San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

MAY 13 2015

Mr. Jeff Schultz
ConAgra Foods
554 S. Yosemite Ave
Oakdale, CA 95361

Re: Proposed Authority to Construct/Certificate of Conformity (Minor Mod)
District Facility # N-1976
Project # N-1150392

Dear Mr. Schultz:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The proposed project is to establish a combined annual heat input rate, establish identical startup and shutdown time, and establish identical emission factor for various pollutants for the boilers under permits N-1976-4, '-6, '-24 and '-27.

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

If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services
Enclosures

JK/st

cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

Facility Name:	ConAgra Foods	Date:	May 12, 2015
Mailing Address:	554 S Yosemite Ave Oakdale, CA 95361	Engineer:	Jagmeet Kahlon
		Lead Engineer:	Nick Peirce
Contact Person:	Jeff Schultz		
Telephone:	(209) 847-0321		
Application #(s):	N-1976-4-12, '-6-12, '-24-2 and '-27-1		
Project #:	N-1150392		
Deemed Complete:	March 4, 2015		

I. PROPOSAL

N-1976-4-12
ConAgra Foods has proposed to modify the permit for a 196 MMBtu/hr natural gas fired boiler (boiler #4), which is served by a selective catalytic reduction (SCR) system, as follows:

1. Remove heat input rate limit of 943,272 MMBtu/year.

   This limit was established in 1994 using permitted operational hours and the heat input rate to the boiler as the company was planning to bank some emission reduction credits (ERCs). However, the ERCs were never banked. Therefore, this limit can be removed from the permit.

2. Establish a combined heat input rate of 2,700,250 MMBtu/year for all boilers at this facility.

N-1976-6-12
ConAgra Foods has proposed to modify the permit for a 184 MMBtu/hr natural gas fired boiler (boiler #2), which is served by an SCR system, as follows:

1. Re-establish NOx and CO emission factors for startup and shutdown activities.

   Permit to Operate (PTO) N-1976-6-10 limits NOx and CO emissions to 80 ppmvd @ 3% O_2 (0.0971 lb/MMBtu) and 200 ppmvd @ 3% O_2 (0.146 lb/MMBtu) respectively. The company has proposed to re-establish these limits to 30 ppmvd NOx @ 3% O_2 and 100 ppmvd CO @ 3% O_2.

2. Re-establish VOC emission factor.

PTO N-1976-6-10 limits VOC emissions to 0.0055 lb/MMBtu during startup/shutdown and 0.001 lb/MMBtu during steady state mode. The company has proposed to reduce the VOC emission factor to 0.0014 lb/MMBtu for startup/shutdown activities.

3. Reduce total startup and shutdown duration from 462.5 hr/yr to 80 hr/yr.

4. Remove flue gas recirculation (FGR) valve monitoring, recording and other associated requirements.

   Originally, FGR requirements were developed to ensure on-going compliance with NOx and CO emissions, and to comply with the monitoring provisions in District Rules 4305 and 4306. Then, these requirements were extended to ensure compliance with 40 CFR Part 64 (Compliance Assurance Monitoring). These requirements were retained in the permit authorized the installation of an SCR system and the use of a portable analyzer to measure NOx, CO and NH_3 emissions.

   This facility will no longer be a Major Source for any pollutant, and consequently, it will no longer be subject to 40 CFR Part 64. Furthermore, monitoring of NOx and CO emissions using portable analyzer satisfies the monitoring provisions in District Rules 4305, 4306 and 4320. Therefore, FGR valve monitoring, recording and associated requirements will be removed from the permit.

   Note that ConAgra Foods is in the process of developing a Parametric Emissions Monitoring (PEM) plan that will track boiler's key operating parameters, compare those parameters to the actual emissions profile developed for the boiler by operating under different loads, and then predict the NOx emissions. PEM plan will be similar to the one being prepared for the boiler under permit N-1976-27-0. However, at this time, ConAgra Foods has proposed to use the existing EPA authorized plan as stated in their permit, until the new PEM plan is proposed and approved by the District and/or the EPA.

5. Establish a combined heat input rate of 2,700,250 MMBtu/year for all boilers at this facility.

N-1976-24-2

ConAgra Foods has proposed to modify the permit for an 86 MMBtu/hr natural gas fired boiler (boiler #5), which is served by an SCR system, as follows:

1. Establish startup and shutdown emission factor for CO emissions.

   PTO N-1976-24-1 does not have a CO emission factor for startup and shutdown modes. ConAgra Foods has proposed to establish 100 ppmvd CO @ 3% O_2 for startup and shutdown modes to keep this permit consistent with permits N-1976-4-12, '-6-12 and '-27-1.

2. Establish a combined heat input rate of 2,700,250 MMBtu/year for all boilers at this facility.

N-1976-27-1:
ConAgra Foods has proposed to modify the permit for a 176.5 MMBtu/hr natural gas fired boiler (boiler #6), which is served by an SCR system, as follows:

1. Re-establish NOx emission factor for startup and shutdown modes.

   PTO N-1976-27-0 limits NOx emissions to 80 ppmvd @ 3% O_2 (0.097 lb/MMBtu). The company has proposed to re-establish this limit to 30 ppmvd NOx @ 3% O_2.

2. Reduce VOC emission factor from 0.004 lb/MMBtu to 0.0014 lb/MMBtu.

3. Establish a combined heat input rate of 2,700,250 MMBtu/year for all boilers at this facility.

ConAgra Foods possesses a Title V permit. This project is a "Minor Modification" to the Title V permit per section 3.20 of Rule 2520. The applicant has requested to issue the Authority to Construct (ATC) permits with Certificate of Conformity (COC), which is EPA's 45-day review of the draft permits prior to the issuance of the final ATCs.

II. APPLICABLE RULES

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration (11/26/12)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emission Standards for Hazardous Air Pollutants (5/20/04)
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 4304	Equipment Tuning Procedure for Boilers, Steam Generators and Process Heaters (10/19/95)
Rule 4305	Boilers, Steam Generators and Process Heaters – Phase 2 (8/21/03)
Rule 4306	Boilers, Steam Generators and Process Heaters – Phase 3 (3/17/05)
Rule 4320	Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters greater than 5.0 MMBtu/hr (10/16/08)
Rule 4351	Boilers, Steam Generators and Process Heaters – Phase 1 (8/21/03)
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 544 S. Yosemite Ave, Oakdale, California.

The boilers are not located within 1,000 feet of any K-12 school. Therefore, the project will not trigger the school and public noticing requirements of Section 42301.6 of the California Health & Safety Code 42301.6.

IV. PROCESS DESCRIPTION

The boilers provide steam to various food manufacturing operations.

V. EQUIPMENT LISTING

Pre-Project Equipment Description

Permit #	Equipment Description
N-1976-4-11	196 MMBTU/HR BABCOCK & WILCOX MODEL FF-16 NATURAL GAS-FIRED BOILER (#4) WITH A NATCOM (OR EQUIVALENT MANUFACTURER) LOW NOX BURNER WITH INDUCED FLUE GAS RECIRCULATION (FGR) SYSTEM SERVED BY A NBI/CRI (OR EQUIVALENT MANUFACTURER) SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM
N-1976-6-10	184 MMBTU/HR BABCOCK & WILCOX MODEL FM117-97 NATURAL GAS-FIRED BOILER #2 WITH A TODD RAPID MIX ULTRA LOW NOX BURNER, INDUCED FLUE GAS RECIRCULATION (FGR), AND SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM
N-1976-24-1	86 MMBTU/HR NEBRASKA MODEL NOS-2A-67 NATURAL GAS-FIRED RENTAL BOILER (BOILER #5) WITH A TODD COMBUSTION BURNER AND A WABASH SELECTIVE CATALYTIC REDUCTION SYSTEM
N-1976-27-0	176.5 MMBTU/HR CLEAVER BROOKS MODEL NB-500D-100 NATURAL GAS-FIRED WITH A CLEAVER BROOKS MODEL NATCOM LOW NOX BURNER AND A C&C PANASIA (OR EQUIVALENT MANUFACTURER) SELECTIVE CATALYTIC REDUCTION SYSTEM

Post-Project Equipment Description

The post-project equipment description will be same as the pre-project equipment description in the above table.

VI. EMISSION CONTROL TECHNOLOGY EVALUATION

Low-NO_X burners reduce formation of NO_X by producing lower flame temperatures (and longer flames) than conventional burners. Conventional burners thoroughly mix all the fuel and air in a single stage just prior to combustion, whereas low-NO_X burners delay the mixing of fuel and air by introducing the fuel (or sometimes the air) in multiple stages. Generally, in the first combustion stage, the air-fuel mixture is fuel rich. In a fuel rich environment, all the oxygen will be consumed in reactions with the fuel, leaving no excess oxygen available to react with nitrogen to produce thermal NO_X. In the secondary and tertiary stages, the combustion zone is maintained in a fuel-lean environment. The

excess air in these stages helps to reduce the flame temperature so that the reaction between the excess oxygen with nitrogen is minimized.

The use of flue gas re-circulation (FGR) can reduce nitrogen oxides (NO_X) emissions by 60% to 70%. In an FGR system, a portion of the flue gas is re-circulated back to the inlet air. As flue gas is composed mainly of nitrogen and the products of combustion, it is much lower in oxygen than the inlet air and contains virtually no combustible hydrocarbons to burn. Thus, flue gas is practically inert. The addition of an inert mass of gas to the combustion reaction serves to absorb heat without producing heat, thereby lowering the flame temperature. Since high flame temperatures form thermal NO_X, the lower flame temperatures produced by FGR serve to reduce thermal NO_X.

An SCR system operates as an external control device where flue gases and a reagent, in this case ammonia, are passed through an appropriate catalyst. Ammonia, will be injected upstream of the catalyst where it reacts and reduces NO_x, over the catalyst bed, to form elemental nitrogen and other by-products. The use of a catalyst typically reduces the NO_x emissions by up to 90%.

VII. CALCULATIONS

A. Assumptions

- Assumptions will be stated as they are made during the evaluation.

B. Emission Factors (EF)

1. Pre-Project Emission Factors (EF1)

N-1976-4-11

Pollutant	EF1		Source
	lb/MMBtu	ppmvd @ 3% O_2	
$NO_{x\ Startup/Shutdown}$	0.036	30	PTO N-1976-4-11
$NO_{x\ Steady\text{-}state}$	0.0062	5.0	
SO_x	0.00285	--	
PM_{10}	0.003	--	PM_{10} emission factor update per District Policy APR -1110 (4/29/04); EF taken from FYI -328 (6/12/14)
$CO_{\ Startup/Shutdown}$	0.074	100	PTO N-1976-4-11
$CO_{\ Steady\text{-}state}$	0.037	50	
VOC	0.0014	--	
NH_3	0.0042	10.0	

N-1976-6-10

Pollutant	EF1		Source
	lb/MMBtu	ppmvd @ 3% O_2	
NO_x Startup/Shutdown	0.0971	80	PTO N-1976-6-10
NO_x Steady-state	0.0062	5	
SO_x	0.00285	--	
PM_{10}	0.003	--	PM_{10} emission factor update per District Policy APR -1110 (4/29/04); EF taken from FYI -328 (6/12/14)
CO Startup/Shutdown	0.146	200	PTO N-1976-6-10
CO Steady-state	0.037	50	
VOC Startup/Shutdown	0.0055	--	
VOC Steady-state	0.001	--	
NH_3	0.0042	10	

N-1976-24-1

Pollutant	EF1		Source
	lb/MMBtu	ppmvd @ 3% O_2	
NO_x Startup/Shutdown	0.036	30	PTO N-1976-24-1
NO_x Steady-state	0.0062	5	
SO_x	0.00285	--	
PM_{10}	0.003	--	PM_{10} emission factor update per District Policy APR -1110 (4/29/04); EF taken from FYI -328 (6/12/14)
CO	0.037	50	PTO N-1976-24-1
VOC	0.0055	--	
NH_3	0.0042	10	

N-1976-27-0

Pollutant	EF1		Source
	lb/MMBtu	ppmvd @ 3% O_2	
NO_x Startup/Shutdown	0.097	80	PTO N-1976-27-0
NO_x Steady-state	0.0062	5.0	
SO_x	0.00285	--	
PM_{10}	0.003	--	PM_{10} emission factor update per District Policy APR -1110 (4/29/04); EF taken from FYI -328 (6/12/14)
CO Startup/Shutdown	0.074	100	PTO N-1976-27-0
CO Steady-state	0.037	50	
VOC	0.004	--	
NH_3	0.0042	10.0	

2. Post-Project Emission Factors (EF2)

N-1976-4-12, '-6-12, '-24-2 and '-27-1

Pollutant	EF2		Source
	lb/MMBtu	ppmvd @ 3% O_2	
$NO_{x\ Startup/Shutdown}$	0.036	30	Applicant's proposal
$NO_{x\ Steady\text{-}state}$	0.0062	5	
SO_x	0.00285	--	PTOs N-1976-4-11, '-6-10, '-24-1 and '-27-0
PM_{10}	0.003	--	District's FYI -328 (6/12/14)
$CO_{\ Startup/Shutdown}$	0.074	100	Applicant's proposal
$CO_{\ Steady\text{-}state}$	0.037	50	PTOs N-1976-4-11, '-6-10, '-24-1 and '-27-0
VOC	0.0014*; 0.0055**	--	Applicant's proposal
NH_3	0.0042	10	PTOs N-1976-4-11, '-6-10, '-24-1 and '-27-0

*VOC emission factor for N-1976-4, '-6 and '-27; **VOC emission factor for N-1976-24

C. Potential to Emit

1. Pre-Project Potential to Emit (PE1)

N-1976-4-11
This boiler is limited to a heat input rate of 943,272 MMBtu/yr. The combined startup and shutdown period is limited to 4 hr/day and 80 hr/yr. The potential emissions are as follows:

PE1 (lb/day) = EF1 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/day)
PE1 (lb/yr) = EF1 (lb/MMBtu) × Heat Input Rate (MMBtu/yr)

Pollutant	EF1	Heat Input Rate		Operation		PE1	PE1
	lb/MMBtu	MMBtu/hr	MMBtu/yr	hr/day	hr/yr	lb/day	lb/yr
$NO_{x Startup/Shutdown}$	0.036	196	15,680*	4	80	28.2	564
$NO_{x Steady\ State}$	0.0062	196	927,592**	20	--	24.3	5,751
NOx (Total)	--	--	--	--	--	52.5	6,315
SOx	0.00285	196	943,272	24	--	13.4	2,688
PM_{10}	0.003	196	943,272	24	--	14.1	2,830
$CO_{Startup/Shutdown}$	0.074	196	15,680*	4	80	58	1,160
$CO_{Steady\ State}$	0.037	196	927,592**	20	--	145	34,321
CO (Total)	--	--	--	--	--	203.0	35,481
VOC	0.0014	196	943,272	24	--	6.6	1,321
NH_3	0.0042	196	943,272	24	--	19.8	3,962

*196 MMBtu/hr x 80 hr/yr = 15,680 MMBtu/yr
**943,272 MMBtu/yr – 15,680 MMBtu/yr = 927,592 MMBtu/yr

N-1976-6-10

The combined startup and shutdown period is limited to 4 hr/day and 462.5 hr/yr. The potential emissions are as follows:

PE1 (lb/day) = EF1 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/day)
PE1 (lb/yr) = EF1 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/yr)

Pollutant	EF1	Heat Input Rate	Operation		PE1	PE1
	lb/MMBtu	MMBtu/hr	hr/day	hr/yr	lb/day	lb/yr
$NO_{X_{Startup/Shutdown}}$	0.0971	184	4	462.5	71.5	8,263
$NO_{X_{Steady\ State}}$	0.0062	184	20	8,297.5	22.8	9,466
NOx (Total)	--	--	--	--	94.3	17,729
SOx	0.00285	184	24	8,760.0	12.6	4,594
PM_{10}	0.003	184	24	8,760.0	13.2	4,836
$CO_{Startup/Shutdown}$	0.146	184	4	462.5	107.5	12,425
$CO_{Steady\ State}$	0.037	184	20	8,297.5	136.2	56,489
CO (Total)	--	--	--	--	243.7	68,914
$VOC_{Startup/Shutdown}$	0.0055	184	4	462.5	4	468
$VOC_{Steady\ State}$	0.001	184	20	8,297.5	3.7	1,527
VOC (Total)	--	--	--	--	7.7	1995
NH_3	0.0042	184	24	8,760.0	18.5	6,770

N-1976-24-1

The combined startup and shutdown period is limited to 4 hr/day and 80 hr/yr. The potential emissions are as follows:

PE1 (lb/day) = EF1 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/day)
PE1 (lb/yr) = EF1 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/yr)

Pollutant	EF1	Heat Input Rate	Operation		PE1	PE1
	lb/MMBtu	MMBtu/hr	hr/day	hr/yr	lb/day	lb/yr
$NO_{X_{Startup/Shutdown}}$	0.036	86	4	80	12.4	248
$NO_{X_{Steady\ State}}$	0.0062	86	20	8,680	10.7	4,628
NOx (Total)	--	--	--	--	23.1	4,876
SOx	0.00285	86	24	8,760	5.9	2,147
PM_{10}	0.003	86	24	8,760	6.2	2,260
CO	0.037	86	24	8,760	76.4	27,874
VOC	0.0055	86	24	8,760	11.4	4,143
NH_3	0.0042	86	24	8,760	8.7	3,164

N-1976-27-1

The combined startup and shutdown period is limited to 4 hr/day and 80 hr/yr. The potential emissions are as follows:

PE1 (lb/day) = EF1 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/day)
PE1 (lb/yr) = EF1 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/yr)

Pollutant	EF1	Heat Input Rate	Operation		PE1	PE1
	lb/MMBtu	MMBtu/hr	hr/day	hr/yr	lb/day	lb/yr
$NO_{X\ Startup/Shutdown}$	0.097	176.5	4	80	68.5	1,370
$NO_{X\ Steady\ State}$	0.0062	176.5	20	8,680	21.9	9,499
NOx (Total)	--	--	--	--	90.4	10,869
SOx	0.00285	176.5	24	8,760	12.1	4,406
PM_{10}	0.003	176.5	24	8,760	12.7	4,638
$CO_{Startup/Shutdown}$	0.074	176.5	4	80	52.2	1,045
$CO_{Steady\ State}$	0.037	176.5	20	8,680	130.6	56,685
CO (Total)	--	--	--	--	182.8	57,730
VOC	0.004	176.5	24	8,760	16.9	6,185
NH_3	0.0042	176.5	24	8,760	17.8	6,494

2. Post-Project Potential to Emit (PE2)

N-1976-4-12

The potential emissions are as follows:

PE2 (lb/day) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/day)
PE2 (lb/yr) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/yr)

Pollutant	EF2	Heat Input Rate	Operation		PE2	PE2
	lb/MMBtu	MMBtu/hr	hr/day	hr/yr	lb/day	lb/yr
$NO_{X\ Startup/Shutdown}$	0.036	196	4	80	28.2	564
$NO_{X\ Steady\ State}$	0.0062	196	20	8,680	24.3	10,548
NOx (Total)	--	--	--	--	52.5	11,112
SOx	0.00285	196	24	8,760	13.4	4,893
PM_{10}	0.003	196	24	8,760	14.1	5,151
$CO_{Startup/Shutdown}$	0.074	196	4	80	58	1,160
$CO_{Steady\ State}$	0.037	196	20	8,680	145	62,947
CO (Total)	--	--	--	--	203	64,107
VOC	0.0014	196	24	8,760	6.6	2,404
NH_3	0.0042	196	24	8,760	19.8	7,211

N-1976-6-12
The potential emissions are as follows:

PE2 (lb/day) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/day)
PE2 (lb/yr) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/yr)

Pollutant	EF2	Heat Input Rate	Operation		PE2	PE2
	lb/MMBtu	MMBtu/hr	hr/day	hr/yr	lb/day	lb/yr
$NOx_{Startup/Shutdown}$	0.036	184	4	80	26.5	530
$NOx_{Steady\ State}$	0.0062	184	20	8,680	22.8	9,902
NOx (Total)	--	--	--	--	49.3	10,432
SOx	0.00285	184	24	8,760	12.6	4,594
PM_{10}	0.003	184	24	8,760	13.2	4,836
$CO_{Startup/Shutdown}$	0.074	184	4	80	54.5	1,089
$CO_{Steady\ State}$	0.037	184	20	8,680	136.2	59,093
CO (Total)	--	--	--	--	190.7	60,182
VOC	0.0014	184	24	8,760	6.2	2,257
NH_3	0.0042	184	24	8,760	18.5	6,770

N-1976-24-2
The potential emissions are as follows:

PE2 (lb/day) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/day)
PE2 (lb/yr) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/yr)

Pollutant	EF2	Heat Input Rate	Operation		PE2	PE2
	lb/MMBtu	MMBtu/hr	hr/day	hr/yr	lb/day	lb/yr
$NOx_{Startup/Shutdown}$	0.036	86	4	80	12.4	248
$NOx_{Steady\ State}$	0.0062	86	20	8,680	10.7	4,628
NOx (Total)	--	--	--	--	23.1	4,876
SOx	0.00285	86	24	8,760	5.9	2,147
PM_{10}	0.003	86	24	8,760	6.2	2,260
$CO_{Startup/Shutdown}$	0.074	86	4	80	25.5	509
$CO_{Steady\ State}$	0.037	86	20	8,680	63.6	27,620
CO (Total)	--	--	--	--	89.1	28,129
VOC	0.0055	86	24	8,760	11.4	4,143
NH_3	0.0042	86	24	8,760	8.7	3,164

N-1976-27-1

The potential emissions are as follows:

PE2 (lb/day) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/day)
PE2 (lb/yr) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/yr)

Pollutant	EF2	Heat Input Rate	Operation		PE2	PE2
	lb/MMBtu	MMBtu/hr	hr/day	hr/yr	lb/day	lb/yr
$NO_{X_{Startup/Shutdown}}$	0.036	176.5	4	80	25.4	508
$NO_{X_{Steady\ State}}$	0.0062	176.5	20	8,680	21.9	9,499
NOx (Total)	--	--	--	--	47.3	10,007
SOx	0.00285	176.5	24	8,760	12.1	4,406
PM_{10}	0.003	176.5	24	8,760	12.7	4,638
$CO_{Startup/Shutdown}$	0.074	176.5	4	80	52.2	1,045
$CO_{Steady\ State}$	0.037	176.5	20	8,680	130.6	56,685
CO (Total)	--	--	--	--	182.8	57,730
VOC	0.0014	176.5	24	8,760	5.9	2,165
NH_3	0.0042	176.5	24	8,760	17.8	6,494

N-1976-4-12, '-6-12, '-24-2 and '-27-1

ConAgra Foods want to establish a combined heat input rate of 2,700,250 MMBtu/yr for all these units. The potential annual emissions are follows:

PE2 (lb/yr) = EF2 (lb/MMBtu) × Heat Input Rate (MMBtu/hr) × Operation (hr/yr)

Pollutant	EF2	Heat Input Rate		Operation		PE2	PE2
	lb/MMBtu	MMBtu/hr	MMBtu/yr	hr/day	hr/yr	lb/day	lb/yr
$NO_{X_{Startup/Shutdown}}$	0.036	642.5*	51,400**	--	80	--	1,850
$NO_{X_{Steady\ State}}$	0.0062	642.5*	2,648,850***	--	--	--	16,423
NOx (Total)	--	--	--	--	--	--	18,273
SOx	0.00285	642.5*	2,700,250	--	--	--	7,696
PM_{10}	0.003	642.5*	2,700,250	--	--	--	8,101
$CO_{Startup/Shutdown}$	0.074	642.5*	51,400**	--	80	--	3,804
$CO_{Steady\ State}$	0.037	642.5*	2,648,850***	--	8,680	--	98,007
CO (Total)	--	--	--	--	--	--	101,811
VOC	0.0014**** 0.0055*****	642.5*	2,700,250	--	--	--	6,869******
NH_3	0.0042	642.5	2,700,250	--	--	--	11,341

*Total heat input rate to the boilers = (196 + 184 + 86 + 176.5) MMBtu/hr = 642.5 MMBtu/hr; **642.5 MMBtu/hr x 80 hr/yr = 51,400 MMBtu/yr; ***2,700,250 MMBtu/yr – 51,400 MMBtu/yr = 2,648,850 MMBtu/yr; ****VOC emission factor for N-1976-4, '-6 or '-27; *****VOC emission factor for N-1976-24; ******PE2 (lb/yr) = (86 MMBtu/hr)(0.0055 lb-VOC/MMBtu)(8,760 hr/yr) + (2,700,250 MMBtu/yr – (86 MMBtu/hr x 8,760 hr/yr))(0.0014 lb-VOC/MMBtu) = 6,869 lb-VOC/yr

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

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid ATCs or PTOs at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) 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. The potential emissions for permit units N-1976-14, '-17, '-18, '-21 and '-22 are taken from the application review under project N-1143152.

Permit #	Pollutants (lb/yr)				
	NO_x	SO_x	PM_{10}	CO	VOC
N-1976-4-11	6,315	2,688	2,830	35,481	1,321
N-1976-6-10	17,729	4,594	4,836	68,914	1,995
N-1976-14-2	310	8	7	54	14
N-1976-17-2	715	9	21	154	58
N-1976-18-2	700	8	20	160	60
N-1976-21-3	0	0	767	0	0
N-1976-22-3	0	0	44	0	0
N-1976-24-1	4,876	2,147	2,260	27,874	4,143
N-1976-27-0	10,869	4,406	4,638	57,730	6,185
N-1976-28-1	0	0	0	0	0
ERCs	0	0	0	0	0
SSPE1	41,514	13,860	15,423	190,367	13,776

4. 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 ATCs or PTOs, except for emissions units proposed to be shut down as part of the Stationary Project, at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) 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.

Permit #	Pollutants (lb/yr)				
	NO_x	SO_x	PM_{10}	CO	VOC
N-1976-4-12	18,273	7,696	8,101	101,811	6,869
N-1976-6-12					
N-1976-24-2					
N-1976-27-1					
N-1976-14-2	310	8	7	54	14
N-1976-17-2	715	9	21	154	58
N-1976-18-2	700	8	20	160	60

Continue...

Permit #	Pollutants (lb/yr)				
	NO_x	SO_x	PM_{10}	CO	VOC
N-1976-21-3	0	0	767	0	0
N-1976-22-3	0	0	44	0	0
N-1976-28-1	0	0	0	0	0
ERCs	0	0	0	0	0
SSPE2	19,998	7,721	8,960	102,179	7,001

5. Major Source Determination

Rule 2201 Major Source Determination
Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- Any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165.

Rule 2201 Major Source Determination (lb/year)					
Category	NO_X	SO_X	PM_{10}	CO	VOC
SSPE1	41,514	13,860	15,423	190,367	13,776
SSPE2	19,998	7,721	8,960	102,179	7,001
Major Source Thresholds	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	No

From the above table, the facility is an existing Major Source for NOx and is going to become a non-Major Source after the implementation of the permits under this project.

Rule 2410 Major Source Determination
The facility or the equipment evaluated under this project is listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore, the following PSD Major Source thresholds are applicable.

PSD Major Source Determination (tons/year)						
Category	NO_2	VOC	SO_2	CO	PM	PM_{10}
Estimated Facility PE before Project Increase	20.8	6.9	6.9	95.2	7.7	7.7
PSD Major Source Thresholds	100	100	100	100	100	100
PSD Major Source?	No	No	No	No	No	No

From the above table, the facility is not an existing Major Source under PSD for any pollutant.

6. Baseline Emissions (BE)

The BE calculation is performed on a pollutant-by-pollutant basis for each unit within the project to calculate the quarterly net emissions change, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE is equal to pre-project Potential to Emit (PE1) for:

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

Otherwise,

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

Section 3.13 of Rule 2201 defines Clean Emission Unit as an emission unit that meets one of the following criteria:

- The unit is equipped with an emissions control technology with a minimum control efficiency of at least 95% (or at least 85% for lean-burn, internal combustion engines); or
- The unit is equipped with emission control technology that meets the requirements for achieved-in-practice (AIP) BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application.

N-1976-4, '-6, '-24 and '-27
The following BACT was accepted for boilers greater than 20 MMBtu/hr during the five years prior to the submittal of this application:

NOx: 7 ppmvd @ 3% O_2
SOx, PM_{10}, CO and VOC: Use of natural gas fuel with LPG backup

Each boiler in this project complies with the above achieved-in-practice BACT standards. Therefore, these units are clean emission units, and BE is set equal to PE1 for each unit.

7. SB-288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Per section VII.C.5 of this document, this facility will no longer be a Major Source for any pollutant. Therefore, the proposed project will not be an SB-288 Major Modification.

8. Federal Major Modification

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

Per section VII.C.5 of this document, this facility will no longer be a Major Source for any pollutant. Therefore, the proposed project will not be a Federal Major Modification.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV are: (See 52.21 (b) (23) definition of significant)

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM, PM_{10}

Step 1:
The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not.

Per section VII.C.5 of this document, this facility is not an existing Major Source under PSD.

Step2:
In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD Major Source.

I. Potential to Emit for New or Modified Emission Units vs PSD Major Source Thresholds

As a screening tool, the project potential to emit from all new and modified units is compared to the PSD major source threshold, and if total project potential to emit from all new and modified units is below this threshold, no futher analysis will be needed.

The facility or the equipment evaluated under this project is listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore, the following PSD Major Source thresholds are applicable.

Potential to Emit (tons/year)						
Category	NO_2	VOC	SO_2	CO	PM	PM_{10}
Total N-1976-4-12, '-6-12, '-24-2 and '-27-1	<10	<3.5	3.9	51.1	4.5	4.5
PSD Major Source threshold	100	100	100	100	100	100
New PSD Major Source?	No	No	No	No	No	No

As shown in the table above, the project potential to emit, by itself, does not exceed any of the PSD major source thresholds. Therefore, Rule 2410 is not applicable and no further discussion is required.

10. Quarterly Net Emissions Change (QNEC)

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

VIII. COMPLIANCE

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

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:

a. 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;

b. 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;

c. 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.

N-1976-4-12, '-6-12, '-24-2 and '-27-1
The BACT requirements for each unit are evaluated in the following section:

a. New emissions unit/Relocation of emission unit – PE2 > 2.0 lb/day

This project neither involves any new emissions unit nor does relocation of an existing emission unit. Therefore, no further discussion is necessary.

Note that BACT for 196 MMBtu/ boiler under permit N-1976-4 will be evaluated on a PE2 basis.

Currently, heat input rate to unit N-1976-4 is limited to 943,272 MMBtu/yr, which will allow the facility to operate this unit for about 200 days/yr (4,813 hr/yr) at its full capacity. By removing this limit, the unit could potentially operate up to 365 days/yr (8,760 hours/year), or for additional 165 days/yr over its existing operation. Each additional day of operation will be evaluated as a new day for BACT purposes. Therefore, BACT for this unit will be based on PE2 rather than AIPE basis.

Pollutant	PE2 (lb/day)	BACT Threshold (lb/day)	SSPE2	BACT Triggered?
NO_x	24.3	> 2.0	N/A	Yes
SO_x	13.4	> 2.0	N/A	Yes
PM_{10}	14.1	> 2.0	N/A	Yes
CO	145	> 2.0 and SSPE2 ≥ 200,000 lb/yr	102,179	No
VOC	6.6	> 2.0	N/A	Yes

b. Modification of emission units – AIPE > 2.0 lb/day

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-1976-6

Pollutant	PE2 (lb/day)	EF2/EF1	PE1 (lb/day)	AIPE (lb/day)
NO_x	22.8	0.0062/0.0062	22.8	0.0
SO_x	12.6	0.00285/0.00285	12.6	0.0
PM_{10}	13.2	0.003/0.003	13.2	0.0
CO	136.2	0.037/0.037	136.2	0.0
VOC	6.2	1*	3.7	2.5

*EF2>EF1, therefore, EF2/EF1 is set equal to 1.

N-1976-24

Pollutant	PE2 (lb/day)	EF2/EF1	PE1 (lb/day)	AIPE (lb/day)
NO_x	10.7	0.0062/0.0062	10.7	0.0
SO_x	5.9	0.00285/0.00285	5.9	0.0
PM_{10}	6.2	0.003/0.003	6.2	0.0
CO	63.6	0.037/0.037	76.4	0.0*
VOC	11.4	0.0055/0.0055	11.4	0.0

*Negative AIPE values are equated to 0.

N-1976-27

Pollutant	PE2 (lb/day)	EF2/EF1	PE1 (lb/day)	AIPE (lb/day)
NO_x	21.9	0.0062/0.0062	21.9	0.0
SO_x	12.1	0.00285/0.00285	12.1	0.0
PM_{10}	12.7	0.003/0.003	12.7	0.0
CO	130.6	0.037/0.037	130.6	0.0
VOC	5.9	0.0014/0.004	16.9	0.0

c. SB-288/Federal Major Modification

Per sections VII.C.7 and VII.C.8 above, this project is not an SB 288 and/or Federal Major Modification for any pollutant. Thus, BACT is not triggered for any pollutant under this section.

Summary:

N-1976-4:
BACT is triggered for NOx, SOx, PM_{10} and VOC emissions.

N-1976-6:
BACT is triggered for VOC emissions.

N-1976-24 and '-27:
BACT is not triggered for any pollutant.

2. BACT Guideline

N-1976-4 and '-6:
The District conducts project-specific analyses for boilers. For units with a heat input rate of greater than 20 MMBtu/hr, the BACT requirements are:

NO_x: 5 ppmvd @ 3% O_2 (or less)
SO_x, PM_{10}, VOC: Use of PUC quality natural gas

3. Top-Down BACT Analysis

N-1976-4:
This boiler is a natural gas-fired unit, and is required to comply with 5 ppmvd @ 3% O_2. Therefore, BACT requirements are satisfied for NOx, SOx, PM_{10} and VOC emissions.

N-1976-6:
This boiler is a natural gas-fired unit. Therefore, this unit meets the BACT requirements for VOC emissions.

B. 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)	19,998	7,721	8,960	102,179	7,001
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets Triggered?	No	No	No	No	No

C. 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 (SB-288 or Federal)
- 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 of this document, the proposed project does not exceed thresholds in any of the above items. Thus, public notice is not required for this project.

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.17 to restrict a unit's maximum daily emissions.

N-1976-4-12, '-6-12, '-24-2 and '-27-1

Startup/shutdown:

- During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306 and 4320]

- The total duration of startup and shutdown period shall not exceed 4.0 hours in any one day.[District Rule 2201]

- During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O_2 or 0.036 lb/MMBtu. [District Rule 2201]

- During startup and shutdown, CO emissions shall not exceed 100 ppmvd @ 3% O_2 or 0.074 lb/MMBtu.[District Rule 2201]

Steady state:

- Except during startup and shutdown, NO_x emissions shall not exceed 5 ppmvd @ 3% O_2 or 0.0062 lb/MMBtu, referenced as NO2. [District Rules 2201, 4305, 4306 and 4320]

- Except during startup and shutdown, CO emissions shall not exceed 50 ppmvd @ 3% O_2 or 0.037 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320]

Startup/shutdown/steady state:

- SO_x emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
- PM_{10} emissions shall not exceed 0.003 lb/MMBtu. [District Rule 2201]
- VOC emissions shall not exceed 0.0014 lb/MMBtu, referenced as methane. [District Rule 2201]*
- NH_3 emissions from the SCR system shall not exceed 10 ppmvd @ 3% O2. [District Rule 2201]

*Note: The following condition will be included in permit N-1976-24-2:

- VOC emissions shall not exceed 0.0055 lb/MMBtu, referenced as methane. [District Rule 2201]

E. Compliance Assurance

1. Source Testing

N-1976-4-12:
Startup/shutdown testing:
Per source testing conducted on July 1, 2014,

Startup emissions:	2.7 ppmvd NOx @ 3% O_2, 15.5 ppmvd CO @ 3% O_2
Shutdown emissions:	5.1 ppmvd NOx @ 3% O_2, 41.4 ppmvd CO @ 3% O_2

Startup and shutdown emissions were found to be below the proposed limits of 30 ppmvd NOx @ 3% O_2 and 100 ppmvd CO @ 3% O_2. Therefore, NOx and CO testing during startup/shutdown modes will not be required.

Steady state testing:
Source test conducted on July 1, 2014 shows that the boiler is operating in compliance with NOx, CO, VOC, and PM_{10} emission limits. Therefore, no initial testing is required.

This boiler is required to be tested at least once every twelve month for determining NOx, CO and NH_3 emissions. Successful compliance demonstration on two consecutive twelve-month periodic tests may defer the following source test up to thirty-six months. This testing frequency is consistent with the requirements in the boiler Rules 4306 and 4320 and other permitted boilers equipped with SCR systems.

N-1976-6-12:
Startup/shutdown testing:
The applicant has proposed to lower the existing NOx, CO and VOC emission limits. Therefore, one time source testing is required to verify compliance with the newly proposed limits. The testing is required to be completed within 60 days of initial startup under this permit.

Steady state testing:
Source test conducted on March 21, 2014 shows that the boiler is operating in compliance with NOx, CO, NH_3 emission limits. Therefore, no initial testing is required.

This boiler is required to be tested at least once every twelve month for determining NOx, CO and NH_3 emissions. Successful compliance demonstration on two consecutive twelve-month periodic tests may defer the following source test up to thirty-six months. This testing frequency is consistent with the requirements in the boiler Rules 4306 and 4320 and other permitted boilers equipped with SCR systems.

N-1976-24-2:
Startup/shutdown testing:
The applicant has proposed to establish CO emission limit higher than that of the currently permitted limit for startup, steady state and shutdown periods. Furthermore, majority of the natural gas-fired boilers operate well below the proposed CO limit. Therefore, source testing is not considered.

Steady state testing:
The applicant has proposed to lower the existing VOC emission limit. Therefore, one time source testing is required to verify compliance with the proposed limit. The testing is required to be completed within 60 days of initial startup under this permit.

Furthermore, this boiler is required to be tested at least once every twelve month for determining NOx, CO and NH_3 emissions. Successful compliance demonstration on two consecutive twelve-month periodic tests may defer the following source test up to thirty-six months. This testing frequency is consistent with the requirements in the boiler Rules 4306 and 4320 and other permitted boilers equipped with SCR systems.

N-1976-27-2:
Startup/shutdown testing:
Per source testing conducted on June 30, 2014,

Startup emissions:	1.5 ppmvd NOx @ 3% O_2, 4.8 ppmvd CO @ 3% O_2
Shutdown emissions:	3.1 ppmvd NOx @ 3% O_2, 8.7 ppmvd CO @ 3% O_2

Startup and shutdown emissions were found to be below the proposed limits of 30 ppmvd NOx @ 3% O_2 and 100 ppmvd CO @ 3% O_2. Therefore, NOx and CO testing during startup/shutdown modes will not be required.

Steady state testing:
Source test conducted on June 30, 2014 shows that the boiler is operating in compliance with NOx, CO, VOC, and PM_{10} emission limits. Therefore, no initial testing is required.

This boiler is required to be tested at least once every twelve month for determining NOx, CO and NH_3 emissions. Successful compliance demonstration on two consecutive twelve-month periodic tests may defer the following source test up to thirty-six months. This testing frequency is consistent with the requirements in the boiler Rules 4306 and 4320 and other permitted boilers equipped with SCR systems.

2. Monitoring

N-1976-4-12, '-6-12, '-24-2 and '-27-1:
The existing permits require monitoring NOx, CO and O_2 concentrations using portable analyzer on a monthly basis. NH_3 slip from the SCR system is required to be measured using Draeger tubes (or other District approved equivalent technique) at least on a monthly basis at the time NOx, CO and O_2 measurements are taken. This monitoring scheme will be replicated in the permits under this project.

3. Recordkeeping

N-1976-4-12, '-6-12, '-24-2 and '-27-1:
ConAgra will be required to maintain all records to verify compliance with the permitted limits. The records are required to be kept for a period of at least 5 years from the date such records is entered in a logbook.

4. Reporting

N-1976-4-12, '-6-12, '-24-2 and '-27-1:
ConAgra will be required to submit each source test report within 60 days after completing the test.

Compliance is expected with this Rule.

Rule 2410 Prevention of Significant Deterioration

As discussed in section VII.C.9 of this document, this project is not subject to the requirements of this rule.

Rule 2520 Federally Mandated Operating Permits

ConAgra is an existing Major Source for NOx emissions. Therefore, this facility is subject to the requirements of this rule. The proposed project is a "Minor Modification" to the Title V permit per section 3.20 of Rule 2520. Note that upon implementation of the permits under this project, ConAgra will no longer be a Major Source for NOx emissions.

ConAgra has proposed to process this project with COC. The following conditions will be included in the permits:

- This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201]

- Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs and

- The source's suggested draft permit (Appendix I of this document) and

- Certification by a responsible official that the proposed modification meets the criteria for use of major permit modification procedures and a request that such procedures be used (Appendix II of this document).

Section 5.3.4 of this rule requires the permittee shall file an application for administrative permit amendments prior to implementing the requested change except when allowed by the operational flexibility provisions of section 6.4 of this rule. ConAgra Foods is expected to notify the District by filing TV Form-008 upon implementing the ATC. The District Compliance Division is expected to submit a change order to implement ATC into Permit to Operate (PTO).

Compliance is expected with this Rule.

Rule 4001 New Source Performance Standards

40 CFR Part 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
This subpart apply to any steam generating unit with a maximum heat input of greater than 100 MMBtu/hr that has commenced construction, modification, or reconstruction after June 19, 1984.

N-1976-4-12:
The boiler under permit N-1976-4 is rated at 196 MMBtu/hr and may be subject to the requirements of this subpart. The historical records in District's permit database indicate that the application for the boiler was submitted on February 19, 1975[1]. The boiler is presumed to be installed sometime in 1975. This boiler does not appear to have been modified in a way that would result an increase in air pollutants since its installation. Therefore, this unit is not subject to subpart to the requirements of this subpart.

N-1976-6-12 and '-27-1:
Section 60.40b - Applicability and delegation of authority
This subpart applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 MMBtu/hr.

The boilers under permits N-1976-6 and '-27 were constructed after June 19, 1984, and the heat input rate to each unit is greater than 100 MMBtu/hr. Therefore, these units are subject to the requirements of this subpart.

Section 60.42b - Standard for sulfur dioxide (SO2)
Section 60.42b(k)(1)(2) states that the units firing only very low sulfur oil, gaseous fuel, a mixture of these fuels with any other fuels with a potential SO_2 emission rate of 0.32 lb/MMBtu heat input or less are exempt from the SO_2 emissions in paragraph (k)(1) of this section (i.e., 0.2 lb-SO_2/MMBtu, or 92% reduction of potential SO_2 rate and 1.2 lb-SO_2/MMBtu).

The boilers are using natural gas fuel that contains a maximum of 1.0 gr-S/100 scf, which equates to 0.00285 lb/MMBtu. Therefore, these units are exempt from the SO_2 emissions in paragraph (k)(1) of this section. The following condition will be included in the permits:

- The unit shall only be fired on PUC-quality natural gas with a sulfur content of no greater than 1.0 grains (gr) of sulfur per 100 standard cubic feet (scf) of natural gas. [District Rules 2201 and 4320, 40 CFR 60.42b(k)(1)(2)]

Section 60.43b - Standard for particulate matter (PM)
This section does not list PM emission standards for natural gas fired steam generating units.

[1] Information taken from 544125.PDF scanned in the EDMS. This boiler's serial number is 22815.

Section 60.44b - Standard for nitrogen oxides (NO_x)
Section 60.44b(a) states that except as provided in paragraphs (k) and (l) of this section, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NOx (expressed as NO2) in excess of 0.1 lb/MMBtu for low heat release rate (≤ 70,000 Btu/hr-ft^3 of furnace volume) or 0.2 lb/MMBtu for high release rate (> 70,000 Btu/hr-ft^3 of furnace volume).
Section 60.44b(h) states for the purposes of paragraph (i) of this section, the NOx standards under this section apply at all times including periods of startup, shutdown, or malfunction.

Section 60.44b(i) state that compliance with an applicable limit is determined on a 30-day rolling average basis.

Each boiler is permitted to emit 5 ppmvd @ 3% O2 (or less) during steady-state and 30 ppmvd NOx @ 3% O_2 during startup/shutdown period. These limits are significantly less than 82 ppmvd @ 3% O_2 (equates to 0.1 lb/MMBtu) most stringent NOx limit for low heat release rate units. Thus, compliance is expected with this section. The following condition(s) will be included in the permits:

- For 40 CFR Part 60 Subpart Db purposes, NOx emissions shall not exceed 0.1 lb/MMBtu for low heat release units (70,000 Btu/hr-ft3 of furnace volume or less) and 0.2 lb/MMBtu for high heat release units (greater than 70,000 Btu/hr-ft3 of furnace volume) on a 30-day rolling average basis. NOx standard shall apply at all times including periods of startup, shutdown, or malfunction. The permittee shall maintain record of the furnace volume, which is defined as the volume bounded by the front furnace wall where the burner is located, the furnace side waterfall, and extending to the level just below or in front of the first row of convection pass tubes. [40 CFR 60.44b(a), 60.44b(h), 60.44b(i)]

Section 60.45b - Compliance and performance test methods and procedures for sulfur dioxide
Section 60.45b(j) states the owner or operator of an affected facility that only combusts very low sulfur oil, natural gas, or a mixture of these fuels with any other fuels not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts per section 60.49b(r) which requires the supplier to certify that the gaseous fuel meets the definition of natural gas. In lieu of receipts, the owner or operator may develop and submit a site-specific fuel analysis for review and approval per information in section 60.49b(r)(2).

This facility uses PUC quality natural gas supplied by PG&E, which has a transportation agreement to deliver gas with maximum sulfur content of 1.0 gr/100 scf (actual: 0.3 to 0.5 gr/100 scf, based on source testing)[2]. Therefore, the following condition will enforce compliance with this section:

[2]The sulfur content in PUC regulated natural gas is taken from District Policy APR-1720.

- The owner or operator shall either obtain fuel receipts (such as a valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets definition of natural gas (as defined in 40 CFR 60.41b) and the applicable sulfur limit (i.e., 1.0 gr-S/100 scf), or demonstrate that the combusted gas is provided from a PUC or FERC regulated source, or monitor the sulfur content within 60 days of initial startup and weekly thereafter. If the sulfur content is less than or equal to 1.0 gr/100 dscf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume until compliance is demonstrated for eight consecutive weeks. [District Rule 4320, 40 CFR 60.45b(j), 60.49b(r)(2)]

Section 60.46b - Compliance and performance test methods and procedures for particulate matter and nitrogen oxides
Section 60.46 (c) Compliance with the NO_X emission standards uncer §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

The existing boilers do not qualify the requirements under paragraphs (g) and (h). Section 60.46b(e) states compliance with the NOx emission limits shall be conducted using continuous system for monitoring NOx under section 60.48(b).

Section 60.46b(e)(1) states NO_x from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_X emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

The following condition(s) will be included in the permits:

- For the initial compliance test under 40 CFR Part 60 Subpart Db, NOx emissions shall be monitored for 30 successive steam generating unit operating days and the 30-day average emission rate shall be used to determine compliance with the NOx emission standard under 40 CFR 60.44b (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)). The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period. Previously conducted compliance test in the manner prescribed in this condition may be used to fulfill the requirements of 40 CFR 60.46b(e)(1). [40 CFR 60.46b(e)(1)]

Section 60.46b(e)(4) Following the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual

oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO_X standards in §60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO_X emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_X emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_X emission data for the preceding 30 steam generating unit operating days.

The following condition(s) will be included in the permits:

- Following the initial compliance test under 40 CFR Part 60 Subpart Db, the operator shall upon request determine compliance with the NOx standard under 40 CFR 60.44 (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)) through the use of a 30-day performance test. During periods when performance tests are not requested, NO_X emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_X emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_X emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(4)]

§ 60.47b Emission monitoring for sulfur dioxide
Per section 60.48b(f), the proposed units are not subject to the requirements of this section if the owner or operator maintains fuel records described in §60.49b(r). Refer to the discussion under section 60.45b above.

§ 60.48b Emission monitoring for particulate matter and nitrogen oxides
Section 60.48b(b) states that except as provided under paragraphs (g), (h) and (i), the owner or operator of an affected facility subject to a NO_X standard under §60.44b shall comply with either paragraphs (b)(1) or (b)(2) of this section (i.e., install continuous emissions monitoring system (CEMS) for measuring NOx and O_2 concentrations).

Section 60.48b(g) states that the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall: (1) Comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of this section; or (2) Monitor steam generating unit operating conditions and predict NO_X emission rates as specified in a plan submitted pursuant to §60.49b(c).

ConAgra Foods is not proposing to install CEMS to monitor and record NOx and O2 concentrations, instead, the facility has proposed to use a portable analyzer that meets

specifications in District policy SSP-1105 (4/28/2008), on a monthly basis. Further, ConAgra Foods is working with a company to develop a predictive emissions monitoring system (PEMS) for boilers N-1976-6 and '-27. The following condition(s) will be included in the permits:

- The owner or operator shall monitor steam generating unit operating conditions and predict NOx emission rates as specified in a plan submitted pursuant to §60.49b(c) and approved by the District or the EPA. However, if no such plan exists at this time, the facility shall develop and submit a plan in accordance with 40 CFR 60.49b(c). [40 CFR 60.48b(g)(2)]

Section 60.48b(j) states that the owner or operator of an affected facility that meets the conditions in either paragraph (j)(1), (2), (3), (4), (5), or (6) of this section is not required to install or operate a continuous opacity metering system (COMS) if:

(1) The affected facility uses a PM CEMS to monitor PM emissions; or

(2) The affected facility burns only liquid (excluding residual oil) or gaseous fuels with potential SO_2 emissions rates of 26 ng/J (0.060 lb/MMBtu) or less and does not use a post-combustion technology to reduce SO_2 or PM emissions. The owner or operator must maintain fuel records of the sulfur content of the fuels burned, as described under §60.49b(r); or

(3) The affected facility burns coke oven gas alone or in combination with fuels meeting the criteria in paragraph (j)(2) of this section and does not use a post-combustion technology to reduce SO_2or PM emissions; or

(4) The affected facility does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a steam generating unit operating day average basis. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (j)(4)(i) through (iv) of this section; or

(i) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (j)(4)(i)(A) through (D) of this section.

(A) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(B) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(C) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

(D) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(ii) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(iii) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(iv) You must record the CO measurements and calculations performed according to paragraph (j)(4) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(5) The affected facility uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part; or

(6) The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

The boilers are being fired on natural gas fuel with 1.0 gr-S/100 scf or less (equates to 0.00285 lb-SO2/MMBtu); therefore, COMS is not required.

§ 60.49b Reporting and recordkeeping requirements
Section 60.49b(a) states that the owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility;

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §§60.42b(d)(1), 60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), 60.44b(c), (d), (e), (i), (j), (k), 60.45b(d), (g), 60.46b(h), or 60.48b(i);

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired; and

(4) Notification that an emerging technology will be used for controlling emissions of SO2.

The design heat input capacity is listed in the equipment description of each permit. These units will not be individually limited to any capacity factor. Further, the units are not equipped with any emerging technology to reduce SO2 emissions. Therefore, no notification is required.

Section 60.49b(b) states that the owner or operator of each affected facility subject to the SO_2, PM, and/or NO_X emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in Appendix B of this part.

ConAgra may use portable analyzer to monitor NOx and O2 concentrations for the 30 consecutive days to determine compliance with the standards in this subpart. Data collected during that period will be required to be submitted to the District within 60 days after completing the test. The following condition(s) will be included in the permit:

- The owner or operator shall submit the data from initial performance test to demonstrate compliance with 40 CFR Part 60 Subpart Db within 60 days after completing the initial test. [40 CFR 60.49b(b)]

Section 60.49b(c) states that the owner or operator of each affected facility subject to the NO_x standard in §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in §60.48b(g)(2) and the records to be maintained in §60.49b(g). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. An affected facility burning coke oven gas alone or in combination with other gaseous fuels or distillate oil shall submit this plan to the Administrator for approval within 360 days of the initial startup of the affected facility or by November 30, 2009, whichever date comes later. If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall:

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO_x emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level);

(2) Include the data and information that the owner or operator used to identify the relationship between NOX emission rates and these operating conditions; and

(3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g).

ConAgra states that this boiler has an EPA-approved Alternate Monitoring Plan (AMP). The District was unable to locate this plan. Note that AMP is being revised in order to utilize the software package and PLC purchased for permit N-1976-27.

The following condition will be included in permit N-1976-6:

- The owner or operator shall develop and submit a plan, within 360 days of initial startup under this permit, to predict the hourly NOx emissions. The plan shall: (1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO_x emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level); (2) Include the data and information that the owner or operator used to identify the relationship between NO_x emission rates and these operating conditions; and (3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g). If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. [40 CFR Part 60.49b(c)]

The following condition will be included in permit N-1976-27:

- The owner or operator shall develop and submit a plan, within 360 days of initial startup of the unit under N-1976-27-0, to predict the hourly NOx emissions. The plan shall: (1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO_x emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level); (2) Include the data and information that the owner or operator used to identify the relationship between NO_x emission rates and these operating conditions; and (3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g). If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. [40 CFR Part 60.49b(c)]

Section 60.49(d)(1) states the owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. The following condition(s) will be included in the permits:

- A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.49b(d)(1)]

- The owner or operator shall maintain records of the amount of fuel combusted during each day in this unit. [District Rule 2201 and 40 CFR 60.49b(d)(1)]

Note that these units will not be individually limited to any capacity factor. Therefore, records on the annual capacity factor will not be required.

Section 60.49(g) states that except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NO_x standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The average hourly NO_X emission rates (expressed as NO2) (ng/J or lb/MMBtu heat input) measured or predicted;

(3) The 30-day average NO_X emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;

(4) Identification of the steam generating unit operating days when the calculated 30-day average NO_X emission rates are in excess of the NO_X emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

The following condition(s) will be included in the permits; note that this condition does not include item (8), (9) or (10) as the proposed installation does not include CEMS to monitor NOx and O2 concentrations.

- The owner or operator shall maintain records and submit a written report each calendar quarter to the District containing the following information for each steam generating unit operating day: (1) Calendar date; (2) The average hourly NOx and CO emission rates (expressed as NO2) (ppmvd @ 3% O2 and lb/MMBtu heat input) measured or predicted; (3) The 30-day average NOx emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days; (4) Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards under 40 CFR 60.44b (0.1 lb/MMBtu for low heat

release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)), with the reasons for such excess emissions as well as a description of corrective actions taken; (5) Identification of the steam generating unit operating days when the average hourly NOx and CO emission rates are in excess of the NOx and CO limits (startup, shutdown and steady state) in this permit, with the reason for such excess emissions as well as a description of corrective actions taken; (6) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; (7) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data; (8) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted; and (11) A negative declaration when no excess emissions occurred. The report is due on the 30th day following the end of the calendar quarter. [District Rules 1080, 2201, 4305, 4306 and 4320, 40 CFR 60.49b(g), 40 CFR 60.49b(i), and 40 CFR 60.49b(w)]

Section 60.49b(h) states that the owner or operator is required to submit excess emission reports for any excess emissions that occurred during the reporting period. Item 4 in the requirement 60.49b(g), given in the above condition, would satisfy an on-going compliance with this section.

Section 60.49b(i) states the owner or operator of any affected facility subject to the continuous monitoring requirements for NO_X under §60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section. The condition under section 60.49b(g) would satisfy an on-going compliance with this section.

Section 60.49b(o) requires that all records shall be maintained by the owner or operator for a period of 2 years following the date of such record.

The District will require the owner or operator to maintain records of required monitoring data and support information for a period of at least five years from the date of data entry of each record. The following condition(s) will be included in the permits:

- The owner or operator shall maintain all records of required monitoring data and support information for a period of five years from the date of data entry and shall make such records available to the District upon request. [District Rules 1070, 2201, 4305, 4306, and 4320, 40 CFR 60.49b(o)]

Section 60.49b(v) states the owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_X and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and

minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format. The following condition(s) will be included in the permits:

- The owner or operator of an affected facility may submit electronic quarterly reports in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the District. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this permit was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the District to obtain their agreement to submit reports in this alternative format. [District Rule 1080 and 40 CFR 60.49b(v)]

Section 60.49b(w) states the reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

The reports are required to be submitted on a quarterly basis. Therefore, compliance is expected with this section. Please refer to the condition under section 60.48b(g) above.

Compliance is expected with this Regulation.

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

This subpart applies to steam generating units that are constructed, reconstructed, or modified after 6/9/89 and have a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. Subpart Dc has standards for SO_X and PM_{10} emissions.

This subpart applies to the boiler under permit N-1976-24. The requirements are discussed in the following section:

60.42c – Standards for Sulfur Dioxide

Since coal is not combusted in the boiler, the requirements of this section are not applicable.

60.43c – Standards for Particulate Matter

The boiler is not fired on coal, combusts mixtures of coal with other fuels, combusts wood, combusts mixtured of wood with other fuels, or oil; therefore this unit is not subject to the requirements of this section.

60.44c – Compliance and Performance Tests Methods and Procedures for Sulfur Dioxide

The boilers is not subject to the sulfur dioxide requirements of this subpart. Therefore, this section does not apply.

60.45c – Compliance and Performance Test Methods and Procedures for Particulate Matter

The boiler is not subject to the particulate matter requirements of this subpart. Therefore, this section does not apply.

60.46c – Emission Monitoring for Sulfur Dioxide

The boiler is not subject to the sulfur dioxide requirements of this subpart. Therefore, this section does not apply.

60.47c – Emission Monitoring for Particulate Matter

The boiler is not subject to the particulate matter requirements of this subpart. Therefore, this section does not apply.

60.48c – Reporting and Recordingkeeping Requirements

Section 60.48c (a) states that the owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

The design heat input capacity and type of fuel combusted is listed in the equipment description. Therefore, no additional conditions are necessary.

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel mixture of fuels under §60.42c or §40.43c.

This requirement is not applicable since the unit is not subject to §60.42c or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

The facility is not proposing to establish an annual capacity factor for this unit.

(4) Notification if an emerging technology will be used for controlling SO_2 emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making

this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator

This requirement is not applicable since the unit will not be equipped with emerging technology used to control SO_2 emissions.

Section 60.48c(g)(2), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month. The following conditions will be listed in the permit.

- A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c(g)]

- The owner or operator shall maintain records of the amount of fuel combusted during each calendar month in this unit. [District Rule 2201 and 40 CFR 60.48c(g)]

Section 60.48c(i) states that all records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. The following condition will ensure compliance with this section:

- The owner or operator shall maintain all records of required monitoring data and support information for a period of five years from the date of data entry and shall make such records available to the District upon request. [District Rules 1070, 2201, 4305, 4306 and 4320, and 40 CFR 60.48c(i)]

Compliance is expected with this regulation.

Rule 4002 National Emission Standards for Hazardous Air Pollutants

40 CFR Part 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
This subpart is applicable to boilers and process heaters located at Major Sources of HAP emissions.

Per project N-1132542, this facility is an Area Source of HAP emissions. Therefore, the requirements of Subpart DDDDD are not applicable to the boilers under this project.

40 CFR Part 63 Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
Pursuant to Section 63.1195(e) a gas-fired boiler, as defined in Subpart JJJJJ, is not subject to any requirement of this Subpart. Pursuant to the definition in the subpart, a gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel.

The boilers under this project meet the definition of a "gas-fired boiler" as they are required to use natural gas fuel. Therefore, Subpart JJJJJJ requirements are not applicable.

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 performs an analysis to determine the possible impact to the nearest resident or worksite.

N-1976-4-12
The proposed removal of annual heat input rate will result in an increase in hazardous air emissions. Therefore, risk management review is required for this unit.

Risk Management Review Summary			
Categories	Boiler (Unit 4-12)	Project Totals	Facility Totals
Prioritization Score	0.07	0.07	>1
Acute Hazard Index	0.00	0.00	0.01
Chronic Hazard Index	0.00	0.00	0.01
Maximum Individual Cancer Risk	1.42E-07	1.42E-07	1.94E-06
T-BACT Required?	No		
Special Permit Conditions?	Yes		

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with the project is 1.42E-07, which is less than the 1 in a million threshold. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

To ensure that human health risks will not exceed District allowable levels; the following condition shall be included in the permit:

- The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]

N-1976-6-12, '-24-2 and '-27-1
ConAgra is not proposing any changes to the existing hourly or annual heat input rate limits. Therefore, there would not be any increase in hazardous air emissions from these units, and risk management review is not required.

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-1976-4-12:

PM_{10} emissions	= 0.588 lb-PM_{10}/hr (0.003 lb/MMBtu × 196 MMBtu/hr)
Fraction (lb-PM_{10}/lb-PM)	= 100%
Exhaust flow rate	= 30,820 dscfm (Source test 7/1/2014)

$$PM\left(\frac{gr}{dscf}\right) = \frac{\left(0.588\frac{lb-PM}{hr}\right)\left(7{,}000\frac{gr-PM}{lb-PM}\right)\left(\frac{hr}{60\ min}\right)}{\left(30{,}820\frac{ft^3}{min}\right)} = 0.0\frac{gr-PM}{dscf}$$

N-1976-6-12:
PM_{10} emissions = 0.552 lb-PM_{10}/hr (0.003 lb/MMBtu × 184 MMBtu/hr)
Fraction (lb-PM_{10}/lb-PM) = 100%
Exhaust flow rate = 26,094 dscfm (Source test 3/21/2014)

$$PM\left(\frac{gr}{dscf}\right) = \frac{\left(0.552\frac{lb-PM}{hr}\right)\left(7{,}000\frac{gr-PM}{lb-PM}\right)\left(\frac{hr}{60\ min}\right)}{\left(26{,}094\frac{ft^3}{min}\right)} = 0.0\frac{gr-PM}{dscf}$$

N-1976-24-2:
PM_{10} emissions = 0.258 lb-PM_{10}/hr (0.003 lb/MMBtu × 86 MMBtu/hr)
Fraction (lb-PM_{10}/lb-PM) = 100%
Exhaust flow rate = 12,295 dscfm (estimated[3])

$$PM\left(\frac{gr}{dscf}\right) = \frac{\left(0.258\frac{lb-PM}{hr}\right)\left(7{,}000\frac{gr-PM}{lb-PM}\right)\left(\frac{hr}{60\ min}\right)}{\left(12{,}295\frac{ft^3}{min}\right)} = 0.0\frac{gr-PM}{dscf}$$

N-1976-27-1:
PM_{10} emissions = 0.530 lb-PM_{10}/hr (0.003 lb/MMBtu × 176.5 MMBtu/hr)
Fraction (lb-PM_{10}/lb-PM) = 100%
Exhaust flow rate = 23,615 dscfm (Source test 6/30/2014)

$$PM\left(\frac{gr}{dscf}\right) = \frac{\left(0.530\frac{lb-PM}{hr}\right)\left(7{,}000\frac{gr-PM}{lb-PM}\right)\left(\frac{hr}{60\ min}\right)}{\left(23{,}615\frac{ft^3}{min}\right)} = 0.0\frac{gr-PM}{dscf}$$

Since PM grain loading factor is below 0.1 gr/dscf for each unit, compliance is expected with this rule. The following condition will be included in each permit:

[3](8,578 dscf/MMBtu)(86 MMBtu/hr)(hr/60 min) = 12,295 dscfm

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

Compliance is expected with this Rule.

Rule 4301 Fuel Burning Equipment

The requirements of section 5.0 are as follows:

- Combustion contaminates (TSP) - Not to exceed 0.1 gr/dscf @ 12% CO_2 and 10 lb/hr.
- SO_x emissions - Not to exceed 200 lb/hr
- NO_x emissions - Not to exceed 140 lb/hr

N-1976-4-12:
NO_x (lb/hr) = (0.036 lb/MMBtu, startup)(196 MMBtu/hr) = 7.1 lb/hr (max)
SO_x (lb/hr) = (0.00285 lb/MMBtu)(196 MMBtu/hr) = 0.6 lb/hr

$$PM\left(\frac{gr}{dscf}\right) = \frac{\text{PM Emissions}\left(\frac{lb-PM}{MMBtu}\right)\times 7{,}000\,\frac{gr-PM}{lb-PM}}{F_{factor\ CO_2}\left(\frac{dscf}{MMBtu}\right)\times\left(\frac{100\%}{12\%}\right)}$$

$$= \frac{\left(0.003\,\frac{lb-PM}{MMBtu}\right)\left(7{,}000\,\frac{gr-PM}{lb-PM}\right)}{\left(1{,}024.2\,\frac{dscf}{MMBtu}\right)\left(\frac{100\%}{12\%}\right)}$$

$$= 0.0\,\frac{gr-PM}{dscf}$$

N-1976-6-12:
NO_x (lb/hr) = (0.036 lb/MMBtu, startup)(184 MMBtu/hr) = 6.6 lb/hr (max)
SO_x (lb/hr) = (0.00285 lb/MMBtu)(184 MMBtu/hr) = 0.5 lb/hr

$$PM\left(\frac{gr}{dscf}\right) = \frac{\text{PM Emissions}\left(\frac{lb-PM}{MMBtu}\right)\times 7{,}000\,\frac{gr-PM}{lb-PM}}{F_{factor\ CO_2}\left(\frac{dscf}{MMBtu}\right)\times\left(\frac{100\%}{12\%}\right)}$$

$$= \frac{\left(0.003\,\frac{lb-PM}{MMBtu}\right)\left(7{,}000\,\frac{gr-PM}{lb-PM}\right)}{\left(1{,}024.2\,\frac{dscf}{MMBtu}\right)\left(\frac{100\%}{12\%}\right)}$$

$$= 0.0\,\frac{gr-PM}{dscf}$$

N-1976-24-2:
NO_x (lb/hr) = (0.036 lb/MMBtu, startup)(86 MMBtu/hr) = 3.1 lb/hr (max)
SO_x (lb/hr) = (0.00285 lb/MMBtu)(86 MMBtu/hr) = 0.2 lb/hr

$$PM\left(\frac{gr}{dscf}\right) = \frac{\text{PM Emissions}\left(\frac{lb-PM}{MMBtu}\right)\times 7{,}000\,\frac{gr-PM}{lb-PM}}{F_{factor\ CO_2}\left(\frac{dscf}{MMBtu}\right)\times\left(\frac{100\%}{12\%}\right)}$$

$$= \frac{\left(0.003\,\frac{lb-PM}{MMBtu}\right)\left(7{,}000\,\frac{gr-PM}{lb-PM}\right)}{\left(1{,}024.2\,\frac{dscf}{MMBtu}\right)\left(\frac{100\%}{12\%}\right)}$$

$$= 0.0\,\frac{gr-PM}{dscf}$$

N-1976-27-1:
NO_x (lb/hr) = (0.036 lb/MMBtu, startup)(176.5 MMBtu/hr) = 6.4 lb/hr (max)
SO_x (lb/hr) = (0.00285 lb/MMBtu)(176.5 MMBtu/hr) = 0.5 lb/hr

$$PM\left(\frac{gr}{dscf}\right) = \frac{\text{PM Emissions}\left(\frac{lb-PM}{MMBtu}\right)\times 7{,}000\,\frac{gr-PM}{lb-PM}}{F_{factor\ CO_2}\left(\frac{dscf}{MMBtu}\right)\times\left(\frac{100\%}{12\%}\right)}$$

$$= \frac{\left(0.003\,\frac{lb-PM}{MMBtu}\right)\left(7{,}000\,\frac{gr-PM}{lb-PM}\right)}{\left(1{,}024.2\,\frac{dscf}{MMBtu}\right)\left(\frac{100\%}{12\%}\right)}$$

$$= 0.0\,\frac{gr-PM}{dscf}$$

For each unit, the proposed emissions are below the limits of this Rule; therefore, compliance is expected.

Rule 4304 Equipment Tuning Procedure for Boilers, Steam Generators and Process Heaters

Pursuant to District Rules 4305 and 4306, Section 6.3.1, boilers are required to be tested at least once every 12-months. Gaseous fuel fired units demonstrating compliance on two consecutive 12-month source tests may defer the following source test for up to 36 months. During 36-month source testing interval, the operator shall tune the boiler according to section 5.2.1 (tune up at least once each calendar year by qualified technician in accordance with Rule 4304). Tune-ups required by Sections 5.2.1 and 6.3.1 do not need to be performed for units that operate and maintain an APCO approved

CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored.

N-1976-4-12, '-6-12, '-24-2 and '-27-1
For each unit, NOx, CO and O_2 concentrations will be measured using a portable analyzer monitor on a monthly basis. This monitoring scheme is approved under District Policy SSP-1105; therefore, boiler tune-ups are not required.

Rule 4305 Boilers, Steam Generators and Process Heaters – Phase 2

Since the emission limits of District Rule 4306 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4306 requirements will satisfy requirements of District Rule 4305.

Rule 4306 Boilers, Steam Generators and Process Heaters – Phase 3

Section 2.0 - Applicability
This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.

The heat input rate to the boilers is greater than 5 MMBtu/hr. Therefore, these units are subject to the requirements of this rule.

Section 5.0 - Requirements
Section 5.1.1 limits NO_x and CO emissions to 9 ppmvd @ 3% O_2 and 400 ppmvd @ 3% O_2 respectively.

The applicant has proposed to achieve 5 ppmvd NO_x @ 3% O_2 (or less) and 50 ppmvd CO @ 3% O_2 (or less) for the boilers in this project. Since the proposed limits are below the rule limits, compliance is expected with this section.

Section 5.2 lists the requirements for boilers limited to a heat input rate of less than 9 billion Btu per calendar year. The boilers under this project will not be limited to a heat input rate of less than 9 billion Btu per calendar year. Therefore, this section is not applicable.

Section 5.3 states that the NO_x and CO emission limits shall not apply to this unit during start-up and shutdown period provided that the duration of each start-up or each shutdown is not greater than 2.0 hours, and the emission control system is utilized during these periods. An operator may submit a request to allow more than two hours for each startup or each shutdown provided the operator meets all of the conditions specified in sections 5.3.3.1 to 5.3.3.3.

ConAgra has proposed to limit the duration of each startup and each shutdown to 2.0 hours. The following condition(s) will be included in the permits:

- Duration of each startup and each shutdown shall not exceed 2.0 hours. [District Rule 4306 and 4320]

Section 5.4.1 requires the operator to install and maintain a non-resettable, totalizing mass or volumetric flow meter for the units, which simultaneous uses gaseous and liquid fuels and is subject to the requirements of Section 5.1. The applicant is proposing to use gaseous fuel only. Therefore, they are not required to install and maintain a fuel flow meter due to this section.

Section 5.4.2 requires that the units subject to District Rule 4306, Section 5.1 emissions limits, shall either install and maintain Continuous Emission Monitoring (CEM) equipment for NO_X, CO and O_2, or install and maintain APCO-approved alternate monitoring. In order to satisfy the requirements of District Rule 4306, the applicant has proposed to use pre-approved alternate monitoring scheme "H" of District Policy SSP-1105, which requires periodic monitoring of NO_X, CO, NH_3 and O_2 exhaust emissions concentrations. The following condition(s) will be included in the permits:

- The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306 and 4320]

- If either the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306 and 4320]

- All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol

approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320]

- Ammonia emissions readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 2201, 4305, 4306 and 4320]

- The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306 and 4320]

Section 5.5.1 states the operator of any unit have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limit. The following condition(s) will be included in the permits:

- The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]

Section 5.5.2 requires 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-ignition as defined in Section 3.0. The following condition(s) will be included in the permits:

- 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-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]

Section 5.5.3 requires that all CEMS data shall be averaged over a period of 15-consecutive minutes to demonstrate compliance with the applicable emission limits in this rule. The proposed boiler emissions will not be measured using CEMS system; therefore, this section is not applicable.

Section 5.5.4 requires emissions monitoring pursuant to Sections 5.4.2, 5.4.2.1, and 6.3.1 using a portable NO_X analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute

period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings evenly spaced out over the 15-consecutive-minute period. The following condition(s) will be included in the permits:

- All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320]

Section 5.5.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, 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. The following condition(s) will be included in the permits:

- 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 4305, 4306 and 4320]

Section 6.0 – Administrative Requirements
Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.3 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule. The following condition(s) will be included in the permits:

- 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 Rules 1070, 2201, 4305, 4306 and 4320]

Section 6.2 identifies the test methods for determining higher heating value of fuel, NO_x, CO, O_2, stack gas velocities, and stack gas moisture content. The following conditions will be listed on each permit. The following condition(s) will be included in the permits:

- 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]

- NOx emissions for source test purposes shall be determined using EPA Method 7E or CARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]

- CO emissions for source test purposes shall be determined using EPA Method 10 or CARB Method 100. [District Rules 4305, 4306 and 4320]

- Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or CARB Method 100. [District Rules 4305, 4306 and 4320]

In addition, the ammonia slip is required to be measured using BAAQMD Method ST-1B. The following condition(s) will be included in the permit:

- Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081]

Section 6.3.1 requires that this unit be tested to determine compliance with the applicable requirements of section 5.1 and 5.2.3 not less than once every 12 months. Units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test for up to 36 months (no more than 30 days before or after the required 36-month source test date). During the 36-month source testing interval, the operator shall tune the unit in accordance with the provisions of Section 5.2.1, and shall monitor, on a monthly basis, the unit's operational characteristics recommended by the manufacturer to ensure compliance with the applicable emission limits specified in Sections 5.1 or 5.2.3. Tune-ups required by Sections 5.2.1 and 6.3.1 do not need to be performed for units that operate and maintain an APCO approved CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored.

NOx, CO and O2 concentrations will be measured on monthly basis using portable analyzer. Therefore, no periodic tune-ups are required. The following condition(s) will be included in the permits:

- Source testing to measure NOx, CO and NH_3 emissions during steady state operation shall be conducted at least once every 12 months. After demonstrating compliance on 2 consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months. [District Rules 4305, 4306 and 4320]

Section 6.3.2 lists compliance testing procedure for units that represent a group of units. The heat input rate of the boilers at this site significantly varies from one boiler to another; therefore, group testing cannot be considered.

Section 6.4 discusses emission control plan (ECP). The permit application for the boiler satisfies the requirements of the Emission Control Plan, as listed in Section 6.4 of District Rule 4306. No further discussion is necessary.

Section 7.0 – Compliance Schedule
The boilers are expected to be operated in compliance with the requirements of this rule. Therefore, no further discussion is required.

Compliance is expected with this Rule.

Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters greater than 5.0 MMBtu/hr

Section 2.0 - Applicability
Section 2.0 states that this rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.

The heat input rate to the boiler is greater than 5 MMBtu/hr. Therefore, this unit is subject to the requirements of this rule.

Section 5.0 – Requirements
Section 5.1 states that an operator of a unit(s) subject to this rule shall comply with all applicable requirements of the rule and one of the following, on a unit-by-unit basis:

- Operate the unit to comply with the emission limits specified in Sections 5.2 and 5.4; or

- Pay an annual emissions fee to the District as specified in Section 5.3 and comply with the control requirements specified in Section 5.4; or

- Comply with the applicable Low-use Unit requirements of Section 5.5.

The facility had chosen to comply with the emission limits specified in Section 5.2 and 5.4. These limits are summarized below:
NOx: 7 ppmvd @ 3% O2
CO: 400 ppmvd @ 3% O2
Particulate Matter: Use PUC-quality natural gas, commercial propane, butane, or LPG, or combination of such gases with fuel sulfur content of 5 grains/100 scf or less.

The applicant has proposed the following limits:

NOx: 5 ppmvd @ 3% O2 (or less);
CO: 50 ppmvd @ 3% O2 (or less);
Particulate Matter: Use PUC-quality natural gas.

Therefore, compliance is expected with this section.

Section 5.3 states that the NO_x and CO emission limits shall not apply to this unit during start-up and shutdown period provided that the duration of each start-up or each

shutdown is not greater than 2.0 hours, and the emission control system is utilized during these periods.

The duration of each startup and startup is 2.0 hours. The following condition(s) will be included in the permit:

- Duration of each startup and each shutdown shall not exceed 2.0 hours. [District Rule 4306 and 4320]

Section 5.7 discusses monitoring provisions to comply with NO_x and CO limits. These provisions are similar to the provisions in Rule 4306 (discussed previously).

Section 5.7.6 requires the operator to provide annual fuel sulfur content analysis. The following conditions will satisfy the requirements of this section:

- Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rule 4320]

- Fuel sulfur content shall be determined using EPA Method 11 or EPA Method 15 or District, CARB and EPA approved alternative methods. [District Rule 4320]

Section 5.8 discusses compliance determination. The requirements in this section are similar to the requirements in Rule 4306 (discussed previously).

Section 6.0 – Administrative Requirements
Recordkeeping requirements of this Rule are similar to that of the Rule 4306. Please refer to section 6.0 of Rule 4306.

Section 7.0 – Compliance Schedule
This section refers to "Authority to Construct" and "Compliance Deadline" dates for existing units. The boilers are being operated in compliance with this rule.

Compliance is expected with this Rule.

Rule 4351 Boilers, Steam Generators, and Process Heaters – Phase 1

Section 2.0 of this rule states that this rule applies to any boiler, steam generator or process heater, with a rated heat input greater than 5 million Btu per hour that is fired with gaseous and/or liquid fuels, and is included in a major NOx source. This rule does not apply to any unit located west of Interstate Highway 5 located in Fresno, Kern, or Kings county.

This facility will no longer be a major source for NOx emissions. Therefore, no further discussion is necessary.

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 (SO_2) at the point of discharge on a dry basis averaged over 15 consecutive minutes.

N-1976-4-12, '-6-12, '-24-2 and '-27-1
For the proposed gaseous fuel combustion at a reference state of 60 °F, the Rule 4801 limit of 2,000 ppmvd is equivalent to:

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

SOx emissions from each boiler are 0.00285 lb/MMBtu. These emissions are below the 2.9 lb-SOx/MMBtu rule limit (determined above). Therefore, compliance is expected with 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 (GHG) Significance Determination

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

On December 17, 2009, the District's Governing Board adopted a policy, APR 2005, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency, for addressing GHG emission impacts when the District is Lead Agency under CEQA and approved the District's guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. Under this policy, the District's determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change. Consistent with District Policy 2005, projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emission.

The California Air Resources Board (ARB) adopted a Cap-and-Trade regulation as part one of the strategies identified for AB 32. This Cap-and-Trade regulation is a statewide plan, supported by a CEQA compliant environmental review document, aimed at reducing or mitigating GHG emissions from targeted industries. Facilities subject to the Cap-and-Trade regulation are subject to an industry-wide cap on overall GHG emissions. Any growth in emissions must be accounted for under that cap such that a corresponding and equivalent reduction in emissions must occur to allow any increase. Further, the cap decreases over time, resulting in an overall decrease in GHG emissions.

Under District policy APR 2025, CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation, the District finds that the Cap-and-Trade is a regulation plan approved by ARB, consistent with AB32 emission reduction targets, and supported by a CEQA compliant environmental review document. As such, consistent with District Policy 2005, projects complying project complying with Cap-and-Trade requirements are determined to have a less than significant individual and cumulative impact for GHG emissions.

The GHG emissions increases associated with this project result from the combustion of fossil fuel(s), other than jet fuel, delivered from suppliers subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with District Policies APR 2005 and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.

District CEQA Findings

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the project will occur at an existing facility and the project involves negligible or no expansion of the existing use. Furthermore, the District determined that the project will not have a significant effect on the environment. The District finds that the project is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline §15301 (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

Issuance of the ATCs is recommended upon addressing comments from the applicant and EPA.

X. BILLING INFORMATION

Permit #	Fee Schedule	Fee Description	Previous Fee Schedule
N-1976-4-12	3020-02H	196 MMBtu/hr	3020-02H
N-1976-6-12	3020-02H	184 MMBtu/hr	3020-02H
N-1976-24-2	3020-02H	86 MMBtu/hr	3020-02H
N-1976-27-1	3020-02H	176.5 MMBtu/hr	3020-02H

APPENDICES

Appendix I: Draft Authority to Construct Permits
Appendix II: Top-Down BACT Analysis
Appendix III: Permits to Operate N-1976-4-11, '-6-10, '-24-1 and '-27-0
Appendix IV: Risk Management Review Summary
Appendix V: Quarterly Emissions Change

Appendix I
Draft Authority to Construct Permits

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1976-4-12

ISSUANCE DATE: DRAFT

DRAFT

LEGAL OWNER OR OPERATOR: CONAGRA FOODS
MAILING ADDRESS: ATTN: REGIONAL ENVIRONMENTAL MANAGER
554 S YOSEMITE AVENUE
OAKDALE, CA 95361

LOCATION: 554 S YOSEMITE AVE
OAKDALE, CA 95361

EQUIPMENT DESCRIPTION:
MODIFICATION OF 196 MMBTU/HR BABCOCK & WILCOX MODEL FF-16 NATURAL GAS-FIRED BOILER (#4) WITH A NATCOM (OR EQUIVALENT MANUFACTURER) LOW NOX BURNER WITH INDUCED FLUE GAS RECIRCULATION (FGR) SYSTEM SERVED BY A NBI/CRI (OR EQUIVALENT MANUFACTURER) SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM: ESTABLISH COMBINED HEAT INPUT RATE FOR BOILERS N-1976-4, '-6, '-24 AND '-27

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. {14} Particulate matter emissions 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. The unit shall only be fired on PUC-quality natural gas with a sulfur content of no greater than 1.0 grains (gr) of sulfur per 100 standard cubic feet (scf) of natural gas. [District Rules 2201 and 4320]
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]

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

DRAFT

Arnaud Marjollet, Director of Permit Services
N-1976-4-12 : May 12 2015 11:52AM – KAHLONJ : Joint Inspection NOT Required

7. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rule 2201]
8. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306 and 4320]
9. Duration of each startup and each shutdown shall not exceed 2.0 hours. [District Rule 4306 and 4320]
10. The total duration of startup and shutdown period shall not exceed 4.0 hours in any one day. [District Rule 2201]
11. The total duration of startup and shutdown period shall not exceed 80 hours during any 12 consecutive month rolling period. [District Rule 2201]
12. The total heat input rate to boilers at this facility shall not exceed 2,700,250 MMBtu during any 12 consecutive month period. [District Rule 2201]
13. During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rule 2201]
14. During startup and shutdown, CO emissions shall not exceed 100 ppmvd @ 3% O2 or 0.074 lb/MMBtu. [District Rule 2201]
15. Except during startup and shutdown, NOx emissions shall not exceed 5 ppmvd @ 3% O2 or 0.0062 lb/MMBtu, referenced as NO2. [District Rules 2201, 4305, 4306 and 4320]
16. Except during startup and shutdown, CO emissions shall not exceed 50 ppmvd @ 3% O2 or 0.037 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320]
17. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
18. PM10 emissions shall not exceed 0.003 lb/MMBtu. [District Rule 2201]
19. VOC emissions shall not exceed 0.0014 lb/MMBtu, referenced as methane. [District Rule 2201]
20. NH3 emissions from the SCR system shall not exceed 10 ppmvd @ 3% O2. [District Rule 2201]
21. 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]
22. Source testing to measure NOx, CO and NH3 emissions during steady state operation shall be conducted at least once every 12 months. After demonstrating compliance on 2 consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months. [District Rules 4305, 4306 and 4320]
23. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
24. 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-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
25. 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 4305, 4306 and 4320]
26. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]
27. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
28. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

29. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081]

30. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320]

31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

32. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306 and 4320]

33. If either the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306 and 4320]

34. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320]

35. Ammonia emissions readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 2201, 4305, 4306 and 4320]

36. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306 and 4320]

37. The permittee shall maintain record of the following items: (1) date; (2) duration of each startup (hours); (3) duration of each shutdown (hours); (4) total start-up and shutdown durations per day (hour/day); (5) total start-up and shutdown durations per month (hours/month); (6) total startup and shutdown duration in a 12 consecutive month period. [District Rules 2201, 4306 and 4320]

38. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rule 4320]

39. The owner or operator shall maintain records of the amount of fuel combusted during each calendar month in this unit. [District Rule 2201]

40. The owner or operator shall keep monthly records of the total heat input (MMBtu) for the boilers at this facility. These records shall be used to determine the total heat input (MMBtu) during 12 consecutive month period on a rolling basis. [District Rule 2201]

41. The owner or operator shall maintain all records of required monitoring data and support information for a period of five years from the date of data entry and shall make such records available to the District upon request. [District Rules 1070, 2201, 4305, 4306 and 4320]

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-1976-6-12 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: CONAGRA FOODS
MAILING ADDRESS: ATTN: REGIONAL ENVIRONMENTAL MANAGER
554 S YOSEMITE AVENUE
OAKDALE, CA 95361

LOCATION: 554 S YOSEMITE AVE
OAKDALE, CA 95361

EQUIPMENT DESCRIPTION:
MODIFICATION OF 184 MMBTU/HR BABCOCK & WILCOX MODEL FM117-97 NATURAL GAS-FIRED BOILER #2 WITH A TODD RAPID MIX ULTRA LOW NOX BURNER, INDUCED FLUE GAS RECIRCULATION (FGR), AND SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM: ESTABLISH COMBINED HEAT INPUT RATE FOR BOILERS N-1976-4, '-6, '-24 AND '-27

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. {14} Particulate matter emissions 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. The unit shall only be fired on PUC-quality natural gas with a sulfur content of no greater than 1.0 grains (gr) of sulfur per 100 standard cubic feet (scf) of natural gas. [District Rules 2201 and 4320, 40 CFR 60.42b(k)(1)(2)]
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services
N-1976-6-12 : May 12 2015 11:52AM – KAHLONJ : Joint Inspection NOT Required

7. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.49b(d)(1)]
8. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
9. Duration of each startup and each shutdown shall not exceed 2.0 hours. [District Rules 4306 and 4320]
10. The total duration of startup and shutdown period shall not exceed 4.0 hours in any one day. [District Rule 2201]
11. The total duration of startup and shutdown period shall not exceed 80 hours during any 12 consecutive month rolling period. [District Rule 2201]
12. The total heat input rate to boilers at this facility shall not exceed 2,700,250 MMBtu during any 12 consecutive month period. [District Rule 2201]
13. During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rule 2201]
14. During startup and shutdown, CO emissions shall not exceed 100 ppmvd @ 3% O2 or 0.074 lb/MMBtu. [District Rule 2201]
15. Except during startup and shutdown, NOx emissions shall not exceed 5 ppmvd @ 3% O2 or 0.0062 lb/MMBtu, referenced as NO2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
16. Except during startup and shutdown, CO emissions shall not exceed 50 ppmvd @ 3% O2 or 0.037 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
18. PM10 emissions shall not exceed 0.003 lb/MMBtu. [District Rule 2201]
19. VOC emissions shall not exceed 0.0014 lb/MMBtu, referenced as methane. [District Rule 2201]
20. NH3 emissions from the SCR system shall not exceed 10 ppmvd @ 3% O2. [District Rule 2201]
21. Source testing to measure startup and shutdown NOx, CO and VOC emissions shall be conducted within 60 days of initial startup under this permit. [District Rule 2201]
22. 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. Source testing to measure NOx, CO and NH3 emissions during steady state operation shall be conducted at least once every 12 months. After demonstrating compliance on 2 consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months. [District Rule 4305, 4306 and 4320]
24. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
25. 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-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
26. 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 4305, 4306 and 4320]
27. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]

29. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]

30. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081]

31. Source testing to measure VOC emissions shall be conducted using EPA Method 18 or 25A. Should the applicant decided to use different methodology, the methodology must be approved by the District prior to its use. [District Rule 2201]

32. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320]

33. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

34. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306 and 4320]

35. If either the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306 and 4320]

36. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320]

37. Ammonia emissions readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 2201, 4305, 4306 and 4320]

38. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306 and 4320]

39. The permittee shall maintain record of the following items: (1) date; (2) duration of each startup (hours); (3) duration of each shutdown (hours); (4) total start-up and shutdown durations per day (hour/day); (5) total start-up and shutdown durations per month (hours/month); (6) total startup and shutdown duration in a 12 consecutive month period. [District Rule 2201, 4306 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

40. The owner or operator shall either obtain fuel receipts (such as a valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets definition of natural gas (as defined in 40 CFR 60.41b) and the applicable sulfur limit (i.e., 1.0 gr-S/100 scf), or demonstrate that the combusted gas is provided from a PUC or FERC regulated source, or monitor the sulfur content within 60 days of initial startup and weekly thereafter. If the sulfur content is less than or equal to 1.0 gr/100 dscf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume until compliance is demonstrated for eight consecutive weeks. [District Rule 4320, 40 CFR 60.45b(j), 60.49b(r)(2)]

41. For 40 CFR Part 60 Subpart Db purposes, NOx emissions shall not exceed 0.1 lb/MMBtu for low heat release units (70,000 Btu/hr-ft3 of furnace volume or less) and 0.2 lb/MMBtu for high heat release units (greater than 70,000 Btu/hr-ft3 of furnace volume) on a 30-day rolling average basis. NOx standard shall apply at all times including periods of startup, shutdown, or malfunction. The permittee shall maintain record of the furnace volume, which is defined as the volume bounded by the front furnace wall where the burner is located, the furnace side waterfall, and extending to the level just below or in front of the first row of convection pass tubes [40 CFR 60.44b(a), 60.44b(h), 60.44b(i)]

42. For the initial compliance test under 40 CFR Part 60 Subpart Db, NOx emissions shall be monitored for 30 successive steam generating unit operating days and the 30-day average emission rate shall be used to determine compliance with the NOx emission standard under 40 CFR 60.44b (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)). The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period. Previously conducted compliance test in the manner prescribed in this condition may be used to fulfill the requirements of 40 CFR 60.46b(e)(1). [40 CFR 60.46b(e)(1)]

43. Following the initial compliance test under 40 CFR Part 60 Subpart Db, the operator shall upon request determine compliance with the NOx standard under 40 CFR 60.44 (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)) through the use of a 30-day performance test. During periods when performance tests are not requested, NOx emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NOx emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(4)]

44. The owner or operator shall monitor steam generating unit operating conditions and predict NOx emission rates as specified in a plan submitted pursuant to §60.49b(c) and approved by the District or the EPA. However, if no such plan exists at this time, the facility shall develop and submit a plan in accordance with 40 CFR 60.49b(c). [40 CFR 60.48b(g)(2)]

45. The owner or operator shall submit the data from initial performance test to demonstrate compliance with 40 CFR Part 60 Subpart Db within 60 days after completing the initial test. [40 CFR 60.49b(b)]

46. The owner or operator shall develop and submit a plan, within 360 days of initial startup under this permit, to predict the hourly NOx emissions. The plan shall: (1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NOx emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level); (2) Include the data and information that the owner or operator used to identify the relationship between NOx emission rates and these operating conditions; and (3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g). If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. [40 CFR Part 60.49b(c)]

CONDITIONS CONTINUE ON NEXT PAGE

47. The owner or operator shall maintain records of the amount of fuel combusted during each day in this unit. [District Rule 2201 and 40 CFR 60.49b(d)(1)]

48. The owner or operator shall maintain records and submit a written report each calendar quarter to the District containing the following information for each steam generating unit operating day: (1) Calendar date; (2) The average hourly NOx and CO emission rates (expressed as NO2) (ppmvd @ 3% O2 and lb/MMBtu heat input) measured or predicted; (3) The 30-day average NOx emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days; (4) Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards under 40 CFR 60.44b (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)), with the reasons for such excess emissions as well as a description of corrective actions taken; (5) Identification of the steam generating unit operating days when the average hourly NOx and CO emission rates are in excess of the NOx and CO limits (startup, shutdown and steady state) in this permit, with the reason for such excess emissions as well as a description of corrective actions taken; (6) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; (7) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data; (8) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted; and (11) A negative declaration when no excess emissions occurred. The report is due on the 30th day following the end of the calendar quarter. [District Rules 1080, 2201, 4305, 4306 and 4320, 40 CFR 60.49b(g), 40 CFR 60.49b(i), and 40 CFR 60.49b(w)]

49. The owner or operator shall keep monthly records of the total heat input (MMBtu) for the boilers at this facility. These records shall be used to determine the total heat input (MMBtu) during 12 consecutive month period on a rolling basis. [District Rule 2201]

50. The owner or operator shall maintain all records of required monitoring data and support information for a period of five years from the date of data entry and shall make such records available to the District upon request. [District Rules 1070, 2201, 4305, 4306, and 4320, and 40 CFR 60.49b(o)]

51. The owner or operator of an affected facility may submit electronic quarterly reports in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the District. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this permit was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the District to obtain their agreement to submit reports in this alternative format. [District Rule 1080 and 40 CFR 60.49b(v)]

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1976-24-2 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: CONAGRA FOODS
MAILING ADDRESS: ATTN: REGIONAL ENVIRONMENTAL MANAGER
554 S YOSEMITE AVENUE
OAKDALE, CA 95361

LOCATION: 554 S YOSEMITE AVE
OAKDALE, CA 95361

EQUIPMENT DESCRIPTION:
MODIFICATION OF 86 MMBTU/HR NEBRASKA MODEL NOS-2A-67 NATURAL GAS-FIRED RENTAL BOILER (BOILER #5) WITH A TODD COMBUSTION BURNER AND A WABASH SELECTIVE CATALYTIC REDUCTION SYSTEM: ESTABLISH COMBINED HEAT INPUT RATE FOR BOILERS N-1976-4, '-6, '-24 AND '-27

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. {14} Particulate matter emissions 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. The unit shall only be fired on PUC-quality natural gas with a sulfur content of no greater than 1.0 grains (gr) of sulfur per 100 standard cubic feet (scf) of natural gas. [District Rules 2201 and 4320]
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c(g)]
7. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306 and 4320]

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

Arnaud Marjollet, Director of Permit Services

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8. Duration of each startup and each shutdown shall not exceed 2.0 hours. [District Rule 4306 and 4320]
9. The total duration of startup and shutdown period shall not exceed 4.0 hours in any one day. [District Rule 2201]
10. The total duration of startup and shutdown period shall not exceed 80 hours during any 12 consecutive month rolling period. [District Rule 2201]
11. The total heat input rate to boilers at this facility shall not exceed 2,700,250 MMBtu during any 12 consecutive month period. [District Rule 2201]
12. During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rule 2201]
13. During startup and shutdown, CO emissions shall not exceed 100 ppmvd @ 3% O2 or 0.074 lb/MMBtu. [District Rule 2201]
14. Except during startup and shutdown, NOx emissions shall not exceed 5 ppmvd @ 3% O2 or 0.0062 lb/MMBtu, referenced as NO2. [District Rules 2201, 4305, 4306 and 4320]
15. Except during startup and shutdown, CO emissions shall not exceed 50 ppmvd @ 3% O2 or 0.037 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320]
16. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
17. PM10 emissions shall not exceed 0.003 lb/MMBtu. [District Rule 2201]
18. VOC emissions shall not exceed 0.0055 lb/MMBtu, referenced as methane. [District Rule 2201]
19. NH3 emissions from the SCR system shall not exceed 10 ppmvd @ 3% O2. [District Rule 2201]
20. 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. Source testing to measure NOx, CO and NH3 emissions during steady state operation shall be conducted at least once every 12 months. After demonstrating compliance on 2 consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months. [District Rule 4305, 4306 and 4320]
22. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
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-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
24. 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 4305, 4306 and 4320]
25. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]
26. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
27. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]
28. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081]
29. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320]
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

31. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306 and 4320]

32. If either the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306 and 4320]

33. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320]

34. Ammonia emissions readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 2201, 4305, 4306 and 4320]

35. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306 and 4320]

36. The permittee shall maintain record of the following items: (1) date; (2) duration of each startup (hours); (3) duration of each shutdown (hours); (4) total start-up and shutdown durations per day (hour/day); (5) total start-up and shutdown durations per month (hours/month); (6) total startup and shutdown duration in a 12 consecutive month period. [District Rules 2201, 4306 and 4320]

37. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rule 4320]

38. The owner or operator shall maintain records of the amount of fuel combusted during each calendar month in this unit. [District Rule 2201 and 40 CFR 60.48c(g)]

39. The owner or operator shall keep monthly records of the total heat input (MMBtu) for the boilers at this facility. These records shall be used to determine the total heat input (MMBtu) during 12 consecutive month period on a rolling basis. [District Rule 2201]

40. The owner or operator shall maintain all records of required monitoring data and support information for a period of five years from the date of data entry and shall make such records available to the District upon request. [District Rules 1070, 2201, 4305, 4306, and 4320, and 40 CFR 60.48c(i)]

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-1976-27-1 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: CONAGRA FOODS
MAILING ADDRESS: ATTN: REGIONAL ENVIRONMENTAL MANAGER
554 S YOSEMITE AVENUE
OAKDALE, CA 95361

LOCATION: 554 S YOSEMITE AVE
OAKDALE, CA 95361

EQUIPMENT DESCRIPTION:
MODIFICATION OF 176.5 MMBTU/HR CLEAVER BROOKS MODEL NB-500D-100 NATURAL GAS-FIRED WITH A CLEAVER BROOKS MODEL NATCOM LOW NOX BURNER AND A C&C PANASIA (OR EQUIVALENT MANUFACTURER) SELECTIVE CATALYTIC REDUCTION SYSTEM: ESTABLISH COMBINED HEAT INPUT RATE FOR BOILERS N-1976-4, '-6, '-24 AND '-27

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. {14} Particulate matter emissions 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. The unit shall only be fired on PUC-quality natural gas with a sulfur content of no greater than 1.0 grains (gr) of sulfur per 100 standard cubic feet (scf) of natural gas. [District Rules 2201 and 4320, 40 CFR 60.42b(k)(1)(2)]
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]

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 car be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

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7. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.49b(d)(1)]
8. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306 and 4320]
9. Duration of each startup and each shutdown shall not exceed 2.0 hours. [District Rule 4306 and 4320]
10. The total duration of startup and shutdown period shall not exceed 4.0 hours in any one day. [District Rule 2201]
11. The total duration of startup and shutdown period shall not exceed 80 hours during any 12 consecutive month rolling period. [District Rule 2201]
12. The total heat input rate to boilers at this facility shall not exceed 2,700,250 MMBtu during any 12 consecutive month period. [District Rule 2201]
13. During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rule 2201]
14. During startup and shutdown, CO emissions shall not exceed 100 ppmvd @ 3% O2 or 0.074 lb/MMBtu. [District Rule 2201]
15. Except during startup and shutdown, NOx emissions shall not exceed 5 ppmvd @ 3% O2 or 0.0062 lb/MMBtu, referenced as NO2. [District Rules 2201, 4305, 4306 and 4320]
16. Except during startup and shutdown, CO emissions shall not exceed 50 ppmvd @ 3% O2 or 0.037 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320]
17. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
18. PM10 emissions shall not exceed 0.003 lb/MMBtu. [District Rule 2201]
19. VOC emissions shall not exceed 0.0014 lb/MMBtu, referenced as methane. [District Rule 2201]
20. NH3 emissions from the SCR system shall not exceed 10 ppmvd @ 3% O2. [District Rule 2201]
21. 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]
22. Source testing to measure NOx, CO and NH3 emissions during steady state operation shall be conducted at least once every 12 months. After demonstrating compliance on 2 consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months. [District Rule 4305, 4306 and 4320]
23. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
24. 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-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
25. 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 4305, 4306 and 4320]
26. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]
27. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
28. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

29. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081]

30. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320]

31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

32. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306 and 4320]

33. If either the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306 and 4320]

34. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320]

35. Ammonia emissions readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 2201, 4305, 4306 and 4320]

36. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306 and 4320]

37. The permittee shall maintain record of the following items: (1) date; (2) duration of each startup (hours); (3) duration of each shutdown (hours); (4) total start-up and shutdown durations per day (hour/day); (5) total start-up and shutdown durations per month (hours/month); (6) total startup and shutdown duration in a 12 consecutive month period. [District Rule 2201, 4306 and 4320]

38. The owner or operator shall either obtain fuel receipts (such as a valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets definition of natural gas (as defined in 40 CFR 60.41b) and the applicable sulfur limit (i.e., 1.0 gr-S/100 scf), or demonstrate that the combusted gas is provided from a PUC or FERC regulated source, or monitor the sulfur content within 60 days of initial startup and weekly thereafter. If the sulfur content is less than or equal to 1.0 gr/100 dscf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume until compliance is demonstrated for eight consecutive weeks. [District Rule 4320, 40 CFR 60.45b(j), 60.49b(r)(2)]

CONDITIONS CONTINUE ON NEXT PAGE

39. For 40 CFR Part 60 Subpart Db purposes, NOx emissions shall not exceed 0.1 lb/MMBtu for low heat release units (70,000 Btu/hr-ft3 of furnace volume or less) and 0.2 lb/MMBtu for high heat release units (greater than 70,000 Btu/hr-ft3 of furnace volume) on a 30-day rolling average basis. NOx standard shall apply at all times including periods of startup, shutdown, or malfunction. The permittee shall maintain record of the furnace volume, which is defined as the volume bounded by the front furnace wall where the burner is located, the furnace side waterfall, and extending to the level just below or in front of the first row of convection pass tubes [40 CFR 60.44b(a), 60.44b(h), 60.44b(i)]

40. For the initial compliance test under 40 CFR Part 60 Subpart Db, NOx emissions shall be monitored for 30 successive steam generating unit operating days and the 30-day average emission rate shall be used to determine compliance with the NOx emission standard under 40 CFR 60.44b (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)). The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period. [40 CFR 60.46b(e)(1)]

41. Following the initial compliance test under 40 CFR Part 60 Subpart Db, the operator shall upon request determine compliance with the NOx standard under 40 CFR 60.44 (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)) through the use of a 30-day performance test. During periods when performance tests are not requested, NOx emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NOx emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(4)]

42. The owner or operator shall monitor steam generating unit operating conditions and predict NOx emission rates as specified in a plan submitted pursuant to §60.49b(c) and approved by the District or the EPA. However, if no such plan exists at this time, the facility shall develop and submit a plan in accordance with 40 CFR 60.49b(c). [40 CFR 60.48b(g)(2)]

43. The owner or operator shall submit the data from initial performance test to demonstrate compliance with 40 CFR Part 60 Subpart Db within 60 days after completing the initial test. [40 CFR 60.49b(b)]

44. The owner or operator shall develop and submit a plan, within 360 days of initial startup of the unit of the unit under N-1976-27-0, to predict the hourly NOx emissions. The plan shall: (1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NOx emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level); (2) Include the data and information that the owner or operator used to identify the relationship between NOx emission rates and these operating conditions; and (3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g). If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. [40 CFR Part 60.49b(c)]

45. The owner or operator shall maintain records of the amount of fuel combusted during each day in this unit. [District Rule 2201 and 40 CFR 60.49b(d)(1)]

CONDITIONS CONTINUE ON NEXT PAGE

46. The owner or operator shall maintain records and submit a written report each calendar quarter to the District containing the following information for each steam generating unit operating day: (1) Calendar date; (2) The average hourly NOx and CO emission rates (expressed as NO2) (ppmvd @ 3% O2 and lb/MMBtu heat input) measured or predicted; (3) The 30-day average NOx emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days; (4) Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards under 40 CFR 60.44b (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)), with the reasons for such excess emissions as well as a description of corrective actions taken; (5) Identification of the steam generating unit operating days when the average hourly NOx and CO emission rates are in excess of the NOx and CO limits (startup, shutdown and steady state) in this permit, with the reason for such excess emissions as well as a description of corrective actions taken; (6) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; (7) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data; (8) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted; and (11) A negative declaration when no excess emissions occurred. The report is due on the 30th day following the end of the calendar quarter. [District Rules 1080, 2201, 4305, 4306 and 4320, 40 CFR 60.49b(g), 40 CFR 60.49b(i), and 40 CFR 60.49b(w)]

47. The owner or operator shall keep monthly records of the total heat input (MMBtu) for the boilers at this facility. These records shall be used to determine the total heat input (MMBtu) during 12 consecutive month period on a rolling basis. [District Rule 2201]

48. The owner or operator shall maintain all records of required monitoring data and support information for a period of five years from the date of data entry and shall make such records available to the District upon request. [District Rules 1070, 2201, 4305, 4306, and 4320, and 40 CFR 60.49b(o)]

49. The owner or operator of an affected facility may submit electronic quarterly reports in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the District. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this permit was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the District to obtain their agreement to submit reports in this alternative format. [District Rule 1080 and 40 CFR 60.49b(v)]

Appendix II
Top-Down BACT Analysis

Top-Down BACT Analysis

N-1976-4-12: 196 MMBtu/hr Boiler

NOx:

Step 1: Identify All Possible Control Technologies

The District considers the following BACT standards for NOx for boilers greater than 20.0 MMBtu/hr:

Achieved-in-Practice:
5 ppmvd @ 3% O_2 (0.0062 lb/MMBtu)

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. 5 ppmvd @ 3% O_2 (0.0062 lb/MMBtu) - Achieved-in-Practice

Step 4: Cost Effectiveness Analysis

There is no technologically feasible option in Step 3. Therefore, cost-effectiveness analysis is not required.

Step 5: Select BACT

The applicant has proposed to achieve 5 ppmvd NOx @ 3% O_2 (or less). Therefore, this unit satisfies the BACT requirements for NOx emissions.

SOx, PM_{10}, VOC:

Step 1: Identify All Possible Control Technologies

The following techniques are considered to reduce SOx, PM_{10}, and VOC emissions.

Achieved-in-Practice:
Use natural gas, or LPG fuel

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. Use of natural gas or LPG fuel

Step 4: Cost Effectiveness Analysis

There is no technologically feasible option in Step 3. Therefore, cost-effectiveness analysis is not required.

Step 5: Select BACT

BACT requirement is to use natural gas or LPG fuels to reduce SOx, PM_{10}, and VOC emissions. The applicant has proposed to use natural gas in the boiler. Thus, the BACT requirements are satisfied.

N-1976-6-12: 184 MMBtu/hr Boiler

VOC:

Step 1: Identify All Possible Control Technologies

The following techniques are considered to reduce VOC emissions.

Achieved-in-Practice:
Use natural gas, or LPG fuel

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

2. Use of natural gas or LPG fuel

Step 4: Cost Effectiveness Analysis

There is no technologically feasible option in Step 3. Therefore, cost-effectiveness analysis is not required.

Step 5: Select BACT

BACT requirement is to use natural gas or LPG fuels to reduce VOC emissions. The applicant has proposed to use natural gas in the boiler. Thus, the BACT requirements are satisfied.

Appendix III
Permits to Operate N-1976-4-11, '-6-10, '-24-1 and '-27-0

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-1976-4-11 **EXPIRATION DATE:** 07/31/2017

EQUIPMENT DESCRIPTION:
196 MMBTU/HR BABCOCK & WILCOX MODEL FF-16 NATURAL GAS-FIRED BOILER (#4) WITH A NATCOM (OR EQUIVALENT MANUFACTURER) LOW NOX BURNER WITH INDUCED FLUE GAS RECIRCULATION (FGR) SYSTEM SERVED BY A NBI/CRI (OR EQUIVALENT MANUFACTURER) SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
4. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Heat input to this boiler shall not exceed 943,272 MMBtu in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. Duration of each startup and each shutdown shall not exceed 2.0 hours. [District Rule 4306 and 4320] Federally Enforceable Through Title V Permit
9. The total duration of startup and shutdown period shall not exceed 4.0 hours in any one cay. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The total duration of startup and shutdown period shall not exceed 80 hours during any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During startup and shutdown, CO emissions shall not exceed 100 ppmvd @ 3% O2 or 0.074 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Except during startup and shutdown, NOx emissions shall not exceed 5.0 ppmvd @ 3% O2 or 0.0062 lb/MMBtu, referenced as NO2. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
14. Except during startup and shutdown, CO emissions shall not exceed 50 ppmvd @ 3% O2 or 0.037 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

15. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. PM10 emissions shall not exceed 0.005 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC emissions shall not exceed 0.0014 lb/MMBtu, referenced as methane. [District Rule 2201] Federally Enforceable Through Title V Permit
18. NH3 emissions from the SCR system shall not exceed 10.0 ppmvd @ 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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] Federally Enforceable Through Title V Permit
20. Source testing to measure NOx, CO and NH3 emissions during steady state operation shall be conducted at least once every 12 months. After demonstrating compliance on 2 consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months. [District Rule 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
21. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
22. 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-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
23. 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 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
24. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
25. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
26. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
28. Source testing to measure PM10 shall be conducted using either: EPA Method 201 or 201A, and 202; or CARB Method 5 in combination with 501. Should the applicant decided to use different methodology, the methodology must be approved by the District prior to its use. [District Rule 2201] Federally Enforceable Through Title V Permit
29. In lieu of performing a source test for PM10, the results of the total particulate test may be used for compliance with the PM10 emissions limit provided the results include both the filterable and condensable (back half) particulate, and that all particulate matter is assumed to be PM10. Source testing to measure concentrations of total particulate emissions shall be conducted using EPA method 5. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Source testing to measure VOC emissions shall be conducted using EPA Method 18 or 25A. Should the applicant decided to use different methodology, the methodology must be approved by the District prior to its use. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

33. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

34. If either the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

35. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

36. Ammonia emissions readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

37. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

38. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit

39. The permittee shall maintain record of the following items: (1) date; (2) duration of each startup (hours); (3) duration of each shutdown (hours); (4) total start-up and shutdown durations per day (hour/day); (5) total start-up and shutdown durations per month (hours/month); (6) total startup and shutdown duration in a 12 consecutive month period. [District Rule 2201, 4306 and 4320] Federally Enforceable Through Title V Permit

40. The permittee shall maintain records of fuel use (standard cubic feet) on monthly basis and use those records to calculate heat input rate (MMBtu) to the unit in a 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

41. 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 Rules 1070, 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-1976-6-10 **EXPIRATION DATE:** 07/31/2017

EQUIPMENT DESCRIPTION:
184 MMBTU/HR BABCOCK & WILCOX MODEL FM117-97 NATURAL GAS-FIRED BOILER #2 WITH A TODD RAPID MIX ULTRA LOW NOX BURNER, INDUCED FLUE GAS RECIRCULATION (FGR), AND SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

PERMIT UNIT REQUIREMENTS

1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201, 4301, and 4320] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
9. This unit is subject to the requirements of 40 CFR Part 60, Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. [District Rule 4001] Federally Enforceable Through Title V Permit
10. This unit shall comply with the emission monitoring requirements for nitrogen oxides given in 40 CFR Part 60.48b. [District Rule 4001] Federally Enforceable Through Title V Permit
11. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
12. Emission rates from the unit shall not exceed 0.10 lb-NOx/MMBtu at any time, including periods of startup, shutdown, or malfunction. Compliance with this shall be determined by the EPA-approved alternate monitoring plan for this permit unit. [District Rule 4001 and 40 CFR 60.44b] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Except during start-up and shutdown, emissions from this unit shall not exceed any of the following limits: 5 ppmvd NOx @ 3% O2 or 0.0062 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.001 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

14. During start-up and shutdown emissions from this unit shall not exceed any of the following limits: 80 ppmvd NOx @ 3% O2 or 0.0971 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 200 ppmvd CO @ 3% O2 or 0.146 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

15. The ammonia emissions from the exhaust of the SCR system serving this boiler shall not exceed 10 ppmvd @ 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The flue gas recirculation system shall be in operation at all times when the boiler is firing. [District Rule 2201] Federally Enforceable Through Title V Permit

17. The flue gas recirculation valve setting shall be monitored and recorded on a daily basis. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last week. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4305, 4306, 4320 and 40 CFR 64] Federally Enforceable Through Title V Permit

18. The flue gas recirculation valve setting shall not be less than 61% at firing rates greater than 62%. [District Rules 4305, 4306, 4320 and 40 CFR 64] Federally Enforceable Through Title V Permit

19. Normal range or level for the flue gas recirculation valve settings shall be re-established during each source test required by this permit. [District Rules 4305, 4306, 4320 and 40 CFR 64] Federally Enforceable Through Title V Permit

20. If the flue gas recirculation valve setting is less than the normal range/level, the permittee shall return the flue gas recirculation valve setting to the normal range/level as soon as possible, but no longer than 1 hour of operation after detection. If the flue gas recirculation valve setting is not returned to the normal range/level within 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour, and conduct a source test within 60 days of the first exceedance, to demonstrate compliance with the applicable emission limits at the new flue gas recirculation valve setting. A District-approved portable analyzer may be used in lieu of a source test to demonstrate compliance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, 4320 and 40 CFR 64] Federally Enforceable Through Title V Permit

21. The permittee shall maintain records of the date and time of flue gas recirculation valve settings, the observed setting, and the firing rate at the time of the flue gas recirculation valve(s) setting measurements. The records must also include a description of any corrective action taken to maintain the flue gas recirculation valve setting within the acceptable range. [District Rules 4305, 4306, 4320 and 40 CFR 64] Federally Enforceable Through Title V Permit

22. Total duration of startup and shutdown shall not exceed 4 hr/day, combined. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

23. Total duration of startup and shutdown shall not exceed 462.5 hr/year, combined. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

24. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

26. If the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

27. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

28. Ammonia emission readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

30. Source testing to measure NOx, CO, and NH3 emissions from this unit while fired on natural gas shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

31. Source testing to measure NOx, CO, and NH3 emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

32. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

33. 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] Federally Enforceable Through Title V Permit

34. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

36. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

37. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

38. 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-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

39. 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 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

40. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

41. Daily records of start-up and shutdown durations and number of occurrences of each shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

42. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-1976-24-1 **EXPIRATION DATE:** 07/31/2017

EQUIPMENT DESCRIPTION:
86 MMBTU/HR NEBRASKA MODEL NOS-2A-67 NATURAL GAS-FIRED RENTAL BOILER (BOILER #5) WITH A TODD COMBUSTION BURNER AND A WABASH SELECTIVE CATALYTIC REDUCTION SYSTEM

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), a roof overhang or any other obstruction. [District Rule 4102]
3. The boiler shall be fired on PUC quality natural gas only. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown periods, the NOx emissions shall not exceed 5 ppmvd @ 3% O2 or 0.0062 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
5. During start-up and shutdown periods, the NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. The combined start-up and shutdown durations shall not exceed 4.0 hours per day and 80 hours during any rolling 12-month period. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. The CO emissions shall not exceed 50 ppmvd @ 3% O2 or 0.037 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. The VOC emissions shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The PM10 emissions shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The ammonia emissions shall not exceed 10 ppmvd @ 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Source testing to measure the NOx, CO and ammonia emissions from this unit shall be conducted at least once every 12 months. After demonstrating compliance on 2 consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months. Each time a boiler and/or emission control system is replaced, source testing shall revert to every 12 months. After demonstrating compliance on 2 consecutive annual tests, the source testing frequency may decreased to not once every 36 months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. 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-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

15. 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] Federally Enforceable Through Title V Permit

16. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

17. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

18. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

19. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

20. 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 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

22. The permittee shall monitor and record the stack concentration of NOx, CO, NH3, and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. Ammonia monitoring shall be conducted utilizing Draeger tubes or another District-approved equivalent method. Monitoring shall not be required if the unit is not in operation (i.e. the unit need not be started solely to perform monitoring). Monitoring shall be performed within five days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4102, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

23. Ammonia emission readings shall be taken at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

24. If the NOx, CO, or NH3 concentration, as measured by the portable analyzer or the District-approved ammonia monitoring equipment, exceed any of the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than one hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after one hour of operation following detection, the permittee shall notify the District within the following one hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

25. All NOx, CO, NH3, and O2 emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO, and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15-consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3, and O2 measurements; (2) the O2 concentration in percent by volume and the measured NOx, CO, and NH3 concentrations corrected to 3% O2; (3) make and model of the portable analyzer; (4) portable analyzer calibration records; (5) the method of determining the NH3 emission concentration; and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2520, 9.4.2, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

27. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit

28. A record of the combined start-up and shutdown durations on a daily basis and on a rolling 12-month bais shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

29. A record of the amount of fuel burned, on a monthly basis, shall be kept. [40 CFR Part 60 Subpart 60.48c(g)] Federally Enforceable Through Title V Permit

30. All records shall be maintained and retained on-site for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-1976-27-0 **EXPIRATION DATE:** 07/31/2017

EQUIPMENT DESCRIPTION:
176.5 MMBTU/HR CLEAVER BROOKS MODEL NB-500D-100 NATURAL GAS-FIRED WITH A CLEAVER BROOKS MODEL NATCOM LOW NOX BURNER AND A C&C PANASIA (OR EQUIVALENT MANUFACTURER) SELECTIVE CATALYTIC REDUCTION SYSTEM

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions from this unit shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-quality natural gas with a sulfur content of no greater than 1.0 grains (gr) of sulfur per 100 standard cubic feet (scf) of natural gas. [District Rules 2201 and 4320, 40 CFR 60.42b(k)(1)(2)] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [40 CFR 60.49b(d)(1)] Federally Enforceable Through Title V Permit
6. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Duration of each startup and each shutdown shall not exceed 2.0 hours. [District Rule 4306 and 4320] Federally Enforceable Through Title V Permit
8. The total duration of startup and shutdown period shall not exceed 4.0 hours in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The total duration of startup and shutdown period shall not exceed 80 hours during any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
10. During startup and shutdown, NOx emissions shall not exceed 80 ppmvd @ 3% O2 or 0.097 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. During startup and shutdown, CO emissions shall not exceed 100 ppmvd @ 3% O2 or 0.074 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Except during startup and shutdown, NOx emissions shall not exceed 5.0 ppmvd @ 3% O2 or 0.0062 lb/MMBtu, referenced as NO2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. Except during startup and shutdown, CO emissions shall not exceed 50 ppmvd @ 3% O2 or 0.037 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. PM10 emissions shall not exceed 0.005 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC emissions shall not exceed 0.004 lb/MMBtu, referenced as methane. [District Rule 2201] Federally Enforceable Through Title V Permit
17. NH3 emissions from the SCR system shall not exceed 10.0 ppmvd @ 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
18. 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] Federally Enforceable Through Title V Permit
19. Source testing to measure NOx, CO and NH3 emissions during steady state operation shall be conducted at least once every 12 months. After demonstrating compliance on 2 consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months. [District Rule 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
20. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
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-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
22. 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 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
23. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
24. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
25. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
26. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Source testing to measure PM10 shall be conducted using either: EPA Method 201 or 201A, and 202; or CARB Method 5 in combination with 501. Should the applicant decided to use different methodology, the methodology must be approved by the District prior to its use. [District Rule 2201] Federally Enforceable Through Title V Permit
28. In lieu of performing a source test for PM10, the results of the total particulate test may be used for compliance with the PM10 emissions limit provided the results include both the filterable and condensable (back half) particulate, and that all particulate matter is assumed to be PM10. Source testing to measure concentrations of total particulate emissions shall be conducted using EPA method 5. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Source testing to measure VOC emissions shall be conducted using EPA Method 18 or 25A. Should the applicant decided to use different methodology, the methodology must be approved by the District prior to its use. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

32. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

33. If either the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

34. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

35. Ammonia emissions readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

36. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

37. The permittee shall maintain record of the following items: (1) date; (2) duration of each startup (hours); (3) duration of each shutdown (hours); (4) total start-up and shutdown durations per day (hour/day); (5) total start-up and shutdown durations per month (hours/month); (6) total startup and shutdown duration in a 12 consecutive month period. [District Rule 2201, 4306 and 4320] Federally Enforceable Through Title V Permit

38. The owner or operator shall either obtain fuel receipts (such as a valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets definition of natural gas (as defined in 40 CFR 60.41b) and the applicable sulfur limit (i.e., 1.0 gr-S/100 scf), or demonstrate that the combusted gas is provided from a PUC or FERC regulated source, or monitor the sulfur content within 60 days of initial startup and weekly thereafter. If the sulfur content is less than or equal to 1.0 gr/100 dscf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume until compliance is demonstrated for eight consecutive weeks. [District Rule 4320, 40 CFR 60.45b(j), 60.49b(r)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. For 40 CFR Part 60 Subpart Db purposes, NOx emissions shall not exceed 0.1 lb/MMBtu for low heat release units (70,000 Btu/hr-ft3 of furnace volume or less) and 0.2 lb/MMBtu for high heat release units (greater than 70,000 Btu/hr-ft3 of furnace volume) on a 30-day rolling average basis. NOx standard shall apply at all times including periods of startup, shutdown, or malfunction. The permittee shall maintain record of the furnace volume, which is defined as the volume bounded by the front furnace wall where the burner is located, the furnace side waterfall, and extending to the level just below or in front of the first row of convection pass tubes [40 CFR 60.44b(a), 60.44b(h), 60.44b(i)] Federally Enforceable Through Title V Permit

40. For the initial compliance test under 40 CFR Part 60 Subpart Db, NOx emissions shall be monitored for 30 successive steam generating unit operating days and the 30-day average emission rate shall be used to determine compliance with the NOx emission standard under 40 CFR 60.44b (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)). The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period. [40 CFR 60.46b(e)(1)] Federally Enforceable Through Title V Permit

41. Following the initial compliance test under 40 CFR Part 60 Subpart Db, the operator shall upon request determine compliance with the NOx standard under 40 CFR 60.44 (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)) through the use of a 30-day performance test. During periods when performance tests are not requested, NOx emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NOx emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(4)] Federally Enforceable Through Title V Permit

42. The owner or operator shall monitor steam generating unit operating conditions and predict NOx emission rates as specified in a plan submitted pursuant to §60.49b(c) and approved by the District. [40 CFR 60.48b(g)(2)] Federally Enforceable Through Title V Permit

43. The owner or operator shall submit notification of the date of initial startup and the annual capacity factor at which the owner or operator anticipate to operate this unit. [40 CFR Part 60.49b(a)(3)] Federally Enforceable Through Title V Permit

44. The owner or operator shall submit the data from initial performance test to demonstrate compliance with 40 CFR Part 60 Subpart Db within 60 days after completing the initial test. [40 CFR 60.49b(b)] Federally Enforceable Through Title V Permit

45. The owner or operator shall develop and submit a plan, within 360 days of initial startup of the unit, to predict the hourly NOx emissions. The plan shall: (1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NOx emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level); (2) Include the data and information that the owner or operator used to identify the relationship between NOx emission rates and these operating conditions; and (3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g). If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. [40 CFR Part 60.49b(c)] Federally Enforceable Through Title V Permit

46. The owner or operator shall maintain records of the amount of fuel combusted during each day in this unit. [40 CFR 60.49b(d)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

47. The owner or operator shall maintain records of the annual capacity factor on a monthly basis. The annual capacity factor shall be determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR 60.49b(d)(1)] Federally Enforceable Through Title V Permit

48. The owner or operator shall maintain records and submit a written report each calendar quarter to the District containing the following information for each steam generating unit operating day: (1) Calendar date; (2) The average hourly NOx and CO emission rates (expressed as NO2) (ppmvd @ 3% O2 and lb/MMBtu heat input) measured or predicted; (3) The 30-day average NOx emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days; (4) Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards under 40 CFR 60.44b (0.1 lb/MMBtu for low heat release units (i.e., 70,000 Btu/hr-ft3 of furnace volume, or less), or 0.2 lb/MMBtu for high heat release units (i.e., greater than 70,000 Btu/hr-ft3 of furnace volume)), with the reasons for such excess emissions as well as a description of corrective actions taken; (5) Identification of the steam generating unit operating days when the average hourly NOx and CO emission rates are in excess of the NOx and CO limits (startup, shutdown and steady state) in this permit, with the reason for such excess emissions as well as a description of corrective actions taken; (6) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; (7) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data; (8) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted; and (11) A negative declaration when no excess emissions occurred. The report is due on the 30th day following the end of the calendar quarter. [District Rules 1080, 2201, 4305, 4306 and 4320, 40 CFR 60.49b(g), 40 CFR 60.49b(i), and 40 CFR 60.49b(w)] Federally Enforceable Through Title V Permit

49. The owner or operator shall maintain all records of required monitoring data and support information for a period of five years from the date of data entry and shall make such records available to the District upon request. [District Rules 1070, 2201, 4305, 4306, and 4320, and 40 CFR 60.49b(o)] Federally Enforceable Through Title V Permit

50. The owner or operator of an affected facility may submit electronic quarterly reports in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the District. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this permit was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the District to obtain their agreement to submit reports in this alternative format. [District Rule 1080 and 40 CFR 60.49b(v)] Federally Enforceable Through Title V Permit

Appendix IV
Risk Management Review Summary

San Joaquin Valley Air Pollution Control District
Risk Management Review

To:	Jag Kahlon – Permit Services
From:	Cheryl Lawler – Technical Services
Date:	March 11, 2015
Facility Name:	ConAgra Foods
Location:	554 S. Yosemite Avenue, Oakdale
Application #(s):	N-1976-4-12, 6-12, 24-2, 27-1
Project #:	N-1150392

A. RMR SUMMARY

RMR Summary			
Categories	**Natural Gas Boiler (Unit 4-12)**	**Project Totals**	**Facility Totals**
Prioritization Score	0.07	0.07	>1
Acute Hazard Index	0.00	0.00	0.01
Chronic Hazard Index	0.00	0.00	0.01
Maximum Individual Cancer Risk	**1.42E-07**	1.42E-07	1.94E-06
T-BACT Required?	**No**		
Special Permit Conditions?	**Yes**		

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Unit 4-12

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] N

I. Project Description

Technical Services received a request on March 10, 2015, to perform a Risk Management Review (RMR) for four natural gas boilers proposing various modifications. However, of the four boilers, only Unit 4-12 results in an increase in natural gas combustion. Therefore, only this unit was analyzed for this RMR.

II. Analysis

Toxic emissions from the project were calculated using 2001 Ventura County Air Pollution Control District emission factors for natural gas fired external combustion. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the proposed project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEART's database. The prioritization score for the proposed project was less than 1.0 (see RMR Summary Table); however, because the facilitywide cumulative prioritizations totaled to greater than 1.0, a refined Health Risk Assessment was required and performed for the project. AERMOD was used with point source parameters outlined below and concatenated 5-year meteorological data from Modesto to determine maximum dispersion factors at the nearest residential and business receptors. The dispersion factors were input into the HARP model to calculate the Chronic and Acute Hazard Indices and the Carcinogenic Risk for the project.

The following parameters were used for the review:

Analysis Parameters			
Source Type	Point	**Closest Receptor (m)**	152.4
Stack Height (m)	15.24	**Type of Receptor**	Residence & Business
Stack Diameter (m)	1.52	**Location Type**	Urban
Stack Gas Temperature (K)	394	**Natural Gas Process Rates (MMscf)**	774 yr
Stack Gas Velocity (m/sec)	11.64		

III. Conclusions

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with the project is **1.42E-07**, which is less than the **1** in a million threshold. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on Page 1 of this report must be included for the proposed unit.

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

RMR Request Form
Prioritization
Risk Results
Facility Summary

Appendix V
Quarterly Emissions Change

Quarterly Emissions Change

Due to establishing combined heat input rate to the boilers, facility's overall potential emissions will decrease for each pollutant. This decrease will be equally divided among these four boilers.

$QEC = [(PE2_{Total} - PE1_{Total})/4]/4$

Note that QEC are rounded to zero decimal place.

N-1976-4, or '-6, or '-24, or '-27

Pollutant	$PE2_{Total}$ (lb/yr)	$PE1_{Total}$ (lb/yr)	QEC (lb/qtr)
NO_X	18,273	39,789	-1,345
SO_X	7,696	13,835	-384
PM_{10}	8,101	14,564	-404
CO	101,811	189,999	-5,512
VOC	6,869	13,644	-423