring or other similar additives to demonstrate compliance with this condition. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 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

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8. Emissions from natural gas combustion in this oven shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 0.084 lb-CO/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
9. This oven shall be equipped with an operational nonresettable elapsed time meter. [District Rule 2201]
10. The permittee shall maintain daily records of fuel use in MMscf/day in this oven. The fuel use (MMscf/day) may be estimated as follows: 0.00056 x total daily hours of operation taken from the time meter. [District Rule 2201]
11. The permittee shall keep records of the date and time of burner inspection, burner identification, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
12. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-8069-14-1

LEGAL OWNER OR OPERATOR: RALCORP FROZEN BAKERY PRODUCTS
MAILING ADDRESS: ATTN: ACCOUNTING
1831 S STOCKTON ST
LODI, CA 95240

LOCATION: 40 E. NEUHARTH DRIVE
LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF CAKE OVEN #2 TO INCLUDE A CONDITION THAT CAKE BATTER SHALL NOT CONTAIN VOC CONTAINING INGREDIENTS; REMOVE DAILY VOC EMISSION LIMIT CALCULATION FOR BAKING PROCESS. THE POST-PROJECT DESCRIPTION WILL BE: 0.56 MMBTU/HR NATURAL GAS-FIRED REVENT ECONOMITE CAKE OVEN #2

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. {15} 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]
4. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
5. This oven shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
7. Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheet for each flavoring or other similar additives to demonstrate compliance with this condition. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 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
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8. Emissions from natural gas combustion in this oven shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 0.084 lb-CO/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
9. This oven shall be equipped with an operational nonresettable elapsed time meter. [District Rule 2201]
10. The permittee shall maintain daily records of fuel use in MMscf/day in this oven. The fuel use (MMscf/day) may be estimated as follows: 0.00056 x total daily hours of operation taken from the time meter. [District Rule 2201]
11. The permittee shall keep records of the date and time of burner inspection, burner identification, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
12. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
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PERMIT NO: N-8069-15-1

LEGAL OWNER OR OPERATOR: RALCORP FROZEN BAKERY PRODUCTS
MAILING ADDRESS: ATTN: ACCOUNTING
1831 S STOCKTON ST
LODI, CA 95240

LOCATION: 40 E. NEUHARTH DRIVE
LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF 0.375 MMBTU/HR NATURAL GAS FIRED WAYNE HOWE BLUE ANGEL OVEN: CORRECT EQUIPMENT MANUFACTURER NAME; INCLUDE A CONDITION THAT CAKE BATTER SHALL NOT CONTAIN VOC CONTAINING INGREDIENTS; REMOVE VOC FLAVOR COMPONENT FROM DAILY EMISSION CALCULATION; RE-ESTABLISH THE DAILY VOC EMISSION CALCULATION EQUATION. THE POST-PROJECT EQUIPMENT DESCRIPTION WILL BE: 0.375 MMBTU/HR NATURAL GAS FIRED BREAD/CAKE OVEN

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. {15} 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]
4. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
5. This oven shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
7. Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheet for each flavoring or other similar additives to demonstrate compliance with this condition. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 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

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8. The total VOC emissions from the baking process and natural gas combustion in this oven shall not exceed 2.0 pounds in any one day. [District Rule 2201]
9. Emissions from natural gas combustion in this oven shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 0.084 lb-CO/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
10. This oven shall be equipped with an operational nonresettable elapsed time meter. [District Rule 2201]
11. The daily VOCs shall be determined using the following equation: $(EF1 \text{ lb-VOC/lb-bread} \times P \text{ lb-bread/day}) + (5.5 \text{ lb/MMscf} \times NG \text{ MMscf/day})$, where EF1 is VOC in bread, P is bread produced, and NG is natural gas use. The natural gas fuel use (MMscf/day) may be estimated as follows: $0.00056 \times \text{total daily hours of operation taken from the time meter}$. [District Rule 2201]
12. The permittee shall maintain daily records of fuel used in MMscf/day in this oven and the total VOC emissions (lb/day). [District Rule 2201]
13. The permittee shall keep records of the date and time of burner inspection, burner identification, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
14. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-8069-16-1

LEGAL OWNER OR OPERATOR: RALCORP FROZEN BAKERY PRODUCTS
MAILING ADDRESS: ATTN: ACCOUNTING
1831 S STOCKTON ST
LODI, CA 95240

LOCATION: 40 E. NEUHARTH DRIVE
LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF ELECTRIC BAKING OVEN TO INCLUDE A CONDITION THAT CAKE BATTER SHALL NOT CONTAIN VOC CONTAINING INGREDIENTS; REMOVE VOC FLAVOR COMPONENT FROM DAILY EMISSION CALCULATION

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} 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]
3. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
4. Cake batter shall not have any VOC containing ingredient. The permittee must keep material safety data sheets or product data sheet for each flavoring or other similar additives to demonstrate compliance with this condition. [District Rule 2201]
5. The total VOC emissions from the baking process shall not exceed 2.0 pounds in any one day. [District Rule 2201]
6. The daily VOCs shall be determined using the following equation: $EF1 \text{ lb-VOC/lb-bread} \times P \text{ lb-bread/day}$, where EF1 is VOC in bread, P is bread produced. [District Rule 2201]
7. The permittee shall maintain daily records of the total VOC emissions (lb/day). [District Rule 2201]
8. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 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

N-8069-16-1: Sep 26 2012 8:42AM - KAHLONU : Joint Inspection NOT Required

Appendix II
BACT Guideline 1.6.24 and Top-Down BACT Analysis

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 1.6.24*

Last Update 2/12/2008

Commercial Bakery Oven

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
NOx	30 ppmvd @ 3% O2 equivalent to 0.036 lb/MMBtu	Low Temperature-Selective Catalytic Reduction	Electric Oven
VOC	VOC capture and 95% control efficiency - thermal/catalytic incineration, or equivalent		

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 a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required 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**

Top-Down BACT Analysis for VOC

Step 1 - Identify All Possible Control Technologies

Achieved-in-Practice:

VOC capture and 95% control efficiency – thermal/catalytic incineration or equivalent

Technologically Feasible:

None

Alternate Basic Equipment:

None

Step 2 - Eliminate Technologically Infeasible Options

All control options listed in step 1 are technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. VOC capture and control using thermal/catalytic incinerator

Step 4 - Cost Effectiveness Analysis

There is no technologically feasible option listed in Step 3 for which a cost-effectiveness analysis is required.

Step 5 - Select BACT

BACT to reduce VOC emissions would be to install a thermal/catalytic incinerator or equivalent control technology. The applicant had installed a regenerative thermal oxidizer (RTO). Therefore, BACT for VOC emissions is satisfied.

Appendix III
Potential to Emit Calculations

Potential to Emit for Ralcorp Frozen Bakery, Inc.
N-8069-7 (Oven #1), '-8 (Oven #2), '-9 (Oven #3), and '-10 (Oven #4)

Unit	Bumer#	Source Test Results		Heat Input MMBtu/hr	CO with 20% Margin of Compliance					NOx with 2.0 lb/day limit					SOx Emissions				PM ₁₀ Emissions				VOC Emissions					
		Test date	NOx ppmvd ¹		CO	ppmvd ^{1,2}	lb/MMBtu ³	lb/hr ⁵	lb/day ⁶	lb/yr ⁷	ppmvd ^{1,8}	lb/MMBtu ⁴	lb/hr ⁵	lb/day ⁶	lb/yr ⁷	lb/MMBtu	lb/hr ⁵	lb/day ⁶	lb/yr ⁷	lb/MMBtu	lb/hr ⁵	lb/day ⁶	lb/yr ⁷	lb/MMBtu	lb/hr ⁵	lb/day ⁶	lb/yr ⁷	
Oven #1	1	2/21/12	50.2	141.8	0.8	170	0.126	0.101	2.4	876	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	2	2/21/12	23.8	7.4	0.8	9	0.007	0.006	0.1	37	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	3	2/22/12	78.7	5.9	0.8	7	0.005	0.004	0.1	37	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	4	2/22/12	48.2	7.5	0.8	9	0.007	0.006	0.1	37	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
Total:					0.117	2.7	987				0.332	8.0	2,920			0.008	0.4	146			0.024	0.4	146			0.016	0.4	146
Oven #2	1	9/28/11	20.3	816.9	0.8	980	0.724	0.579	13.9	5,074	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	2	9/27/11	19.2	220.4	0.8	264	0.195	0.156	3.7	1,351	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	3	9/28/11	14.1	670	0.8	804	0.594	0.475	11.4	4,161	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	4	9/28/11	64.2	1112	1.6	1334	0.985	1.576	37.8	13,797	70.6	0.086	0.138	2.0	730	0.00285	0.005	0.1	37	0.0076	0.012	0.2	73	0.0055	0.009	0.1	37	
Total:					2.786	66.8	24,383	0	0		0.387	8.0	2,920			0.011	0.4	146			0.030	0.5	183			0.021	0.4	146
Oven #3	1	9/28/11	58.4	185.7	0.8	223	0.165	0.132	3.2	1,168	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	2	9/28/11	19.7	495.2	0.8	594	0.439	0.351	8.4	3,066	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	3	9/28/11	29.2	24.5	0.8	29	0.021	0.017	0.4	146	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	4	9/28/11	32.5	982.7	1.6	1179	0.871	1.394	33.5	12,228	42.9	0.052	0.083	2.0	730	0.00285	0.005	0.1	37	0.0076	0.012	0.3	110	0.0055	0.009	0.2	73	
Total:					1.894	45.5	16,608				0.332	8.0	2,920			0.011	0.4	146			0.030	0.6	219			0.021	0.5	183
Oven #4	1	2/14/12	44.6	10.5	0.8	13	0.01	0.008	0.2	73	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	2	2/14/12	26.5	657.2	0.8	789	0.583	0.466	11.2	4,088	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	3	2/14/12	35	677.1	0.8	813	0.601	0.481	11.5	4,198	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
	4	2/14/12	30.1	442.8	0.8	531	0.392	0.314	7.5	2,738	85.7	0.104	0.083	2.0	730	0.00285	0.002	0.1	37	0.0076	0.006	0.1	37	0.0055	0.004	0.1	37	
Total:					1.269	30.4	11,097				0.332	8.0	2,920			0.008	0.4	146			0.024	0.4	146			0.016	0.4	146

Notes:

- NO_x and CO ppmvd concentrations are corrected to 3% O₂
- CO concentrations = 1.2 x CO concentration during test (20% margin of compliance)
- CO (lb/MMBtu) = CO (ppmvd) x 28 lb/lb-mole x 8,578 dscf/MMBtu x (20.95/(20.95-3))/(379.5 dscf/lb-mole x 10⁶)
- NO_x (lb/MMBtu) = PE2 (lb/day)/(Heat input MMBtu/hr x 24 hr/day)
- PE (lb/hr) = EF (lb/MMBtu) x Heat input (MMBtu/hr)
- PE (lb/day) = PE (lb/hr) x 24 (hr/day), or EF (lb/MMBtu) x Heat input (MMBtu/hr) x 24 hr/day
- PE (lb/yr) = PE (lb/day) x 365 (days/yr)
- NO_x (ppmvd) = NO_x (lb/MMBtu) * 379.5 dscf/lb-mol * 10⁶ / (46 lb/lb-mol * 8578 dscf/MMBtu * (20.95/(20.95-3)))

70.6 1.1 x 64.2 ppmv NOx = 70.6 ppmvd @ 3% O₂ (10% margin of compliance)

0.1, 0.2 EF (lb/MMBtu) x 23.3 MMBtu/day

Appendix IV
GHG Analysis

GHG Analysis

Pre-Project GHG:

Heat input rate to each oven prior to processing project N-1093808 was as follows:

Permit	Unit description	Total heat input rate (MMBtu/hr)
N-8069-7	Bread baking oven 1	4.0
N-8069-8	Bread baking oven 2	6.4
N-8069-9	Bread baking oven 3	6.4
N-8069-10	Cake oven 4	4.0
N-8069-13	Cake oven 1	0.56
N-8069-14	Cake oven 2	0.56
N-8069-15	Bread/cake oven	0.375
N-8069-16	Electric oven	--
Total:		22.295

$$\begin{aligned} \text{CO}_2\text{e} &= 117 \text{ lb-CO}_2\text{e/MMBtu} \times 22.295 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times \text{m-ton}/2,205 \text{ lb} \\ &= 10,363 \text{ m-tons/yr} \end{aligned}$$

Post-Project GHG:

Permit	Unit description	Total heat input rate (MMBtu/hr)
N-8069-7	Bread baking oven 1	3.2
N-8069-8	Bread baking oven 2	4.0
N-8069-9	Bread baking oven 3	4.0
N-8069-10	Cake oven 4	3.2
N-8069-13	Cake oven 1	0.56
N-8069-14	Cake oven 2	0.56
N-8069-15	Bread/cake oven	0.375
N-8069-16	Electric oven	--
--	RTO	2.2
Total:		18.095

$$\begin{aligned} \text{CO}_2\text{e} &= 117 \text{ lb-CO}_2\text{e/MMBtu} \times 18.095 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times \text{m-ton}/2,205 \text{ lb} \\ &= 8,411 \text{ m-tons/yr} \end{aligned}$$

Note: CO₂ from the bread baking process is assumed to be same for pre and post project configuration.

GHG increase:

$$\begin{aligned} &= (8,411 - 10,363) \text{ m-tons/yr} \\ &= -1,952 \text{ m-tons/yr} \\ &\approx 0 \text{ m-tons/yr} \end{aligned}$$

Appendix V
Risk Management Review and AAQA Summary

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Jag Kahlon– Permit Services
 From: Kyle Melching – Technical Services
 Date: August 22, 2012
 Facility Name: Ralcorp Frozen Bakery
 Location: 40 E Neuharth Dr
 Application #(s): N-8069-7-1, 8-1, 9-1, 10-1, 14-1, & 15-1
 Project #: 1120945

A. RMR SUMMARY

RMR Summary			
Categories	Bakery w/ NG Ovens (Units 7-1, 8-1, 9-1, &10-1)	Project Totals	Facility Totals
Prioritization Score	0.2	0.2	0.2
Acute Hazard Index	N/A ¹	N/A ¹	N/A ¹
Chronic Hazard Index	N/A ¹	N/A ¹	N/A ¹
Maximum Individual Cancer Risk (10 ⁻⁶)	N/A ¹	N/A ¹	N/A ¹
T-BACT Required?	No		
Special Permit Conditions?	No		

1. Prioritization score is less than 1. No further analysis is required.

B. RMR REPORT

I. Project Description

Technical Services received a request on August 8, 2012, to perform an Ambient Air Quality Analysis (AAQA) and a Risk Management Review for a bakery operation including NG ovens with a thermal oxidizer unit in order to re-issue permits. According to the NSR, since these units are treated as new, emission factors previously entered for these units will be removed from the facilities total risk score.

Analysis

Toxic emissions for this proposed unit were calculated using flour emissions and 'NG < 10 MMBTU/Hr External Combustion emission factors. 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 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

NG Oven 7-0			
NG Usage (MMSCF/hr)	0.0032	NG Usage (MMSCF/yr)	28.032
Closest Receptor [Business] (m)	6.1		

NG Ovens 8-0			
NG Usage (MMSCF/hr)	0.004	NG Usage (MMSCF/yr)	29.529
Closest Receptor [Business] (m)	6.1		

NG Oven 9-0			
NG Usage (MMSCF/hr)	0.004	NG Usage (MMSCF/yr)	35.040
Closest Receptor [Business] (m)	6.1		

NG Oven 10-0			
NG Usage (MMSCF/hr)	0.0032	NG Usage (MMSCF/yr)	28.032
Closest Receptor [Business] (m)	6.1		

RTO			
NG Usage (MMSCF/hr)	0.0022	NG Usage (MMSCF/yr)	19.272
Closest Receptor [Business] (m)	6.1		

Technical Services also performed modeling for criteria pollutants CO, NO_x, SO_x, PM₁₀, and PM_{2.5}, as well as the RMR. Emission rates used for criteria pollutant modeling were:

Units	CO (lb hr/yr)	NO _x (lb hr/yr)	SO _x (lb hr/yr)	PM ₁₀ (lb hr/yr)	PM _{2.5} (lb hr/yr)
Unit 7-1	0.117/987	0.332/2920	0.008/146	0.024/146	0.024/146
Unit 8-1	2.786/24,383	0.387/2920	0.011/146	0.030/183	0.030/183
Unit 9-1	1.894/16,608	0.332/2920	0.011/146	0.030/219	0.030/219
Unit 10-1	1.269/11,097	0.332/2920	0.008/146	0.024/146	0.024/146
RTO	0.649/5,694	0.079/694	0.006/73	0.017/146	0.017/146

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*
Values are in $\mu\text{g}/\text{m}^3$

3 Ovens & 1 RTO	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass ¹	X	X	X	Pass
SO _x	Pass	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass ²	Pass ²
PM _{2.5}	X	X	X	Pass ²	Pass ²

*Results were taken from the attached PSD spreadsheet.

¹The project was compared to the 1-hour NO₂ National Ambient Air Quality Standard that became effective on April 12, 2010, using the District's approved procedures.

²The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

III. Conclusion

The criteria modeling runs indicate the emissions from the proposed equipment will not cause or significantly contribute to a violation of a State or National AAQS.

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. Prioritization score
- D. Facility Summary
- E. AAQA Summary

Appendix VI
Permits to Operate N-8069-13-0 to '-16-0

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-8069-13-0

EXPIRATION DATE: 08/31/2014

EQUIPMENT DESCRIPTION:

0.56 MMBTU/HR NATURAL GAS-FIRED REVENT ECONOMITE CAKE OVEN #1

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. 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]
4. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
5. This oven shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
7. The total VOC emissions from the baking process and natural gas combustion in this oven shall not exceed 2.0 pounds in any one day. [District Rule 2201]
8. Emissions from natural gas combustion in this oven shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 0.084 lb-CO/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
9. The permittee shall maintain daily records of fuel use in MMscf/day in this oven. [District Rules 2201 and 4693]
10. The permittee must keep material safety data sheets or product data sheets for each VOC containing flavoring (or other similar additives) used in making cakes. [District Rule 2201]
11. The daily VOCs shall be determined using the following equation: (EF lb-VOC/lb-flavor x F lb-flavor/day) + (5.5 lb/MMscf x NG MMscf/day), where EF is VOC in flavor, F is flavor use, and NG is natural gas use. [District Rule 2201]
12. The permittee shall keep records of the date and time of burner inspection, burner identification, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
13. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

Facility Name: RALCORP FROZEN BAKERY PRODUCTS

Location: 40 E. NEUHARTH DRIVE, LODI, CA 95241

N-8069-13-0 : Sep 26 2012 8:43AM - KAH/LONJ

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-8069-14-0

EXPIRATION DATE: 08/31/2014

EQUIPMENT DESCRIPTION:

0.56 MMBTU/HR NATURAL GAS-FIRED REVENT ECONOMITE CAKE OVEN #2

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. 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]
4. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
5. This oven shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
7. The total VOC emissions from the baking process and natural gas combustion in this oven shall not exceed 2.0 pounds in any one day. [District Rule 2201]
8. Emissions from natural gas combustion in this oven shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 0.084 lb-CO/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
9. The permittee shall maintain daily records of fuel use in MMscf/day in this oven. [District Rules 2201 and 4693]
10. The permittee must keep material safety data sheets or product data sheets for each VOC containing flavoring (or other similar additives) used in making cakes. [District Rule 2201]
11. The daily VOCs shall be determined using the following equation: (EF lb-VOC/lb-flavor x F lb-flavor/day) + (5.5 lb/MMscf x NG MMscf/day), where EF is VOC in flavor, F is flavor use, and NG is natural gas use. [District Rule 2201]
12. The permittee shall keep records of the date and time of burner inspection, burner identification, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
13. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-8069-15-0

EXPIRATION DATE: 08/31/2014

EQUIPMENT DESCRIPTION:

0.375 MMBTU/HR NATURAL GAS FIRED WAYNE HOWE BLUE ANGEL OVEN

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions from each burner stack shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. 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]
4. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
5. This oven shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. The burners in this oven shall be periodically tuned per manufacturer's recommendation. A copy of manufacturer recommendations shall be kept on-site. [District Rule 2201]
7. The total VOC emissions from the baking process and natural gas combustion in this oven shall not exceed 2.0 pounds in any one day. [District Rule 2201]
8. Emissions from natural gas combustion in this oven shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 0.084 lb-CO/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
9. The permittee shall maintain daily records of fuel use in MMscf/day in this oven. [District Rules 2201 and 4693]
10. The daily VOCs shall be determined using the following equation: (EF1 lb-VOC/lb-bread x P lb-bread/day) + (EF2 lb-VOC/lb-flavor x F lb-flavor/day) + (5.5 lb/MMscf x NG MMscf/day), where EF1 is VOC in bread, EF2 is VOC in flavor, P is bread produced, F is flavor use, and NG is natural gas use. [District Rule 2201]
11. The permittee shall keep records of the date and time of burner inspection, burner identification, name of the individual performing inspection, type of maintenance and repair performed. [District Rule 2201]
12. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-8069-16-0

EXPIRATION DATE: 08/31/2014

EQUIPMENT DESCRIPTION:
ELECTRIC BAKING OVEN

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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]
3. VOC emissions from the entire stationary source shall not exceed 19,999 pounds in any 12 consecutive month rolling period. The permittee shall maintain all records to demonstrate compliance with this condition. [District Rule 2201]
4. The total VOC emissions from the baking process shall not exceed 2.0 pounds in any one day. [District Rule 2201]
5. The daily VOCs shall be determined using the following equation: $(EF1 \text{ lb-VOC/lb-bread} \times P \text{ lb-bread/day}) + (EF2 \text{ lb-VOC/lb-flavor} \times F \text{ lb-flavor/day})$, where EF1 is VOC in bread, EF2 is VOC in flavor, P is bread produced, and F is flavor use. [District Rule 2201]
6. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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