



NOV 20 2012

Michael Kummer  
Hilmar Cheese Company  
PO Box 910  
Hilmar, CA 95324

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # N-1275  
Project # N-111922**

Dear Mr. Kummer:

Enclosed for your review and comment is the District's analysis of Hilmar Cheese Company's application for the Federally Mandated Operating Permit for its Cheese manufacturing operation at 9001 North Lander Avenue in Hilmar, California.

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

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Sincerely,

David Warner  
Director of Permit Services

DW:MS/st

Enclosures

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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

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

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



NOV 20 2012

Gerardo C. Rios, Chief  
Permits Office (AIR-3)  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # N-1275  
Project # N-1111922**


Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Hilmar Cheese Company's application for the Federally Mandated Operating Permit for its Cheese manufacturing operation at 9001 North Lander Avenue in Hilmar, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Sincerely,



David Warner  
Director of Permit Services

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NOV 20 2012

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

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # N-1275  
Project # N-1111922**

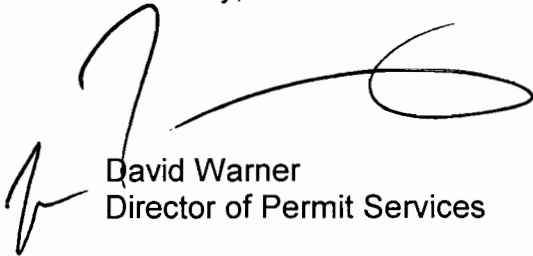
Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Hilmar Cheese Company's application for the Federally Mandated Operating Permit for its Cheese manufacturing operation at 9001 North Lander Avenue in Hilmar, California.

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

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Sincerely,



David Warner  
Director of Permit Services

DW:MS/st

Enclosures

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Merced Sun Star

**NOTICE OF PRELIMINARY DECISION  
FOR THE PROPOSED ISSUANCE OF  
FEDERALLY MANDATED OPERATING PERMITS**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed issuance of the Federally Mandated Operating permits to Hilmar Cheese Company for its Cheese manufacturing operation at 9001 North Lander Avenue in Hilmar, California.

The District's analysis of the legal and factual basis for this proposed action, project #N-1111922, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed Federally Mandated Operating initial permits. If requested by the public, the District will hold a public hearing regarding issuance of this initial permit. For additional information, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CALIFORNIA 95356.

**San Joaquin Valley  
Air Pollution Control District**

**Proposed Initial Title V Permit Evaluation  
Hilmar Cheese Company, Inc.  
N-1275**

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**INITIAL TITLE V PERMIT EVALUATION  
CHEESE MANUFACTURING FACILITY**

Engineer: Mark Schonhoff  
Date: October 23, 2012

Facility Number: N-1275  
Facility Name: Hilmar Cheese Company  
Mailing Address: PO Box 910  
Hilmar, CA 95324  
Contact Name: Michael Kummer  
Telephone: (209) 656-1171  
Responsible Official: Tedd Struckmeyer  
Title: Vice President – Engineering and Business Development  
Project Number: N-1111922  
Deemed Complete: July 12, 2011

**I. PROPOSAL**

As required by District Rule 2520, Hilmar Cheese Company has applied for a Title V operating permit. The existing permit will be reviewed and modified to reflect all applicable District and federal rules.

The purpose of this evaluation is to provide the legal and factual basis for all applicable requirements and to determine if the facility will comply with these requirements.

**II. FACILITY LOCATION**

9001 North Lander Avenue  
Hilmar, CA

### **III. EQUIPMENT LISTING**

#### **N-1275-2-8**

25.1 MMBTU/HR CLEAVER-BROOKS BOILER (S/N L-86827) WITH A NATCOM PROFIRE NT ULTRA LOW-NOX BURNER AND A FLUE-GAS RECIRCULATION SYSTEM (BOILER #1)

#### **N-1275-4-9**

25.1 MMBTU/HR CLEAVER-BROOKS MODEL CB-200-600 BOILER (S/N L90961) WITH A NATCOM PROFIRE NT ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #3)

#### **N-1275-5-6**

STEAM-OPERATED VIBRO-FLUIDIZER DRYER SERVED BY A NIRO HUDSON INC. CYCLONE VENTED TO AN AMERICAN AIR FILTER MODEL MILLENIUM SIZE 14-336-6304 BAGHOUSE

#### **N-1275-6-3**

125 HP BAUERMEISTER MODEL #UT53 HAMMERMILL AND MODEL 3 CLASSIFIER SERVED BY MAC MODEL #96LRT80 STYLE III BAGHOUSE (SHARED WITH LACTOSE POWDER RECEIVER)

#### **N-1275-7-4**

LACTOSE POWDER BAGGING SYSTEM SERVED BY A DCE MODEL C72-RK15AD DUST COLLECTOR

#### **N-1275-9-7**

25.1 MMBTU/HR CLEAVER BROOKS MODEL CBLE 700-600-2005 BOILER (S/N OLO94841) WITH A NATCOM MODEL PROFIRE NT ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #2)

#### **N-1275-12-4**

ONE SINGLE STAGE MARRIOT-WALKER SPRAY DRIER WITH A 20.7 MMBTU/HR MAXON BURNER SERVED BY A WALKER STAINLESS EQUIPMENT BAGHOUSE AND A FISHER-KLOSTERMAN SCRUBBER

**N-1275-14-2**

LACTOSE DRYING OPERATION WITH A NIRO-HUDSON FLUID BED DRYER SERVED BY A NIRO MODEL #235145 BAGHOUSE

**N-1275-15-2**

LACTOSE MILLING OPERATION WITH A BAUERMEISTER, INC. MODEL UT-53 HAMMERMILL, SERVED BY A MAC MODEL 96 LRT 80 STYLE III BAGHOUSE

**N-1275-16-3**

WHEY PROTEIN BAGGING OPERATION SERVED BY A DCE MODEL C-72-55 BAGHOUSE

**N-1275-17-3**

PROTEIN DRYING OPERATION CONSISTING OF AN INDIRECT NATURAL GAS-FIRED EXOTHERMICS ES-2465 PROCESS HEATER EQUIPPED WITH A 17.0 MMBTU/HR ECLIPSE INC. MINNOX 4250 CCS-T/C-SP LOW-NOX BURNER WITH FLUE GAS RECIRCULATION. EMISSIONS FROM THE HANDLING OF DRIED PROTEIN ARE CONTROLLED BY A NIRO MODEL 235-14-5 BAGHOUSE.

**N-1275-18-4**

33.6 MMBTU/HR NATURAL GAS FIRED CLEAVER-BROOKS MODEL CEW 700-800 BOILER WITH AN ALZETA MODEL V504-G ULTRA LOW-NOX BURNER (BOILER #4)

**N-1275-22-3**

50.4 MMBTU/HR NATURAL GAS FIRED CLEAVER BROOKS MODEL CBL-700-1200-200 BOILER WITH A PROFIRE NT BURNER, A FLUE GAS RECIRCULATION SYSTEM AND AN O2 CONTROLLER (BOILER #5)

**N-1275-23-6**

2.5 MILLION GALLON PER DAY CHEESE WASTEWATER ANAEROBIC DIGESTER SERVED BY CEILCOTE SPT 14-84 WET SCRUBBER SYSTEM AND VAREC A MODEL 244E ENCLOSED FLARE



**N-1275-24-1**

LACTOSE POWDER MILLING OPERATION #3 CONSISTING OF A BAUERMEISTER MODEL UT-53 POWDER MILL SERVED BY A MAC MODEL RTSPCL BAGHOUSE, SURGE HOPPER SERVED BY A NU-CON MODEL NCBV-58-25-1TF BIN VENT FILTER, AND ASSOCIATED CONVEYING EQUIPMENT.

**N-1275-25-2**

LACTOSE POWDER STORAGE OPERATION CONSISTING OF SIX STORAGE SILOS WITH SILOS #1 AND #2 EACH SERVED BY A NU-CON MODEL NCBV-58-25-1TF BIN VENT FILTER (1300 CFM EACH), SILOS #3, #4 AND #6 EACH SERVED BY A NU-CON MODEL NCBV-58-25-1TF (800 CFM EACH) AND SILO #5 SERVED BY A NU-CON MODEL NCBV-41-25-3TF BIN VENT FILTER (1300 CFM)

**N-1275-26-1**

WAREHOUSE VACUUM CLEANING SYSTEM SERVED BY A GARDNER DENVER/INVINCIBLE MODEL TC-78 DUST COLLECTOR

**N-1275-28-1**

WHEY PROTEIN DRYING OPERATION CONSISTING OF A NIRO MODEL ES-2249 SPRAY DRYER WITH A 6.6 MMBTU/HR ECLIPSE COMBUSTION MODEL ES-2249 ULTRA LOW NOX BURNER, SERVED BY A NIRO MODEL BF-R-14-135 BAGHOUSE DUST COLLECTOR

**N-1275-30-1**

50.2 MMBTU/HR SUPERIOR MODEL 8-X-6000-S200-M BOILER EQUIPPED WITH A URS CORPORATION MODEL RMBF-50-G BURNER SERVED BY A HALDOR TOPSOE INC. SELECTIVE CATALYTIC REDUCTION SYSTEM (BOILER #6)

**N-1275-35-2**

SALT RECEIVING OPERATION IN ONE 21,430 GALLON (APPROX. 25' 4" HIGH, 12' DIAMETER) ABOVE GROUND BRINE TANK SERVED BY A FABRIC SOCK FILTER

#### **IV. GENERAL PERMIT TEMPLATE USAGE**

The applicant is requesting to use the following model general permit template:

##### **A. Template SJV-UM-0-3 Facility Wide Umbrella**

The utilization of template number SJV-UM-0-3, Facility Wide Umbrella is proposed. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

#### **V. SCOPE OF EPA AND PUBLIC REVIEW**

Certain segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the requirements for permit N-1275-0-1.

## VI. **FEDERALLY ENFORCEABLE REQUIREMENTS**

District 1081, Source Sampling  
(last amended December 16, 1993)

District Rule 2201, New and Modified Stationary Source Review Rule  
(last amended April 21, 2011)

District Rule 4201, Particulate Matter Concentration  
(last amended December 17, 1992)

District Rule 4202, Particulate Matter Emission Rate  
(amended December 17, 1992)

District Rule 4309, Dryers, Dehydrators and Ovens  
(last amended December 15, 2005)

District Rule 4311, Flares  
(last amended June 18, 2009)

District Rule 4305, Boilers, Steam Generators and Process Heaters – Phase 2  
(last amended October 21, 2003)

District Rule 4306, Boilers, Steam Generators and process heaters – Phase 3  
(last amended October 16, 2008)

District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators and Process heaters Greater than 5.0 MMBtu/hr  
(last amended October 16, 2008)

District Rule 4351, Boilers, Steam Generators and Process Heaters – Phase 1  
(last amended August 21, 2003)

District Rule 4801, Sulfur Compounds  
(last amended November 18, 1992)

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

40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters

40 CFR Part 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

**VII. RULES NOT FEDERALLY ENFORCEABLE**

District Rule 1070, Inspections (amended December 17, 1992)

District Rule 1160, Emission Statements (amended November 18, 1992)

District Rule 4102, Nuisance (amended December 17, 1992)

**VIII. Permit Requirements**

This section includes the Federally enforceable requirements. Clarification of equipment descriptions and the correction of typographical errors that do not change the meaning of an equipment description or condition will be made but not discussed.

**District 1081, Source Sampling**  
**(last amended December 16, 1993)**

The purpose of this rule is to ensure that any source operation that emits or may emit air contaminants provides adequate and safe facilities for use during emission sampling. This rule also specifies that the methods and procedures for source testing, sample collection and compliance determinations be on the PTO's.

New Title V Permit Number	Condition Numbers	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-12-4 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-23-6 N-1275-28-1 N-1275-30-1	12 12 12 19 24 12 12 15, 24 22 24	Sampling Ports and Access	Section 3.0
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-12-4 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-23-6 N-1275-28-1 N-1275-30-1	13, 14 13, 14 13, 14 20, 21 25, 26 13, 14 13, 14 16, 17 23, 24 19, 25, 26	Sample Collection	Section 4.0
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-12-4 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-23-6 N-1275-28-1 N-1275-30-1	16, 17, 18, 27 16, 17, 18, 27 16, 17, 18, 27 23, 24, 25, 26, 27 28, 29, 30, 39 16, 17, 18, 27 16, 17, 18, 27 18, 19, 20, 21, 23, 25, 26, 27, 28 26, 27, 28, 36 27, 28, 29, 30, 31, 32, 42	Test Methods	Section 5.0

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**District 1081, Source Sampling - Continued**

New Title V Permit Number	Condition Numbers	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-12-4 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-23-6 N-1275-28-1 N-1275-30-1	19 19 19 28 31 19 19 22 29 33	Test Procedures	Section 6.0
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-12-4 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-23-6 N-1275-28-1 N-1275-30-1	11, 13 11, 13 11, 13 18, 20 23, 25 11, 13 11, 13 14, 16, 44 21, 23 23, 25, 38	Administrative Requirements	Section 7.0

**District Rule 2201, New and Modified Stationary Source Review Rule  
(last amended April 21, 2011)**

The permit units listed on the following table were subject to a District NSR Rule upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTOs were addressed to define how NSR permit terms should be incorporated into the Title V permit.

New Title V Permit Number	Condition Numbers
N-1275-2-8	3, 4, 5, 6, 7, 8, 28,29
N-1275-4-9	3, 4, 5, 6, 7, 8, 28, 29
N-1275-5-6	3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17
N-1275-6-3	3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16
N-1275-7-4	3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17
N-1275-9-7	3, 4, 5, 6, 7, 8, 28, 29
N-1275-12-4	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 33, 35, 36, 37
N-1275-14-2	3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16
N-1275-15-2	3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17
N-1275-16-3	3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16
N-1275-17-3	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 40, 41, 42, 43, 44
N-1275-18-4	3, 4, 5, 6, 7, 8, 28, 29
N-1275-22-3	3, 4, 5, 6, 7, 8, 28, 29
N-1275-23-6	3, 4, 6, 7, 8, 9, 10, 11, 13, 18, 19, 20, 21, 25, 26, 27, 41, 42, 43, 45, 48
N-1275-24-1	3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19
N-1275-25-2	3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17
N-1275-26-1	3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17
N-1275-28-1	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 38, 39, 40, 41, 42
N-1275-30-1	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 20, 21, 22, 29, 31, 32, 43, 44
N-1275-35-2	3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15

**District Rule 2520, Federally Mandated Operating Permits  
(last amended June 21, 2001)**

General Umbrella Template SJV-UM-0-3 addresses this rule, therefore, no discussion is required.

**Greenhouse Gas Discussion**

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

**District Rule 4201, Particulate Matter Concentration  
(last amended December 17, 1992)**

This rule limits the particulate matter concentration to 0.1 grains per dry standard cubic foot of exhaust flow.

New Title V Permit Number	Condition #	Requirement	Basis
N-1275-2-8	2	Limit the Particulate Matter Concentration	Section 3.0
N-1275-4-9	2		
N-1275-5-6	2		
N-1275-6-3	2		
N-1275-7-4	2		
N-1275-9-7	2		
N-1275-12-4	2		
N-1275-14-2	2		
N-1275-15-2	2		
N-1275-16-3	2		
N-1275-17-3	2		
N-1275-18-4	2		
N-1275-22-3	2		
N-1275-23-6	2		
N-1275-24-1	2		
N-1275-25-2	2		
N-1275-26-1	2		
N-1275-28-1	2		
N-1275-30-1	2		
N-1275-35-2	2		



**District Rule 4202, Particulate Matter Emission Rate  
(amended December 17, 1992)**

This rule limits the particulate matter emission rate of each source operation based on its throughput.

New Title V Permit Number	Condition #	Requirement	Basis
N-1275-5-6	8	Particulate matter emission rate limit	Section 4.0
N-1275-6-3	9		
N-1275-7-4	10		
N-1275-12-4	16		
N-1275-14-2	9		
N-1275-15-2	9		
N-1275-16-3	9		
N-1275-17-3	21		
N-1275-24-1	11		
N-1275-25-2	9		
N-1275-26-1	10		
N-1275-28-1	19		
N-1275-35-2	10		

**District Rule 4309, Dryers, Dehydrators and Ovens  
(last amended December 15, 2005)**

This rule regulates the operation of dryers, dehydrators and ovens.

New Title V Permit Number	Condition #	Requirement	Basis
N-1275-12-4	9,10	NOx and CO Emission Limits	Section 5.2
	29, 30, 31	Emission Monitoring	Section 5.4 (Sect 5.4.1.2.2.1 Option)
	17	Source Testing Source tested pollutants and source test frequency	Section 6.3.2
	21	Source testing conditions	Sections 6.3.6, 5.5.2
	28	Run averaging/valid runs	Sections 5.5.6, 6.3.8
	22	Test result format	Section 6.3.7
	23, 24, 25, 26, 27	Source test Methods	Section 6.2
	32 <sup>1</sup> 34 37	Record Keeping Records of monitoring Records of the hours of operation and fuel usage Record keeping duration	Section 6.1.2 Section 6.1.2 Section 6.1.6

<sup>1</sup> This rule does not specifically require that records of monitoring activities be kept. However, District Policy SSP-3005, which clarifies the monitoring requirements of this rule does require such records. Therefore, the reference for this record keeping condition will be Rule 4309.

**District Rule 4311, Flares**  
**(last amended June 18, 2009)**

This rule regulates the operation of flares.

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-23-6	29	Require a flame to be present at all times that combustible gasses are being vented through the flare.	Section 5.2
	30	Ignition system requirements	Section 5.3
	31	Ignition system monitoring	Section 5.4
	32	Flow sensing automatic ignition system	Section 5.5
	N/A	40 CFR Part 60.18 requirements applicable to <u>open type</u> air assisted, steam assisted and non-assisted flares.	Section 5.6 N/A – Unit is an enclosed flare
	10	Emission limits (VOC & NOx)	Section 5.7
	33, 39, 40	Flare Minimization Plan (FMP) requirements	Sections 5.8 & 6.5
	34	Monitoring Vent gas flow monitoring	Section 5.10
	N/A	Vent gas composition monitoring	Section 6.6 – Note 1
	N/A	Pilot and purge gas flow monitoring	Section 6.7 – Note 1
	N/A	Water Seal Monitoring	Section 6.8 – note 1
N/A	Restriction on monitoring system downtime	Section 6.9.1 – Note 1	
N/A	Monitoring equipment maint.	Section 6.9.3 – Note 1	
N.A	Video Monitoring	Section 6.10 – Note 1	

Note 1: Per section 5.11, sections 6.6, 6.7, 6.8, 6.9 and 6.10 apply to flares operated at refineries or flares with capacities of equal to or greater than 50 MMBtu/hr. This flare is not located at a refinery and is not rated at equal to or greater than 50 MMBtu/hr. Therefore, these sections do not apply.

Continued – Next Page

**District Rule 4311, Flares  
(last amended June 18, 2009) - Continued**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-23-6	N/A	Record keeping Compliance determination records	Section 6.1.1 – Note 2
	46	Source test results records	Section 6.1.2
	47	Emergency fuel usage records	Section 6.1.3
	N/A	Section 4.3 exemption records	Section 6.1.4 – Note 3
	46	Retention of the approved FMP	Section 6.1.5
	46	Annual report records	Section 6.1.6
		Monitoring activity records	Section 6.1.7
	48	Record keeping duration	Section 6.1
	34	Vent gas flow	Section 5.10
	N/A	Vent gas composition	Section 6.6 – Note 1
	N/A	Pilot and purge gas flow	Section 6.7 – Note 1
	N/A	Water seal monitoring	Section 6.8 – Note 1
	N/A	Records of flare monitoring system inoperation	Section 6.9 – Note 1
		Source Testing	
	13	Tested pollutants and frequency	Section 6.4.2
	16	Test protocol submission	Section 6.4.2
	14	Submission of results	Section 6.4.2
	18, 20, 21,23	Test methods	Section 6.3
		Reporting	
	N/A	Reporting of monitoring system inoperation	Section 6.9.1 – Note 1
	35	Reporting of Unplanned Flaring Events	Section 6.2.1
36	Reporting of Reportable Flaring Events	Section 6.2.2	
37, 38	Annual Monitoring Report	Section 6.2.3	

Note 2: This requirement applies only to open flares. Since this flare is an enclosed unit, these records are not required.

Note 3: The flare is not operating under the Section 4.3 exemption

**District Rule 4305, Boilers, Steam Generators and Process Heaters – Phase 2**  
**(last amended October 21, 2003)**

This rule regulates the emissions from boilers, steam generators and process heaters rated at over 5 MMBtu/hr.

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	8 8 8 17 8 8 15 8, 9	Emission Limits	Sections 5.1, 5.3
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	20, 21, 22, 23 <sup>2</sup> 20, 21, 22, 23 <sup>2</sup> 20, 21, 22, 23 <sup>2</sup> 32, 33, 34, 35 <sup>2</sup> 20, 21, 22, 23 <sup>2</sup> 20, 21, 22, 23 <sup>2</sup> 30, 31, 32, 33 <sup>2</sup> 34, 35, 36, 37 <sup>2</sup>	Monitoring	Section 5.4
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	15 15 15 27 15 15 25 N/A	Compliance determination Compliance w/ lb/MMBtu or ppmvd emission limit	Section 5.5.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	14 14 14 26 14 14 24 26	Compliance determination Source testing operating conditions	Section 5.5.2

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<sup>2</sup> This rule does not specifically require that records of monitoring activities be kept. However, District Policy SSP1-1105, which clarifies the monitoring requirements of this rule does require such records. Therefore, the reference for this record keeping condition will be Rule 4305.

**District Rule 4305, Boilers, Steam Generators and Process Heaters –  
Phase 2 - Continued**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	22 22 22 34 22 22 32 36	Compliance determination Monitoring reading averaging	Section 5.5.4
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	19 19 19 31 19 19 29 33	Compliance determination Source test data averaging	Section 5.5.5
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	N/A. No permit includes start-up/shutdown emission limits.	Start-up/shutdown requirements	Section 5.5.6
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	23, 29 23, 29 23, 29 35, 44 23, 29 23, 29 33, 42 37, 44	Record keeping Monitoring activity records and record keeping duration	Sections 6.1, 6.1.4
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	10 10 10 22 10 10 20 22	Compliance Testing Pollutants to be tested and frequency	Section 6.3.1

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**District Rule 4305, Boilers, Steam Generators and Process Heaters – Phase 2 - Continued**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8	16, 17, 18		
N-1275-4-9	16, 17, 18		
N-1275-9-7	16, 17, 18		
N-1275-17-3	28, 29, 30	Compliance testing Test methods	Section 6.2
N-1275-18-4	16, 17, 18		
N-1275-22-3	16, 17, 18		
N-1275-28-1	26, 27, 28		
N-1275-30-1	27, 28, 30		

**District Rule 4306, Boilers, Steam Generators and process heaters – Phase 3**  
**(last amended October 16, 2008)**

This rule regulates the emissions from boilers, steam generators and process heaters rated at over 5 MMBtu/hr.

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	8 8 8 17 8 8 15 8, 9	Emission Limits	Section 5.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	N/A. No unit has such a fuel use limit.	Requirements for units limited to less than 9 billion Btu/yr of fuel use	Section 5.2
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	N/A. No unit has start-up/shutdown period emission limits.	Start-up/shut-down period emission limits	Section 5.3
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	20, 21, 22, 23 <sup>3</sup> 20, 21, 22, 23 <sup>3</sup> 20, 21, 22, 23 <sup>3</sup> 32, 33, 34, 35 <sup>3</sup> 20, 21, 22, 23 <sup>3</sup> 20, 21, 22, 23 <sup>3</sup> 30, 31, 32, 33 <sup>3</sup> 34, 35, 36, 37 <sup>3</sup>	Monitoring	Section 5.4

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<sup>3</sup> This rule does not specifically require that records of monitoring activities be kept. However, District Policy SSP-1105, which clarifies the monitoring requirements of this rule does require such records. Therefore, the reference for this record keeping condition will be Rule 4306.



**District Rule 4306, Boilers, Steam Generators and process heaters –  
Phase 3 - Continued**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	15 15 15 27 15 15 25 N/A	Compliance determination Compliance w/ lb/MMBtu or ppmvd emission limit	Section 5.5.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	14 14 14 26 14 14 24 26	Compliance determination Source testing operating conditions	Section 5.5.2
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	22 22 22 34 22 22 32 36	Compliance determination Monitoring reading averaging	Section 5.5.4
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	19 19 19 31 19 19 29 33	Compliance determination Source test data averaging	Section 5.5.5

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**District Rule 4306, Boilers, Steam Generators and process heaters –  
Phase 3 - Continued**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	23, 29 23, 29 23, 29 35, 44 23, 29 23, 29 33, 42 37, 44	Record keeping Monitoring activity records and record keeping duration	Sections 6.1, 6.1.3
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	14 14 14 26 14 14 24 26	Compliance determination Source testing operating conditions	Section 5.5.2
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	16, 17, 18 16, 17, 18 16, 17, 18 28, 29, 30 16, 17, 18 16, 17, 18 26, 27, 28 27, 28, 30	Compliance determination Source test methods	Section 6.2
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	10 10 10 22 10 10 20 22	Compliance Testing Tested pollutants and testing frequency	Section 6.3.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	N/A. The applicant has already complied with the emission Control Plan requirements.	Emission Control Plan	Section 6.4

**District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators and Process heaters Greater than 5.0 MMBtu/hr (last amended October 16, 2008)**

This rule regulates the emissions from boilers, steam generators and process heaters rated at over 5 MMBtu/hr.

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	8 8 8 17 8 8 15 8, 9	Emission Limits	Sections 5.2.1, 5.2.2
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	5 5 5 14 5 5 12 5	Particulate Matter Control	Section 5.4
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	N/A. None of the facility units is a low use unit.	Low use units	Section 5.5
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	N/A. None of the permits includes start-up or shutdown period emission allowances.	Start-up/shutdown provisions	Section 5.6

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**District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators and Process heaters Greater than 5.0 MMBtu/hr - Continued**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	20, 21, 22, 23 <sup>4</sup> 20, 21, 22, 23 <sup>4</sup> 20, 21, 22, 23 <sup>4</sup> 32, 33, 34, 35 <sup>4</sup> 20, 21, 22, 23 <sup>4</sup> 20, 21, 22, 23 <sup>4</sup> 30, 31, 32, 33 <sup>4</sup> 34, 35, 36, 37 <sup>4</sup>	Monitoring NOx, CO and O <sub>2</sub> Monitoring	Section 5.7
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	24 24 24 36 24 24 34 39	Monitoring SOx Monitoring	Section 5.7.6.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	15 15 15 27 15 15 25 N/A	Compliance determination Compliance w/ lb/MMBtu or ppmvd emission limit	Section 5.8.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	14 14 14 26 14 14 24 26	Compliance determination Source testing operating conditions	Section 5.8.2

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<sup>4</sup> This rule does not specifically require that records of monitoring activities be kept. However, District Policy SSP-1105, which clarifies the monitoring requirements of this rule does require such records. Therefore, the reference for this record keeping condition will be Rule 4320.

**District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators and Process heaters Greater than 5.0 MMBtu/hr - Continued**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	22 22 22 34 22 22 32 36	Compliance determination Monitoring reading averaging	Section 5.8.4
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	19 19 19 31 19 19 29 33	Compliance determination Source test data averaging	Section 5.8.5
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	23, 29 23, 29 23, 29 35, 44 23, 29 23, 29 33, 42 37, 44	Record keeping Monitoring activity records and record keeping duration	Sections 6.1, 6.1.3

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**District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators and Process heaters Greater than 5.0 MMBtu/hr - Continued**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	16, 17, 18 16, 17, 18 16, 17, 18 28, 29, 30 16, 17, 18 16, 17, 18 26, 27, 28 27, 28, 30	Compliance Testing Source test methods	Section 6.2
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	10 10 10 22 10 10 20 22	Compliance Testing Tested pollutants and testing frequency	Sections 6.3.1, 6.3.1.1, 6.3.1.3
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	N/A. The applicant has already complied with the Emission Control Plan requirements.	Emission Control Plan	Section 6.4

**District Rule 4351, Boilers, Steam Generators and Process Heaters –  
Phase 1  
(last amended August 21, 2003)**

This rule regulates the emissions from boilers, steam generators and process heaters rated at over 5 MMBtu/hr and located at Major Sources of NOx emissions.

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	8 8 8 17 8 8 15 8, 9	Emission Limits	Sections 5.2.2 and 5.5
N-1275-30-1	4	Fuel Flow Meter	Section 5.6 – Note 1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	15 15 15 27 15 15 25 N/A	Compliance determination Compliance w/ lb/MMBtu or ppmvd emission limit	Section 5.7.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	14 14 14 26 14 14 24 26	Compliance determination Source testing operating conditions	Section 5.7.2

Note 1: This rule requires a fuel flow meter only for units that burn more than one type of fuel. Units N-1275-2-8, N-1275-4-9, N-1275-9-7, N-1275-17-3, N-1275-18-4, N-1275-22-3, N-1275-28-1 burn only a single fuel (natural gas), therefore, this rule requires a fuel flow meter only for unit N-1275-30-1.

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**District Rule 4351, Boilers, Steam Generators and Process Heaters –  
Phase 1 - Continued  
(last amended August 21, 2003)**

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	29 29 29 44 29 29 42 44	Record keeping Record keeping duration	Section 6.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	27 27 27 39 27 27 36 42	Record keeping Annually monitor and record the higher heating value of each fuel	Section 6.1.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	26 26 26 38 26 26 35 41	Record keeping Monitor and record the annual use of each fuel	Section 6.1.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	16, 17, 18, 27 16, 17, 18, 27 16, 17, 18, 27 28, 29, 30, 39 16, 17, 18, 27 16, 17, 18, 27 26, 27, 28, 36 27, 28, 30, 42	Compliance testing Source test methods	Sections 6.2.1.2, 6.2.2, 6.2.3, 6,2.4, 6.2.5, 6,2.6 and 6.2.7



**District Rule 4351, Boilers, Steam Generators and Process Heaters –  
**Phase 1 - Continued**  
**(last amended August 21, 2003)****

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	10 10 10 22 10 10 20 22	Compliance Testing Tested pollutants and testing frequency	Section 6.3.1
N-1275-2-8 N-1275-4-9 N-1275-9-7 N-1275-17-3 N-1275-18-4 N-1275-22-3 N-1275-28-1 N-1275-30-1	N/A. The applicant has already complied with the emission Control Plan requirements.	Emission control plan	Section 6.4

**District Rule 4801, Sulfur Compounds**  
**(last amended November 18, 1992)**

This rule is applicable to units that emit sulfur compounds. The fuel fired equipment at this facility is expected to emit sulfur compounds. District Rule 4801 was last amended on December 17, 1992, and has been submitted to the EPA to replace San Joaquin County Rule 407 in the SIP. This District Rule is at least as stringent as the county rule, as demonstrated by the following comparison:

<b>Comparison of District Rule 4801 and Stanislaus County Rule 407</b>		
<b>REQUIREMENT</b>	<b>Rule 4801</b>	<b>Rule 407</b>
A person shall not discharge into the atmosphere sulfur compounds exceeding in concentration at the point of discharge 0.2 percent by volume calculated as sulfur dioxide on a dry basis averaged over 15 consecutive minutes.	✓	✓
EPA Method 8 and ARB Method 1-100 shall be used to determine such emissions.	✓	

The facility includes several units that burn only natural gas and one unit that burns natural gas, biogas or a combination of natural gas and biogas. Therefore, both cases must be investigated.

For natural gas combustion, 2,000 ppmvd is equivalent to:

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

For biogas combustion, 2000 ppmvd is equivalent to:

$$\frac{(2000 \text{ ppmvd}) \left( 787 \frac{\text{dscf}}{\text{MMBtu}} \right) \left( 64 \frac{\text{lb} - \text{SOx}}{\text{lb} - \text{mol}} \right)}{\left( 379.5 \frac{\text{dscf}}{\text{lb} - \text{mol}} \right) (10^6)} = 0.27 \text{ lb} / \text{MMBtu}$$

**Natural Gas Compliance Determination:**

While burning natural gas, the use of PUC quality natural gas is required. The maximum allowable sulfur content of such fuel is 5 gr/100 scf (equivalent to a SOx emission rate of 0.00285 lb/MMBtu – District Policy APR-1720). Therefore, while firing on natural gas, compliance with this rule will be met.

**Biogas Compliance Determination:**

Fuel H<sub>2</sub>S content: 26 ppmv (Permit to Operate)  
 Fuel Heat Content: 780 Btu/ft<sup>3</sup> (Application Review Document for project N-1083380)

$$\frac{\left(\frac{26 \text{ ft}^3 - \text{H}_2\text{S}}{10^6 \text{ ft}^3 - \text{gas}}\right)\left(\frac{34 \text{ lb} - \text{H}_2\text{S}}{\text{mol}}\right)\left(\frac{10^6 \text{ Btu}}{\text{MMBtu}}\right)}{\left(\frac{379.5 \text{ ft}^3 - \text{H}_2\text{S}}{\text{mol}}\right)\left(\frac{34 \text{ lb} - \text{H}_2\text{S}}{32 \text{ lb} - \text{S}}\right)\left(\frac{32 \text{ lb} - \text{S}}{64 \text{ lb} - \text{SO}_2}\right)\left(\frac{780 \text{ Btu}}{\text{ft}^3 - \text{gas}}\right)} = 0.0056 \frac{\text{lb}}{\text{MMBtu}}$$

As can be seen, compliance with the requirements of this rule will be met while firing on biogas.

**Biogas/Natural Gas Compliance Determination:**

While firing on this combination of fuel, the SOx emissions would be somewhere between the emission rates while firing solely on natural gas or solely on biogas. Therefore, compliance with this rule will be met while firing on a combination of these fuels.

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8	9	Limit the sulfur compound emissions, as SO <sub>2</sub> , to 2000 ppmv (equivalent to 0.2% by volume)	Section 3.1
N-1275-4-9	9		
N-1275-9-7	9		
N-1275-12-4	15		
N-1275-17-3	20		
N-1275-18-4	9		
N-1275-22-3	9		
N-1275-23-6	12		
N-1275-28-1	18		
N-1275-30-1	15		

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

New Title V Permit Number	Condition Number	Requirement	Basis
N-1275-2-8	25	Monthly fuel use records	40 CFR Part 60.48c(g)(2)  (see notes below)
N-1275-4-9	25		
N-1275-9-7	25		
N-1275-17-3	37		
N-1275-18-4	25		
N-1275-22-3	25		
N-1275-28-1	37		
N-1275-30-1	40		

**N-1275-2-8, N-1275-4-9, N-1275-9-7, N-1275-17-3, N-1275-18-4, N-1275-22-3 and N-1275-28-1:**

These units are permitted to burn natural gas and/or digester gas. Therefore, per section 60.48c(g)(2), only monthly fuel usage records are required for these units.

**N-1275-30-1:**

Per section 60.48c(g)(2) units that burn natural gas, wood, fuels using fuel certification in section 60.48c(f), fuels not subject to an emission standard (excluding opacity) or a mixture of these fuels are subject only to monthly fuel usage records. The unit will burn natural gas, digester gas or a mixture of these gasses. The digester gas is not subject to emission limits, therefore, only monthly fuel usage records are required for this unit.

**40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters**

Per section 63.7485, this subpart applies only to units located at Major Sources of HAP emissions. As shown in Appendix D of this document, the facility is not a Major Source of HAP emissions, therefore, this subpart does not apply.

**40 CFR Part 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources**

Per section 63.11194, this subpart applies only to units that fire on coal, biomass or oil. The facility permits do not allow the use of these fuels, therefore, this subpart does not apply.

## **40 CFR Part 64, Compliance Assurance Monitoring (CAM)**

For a unit to be subject to CAM, all of the following must be true:

1. The facility must be a Major Source
2. The unit must have an emission limit that is complied with utilizing a control device
3. The uncontrolled emissions from the unit must be in excess of the Major Source threshold.

The facility is a Major Source for each NO<sub>x</sub> and VOC and therefore, CAM may be required. As shown in the CAM applicability calculations that are in Appendix D of this document, CAM must be addressed only for unit N-1275-30-1.

### **N-1275-30-1 (50.2 MMBtu/hr Boiler Served by a Selective Catalytic Reduction System)**

The facility is a Major Source for NO<sub>x</sub> and as shown in Appendix D of this document, the uncontrolled NO<sub>x</sub> emissions from this unit are in excess of the Major Source threshold. Since an emission control device is utilized to meet the NO<sub>x</sub> emission limit, CAM will be required. Sections 64.5(a) and 64.5(b) of 40 CFR Part 64 will be examined to determine the CAM deadline.

#### **Section 64.5(a) – Large Pollutant-Specific Emission Units:**

The deadline specified in this section applies to emission units whose controlled and uncontrolled emissions are equal to or greater than the applicable Major Source threshold. Although the uncontrolled NO<sub>x</sub> emissions are in excess of the Major Source threshold for NO<sub>x</sub>, the controlled NO<sub>x</sub> emissions are not. Therefore, the deadline specified in this section does not apply.

#### **Section 64.5(b) – Other Pollutant-Specific Emission Units:**

The deadline specified in this section applies to emission units whose uncontrolled emissions are equal to or greater than the applicable Major Source threshold but their controlled emissions are not. In the case of this emission unit, the uncontrolled NO<sub>x</sub> emissions are in excess of the Major Source threshold for NO<sub>x</sub> and the controlled NO<sub>x</sub> emissions are not. Therefore, the deadline specified in this section applies. This section states that a CAM plan is required as part of the application for a renewal of the Title V permit. Since this permitting action is for an initial Title V permit (not the renewal of a Title V permit), a CAM plan is not required at this time.

**Non-Federally Enforceable Rules:**

District Rule 1070, Inspections (amended December 17, 1992)  
District Rule 4102, Nuisance (amended December 17, 1992)

Any permit conditions attributable solely to these rules will be identified as non-Federally enforceable.

**IX. Permit Shields**

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Permit to Operate is considered compliance with all applicable requirements upon which those conditions are based.

**A. Requirements addressed by Model General Permit Templates**

1. Model General Permit Template SJV-UM-03

The facility submitted a Title V General Permit Template Qualification form for the use of Facility-Wide Umbrella General Permit Template SJV-UM-0-3. Therefore, the permit shields granted in General Permit Template SJV-UM-03 are included as conditions 39 and 40 of permit N-4238-0-1.

**B. Permit Shield Requirements Not Addressed by Model General Permit Templates**

1. None.

**X. Permit Conditions**

See Appendix A – Draft Initial Title V Operating Permit.

**XI. Appendices**

Appendix A: Draft Initial Title V Operating Permit  
Appendix B: Detailed Facility List  
Appendix C: CAM Applicability Calculations  
Appendix D: Major HAP Source Determination

Appendix A  
Draft Initial Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

FACILITY: N-1275-0-1

EXPIRATION DATE: 09/30/2013

## FACILITY-WIDE REQUIREMENTS

1. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: HILMAR CHEESE COMPANY  
Location: 9001 N LANDER AVE, HILMAR, CA 95324  
N-1275-0-1: Oct 24 2012 11:09AM - SCHONHOM



9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

22. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-2-8

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

25.1 MMBTU/HR CLEAVER-BROOKS BOILER (S/N L-86827) WITH A NATCOM PROFIRE NT ULTRA LOW-NOX BURNER AND A FLUE-GAS RECIRCULATION SYSTEM (BOILER #1)

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. 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] Federally Enforceable Through Title V Permit
5. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the boiler shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 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 0.012 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
10. Source testing to measure NOx and CO emissions from the boiler shall be conducted at least once every 12 months. After demonstrating compliance on two 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, 4320 and 4351] Federally Enforceable Through Title V Permit
11. 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
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
13. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

14. All emissions measurements shall be made with the unit(s) 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 Rules 4305, 4306 and 4320. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 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 performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Permittee shall maintain records of the amount of fuel combusted each calendar month. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the amount of fuel combusted during each calendar year. The record shall be updated at least once every calendar month. [District Rule 4351] Federally Enforceable Through Title V Permit
27. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89. [District Rules 1081 and 4351] Federally Enforceable Through Title V Permit
28. Records of the facility-wide NO<sub>x</sub> and PM<sub>10</sub> emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
29. 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, 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1275-4-9

EXPIRATION DATE: 09/30/2013

## EQUIPMENT DESCRIPTION:

25.1 MMBTU/HR CLEAVER-BROOKS MODEL CB-200-600 BOILER (S/N L90961) WITH A NATCOM PRO FIRE NT ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #3)

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. 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] Federally Enforceable Through Title V Permit
5. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the boiler shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 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 0.004 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
10. Source testing to measure NOx and CO emissions from the boiler shall be conducted at least once every 12 months. After demonstrating compliance on two 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, 4320 and 4351] Federally Enforceable Through Title V Permit
11. 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
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
13. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

14. All emissions measurements shall be made with the unit(s) 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 Rules 4305, 4306 and 4320. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 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 performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



25. Permittee shall maintain records of the amount of fuel combusted each calendar month. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the amount of fuel combusted during each calendar year. The record shall be updated at least once every calendar month. [District Rule 4351] Federally Enforceable Through Title V Permit
27. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89. [District Rules 1081 and 4351] Federally Enforceable Through Title V Permit
28. Records of the facility-wide NOx and PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
29. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-5-6

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

STEAM-OPERATED VIBRO-FLUIDIZER DRYER SERVED BY A NIRO HUDSON INC CYCLONE VENTED TO AN AMERICAN AIR FILTER MODEL MILLENNIUM SIZE 14-336-6304 BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the lactose drying process shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
5. PM10 emissions from the baghouse serving the dried lactose process system shall not exceed 0.04 pounds per ton of dried lactose produced. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The amount of dried lactose produced shall not exceed 120 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. PM10 emissions shall be calculated as follows:  $0.04 \text{ lb/ton-lactose-produced} \times \text{ton-lactose-produced}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30 \text{ tph}$ ) or  $E=17.31P^{0.16}$  ( $P > 30 \text{ tph}$ ). [District Rule 4202] Federally Enforceable Through Title V Permit
9. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the filters. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The differential pressure gauge reading shall be between 2 and 5 inches of water column at all times the baghouse is in operation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Replacement bags numbering at least 10% of the total number of bags shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Differential operating pressure (inches of water column gauge) shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Records of all maintenance of the baghouse, including all change outs of bags or filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. The permittee shall keep records of date and quantity of lactose produced. [District Rule 2201] Federally Enforceable Through Title V Permit
16. A record of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The record shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All records shall be retained for a minimum of five years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1275-6-3

EXPIRATION DATE: 09/30/2013

## EQUIPMENT DESCRIPTION:

125 HP BAUERMEISTER MODEL #UT53 HAMMERMILL AND MODEL 3 CLASSIFIER SERVED BY MAC MODEL #96LRT80 STYLE III BAGHOUSE (SHARED WITH LACTOSE POWDER RECEIVER)

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from baghouses shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. PM10 emissions shall be calculated as follows: 0.0442 lb-PM10/ton-lactose-processed x (throughput) ton-lactose-processed. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The quantity of dried lactose processed through the lactose grinding and receiving system shall not exceed 96 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. PM10 emissions from the baghouse serving the hammermill and classifier shall not exceed 0.0442 lb/ton-dried-lactose. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202] Federally Enforceable Through Title V Permit
10. Baghouses shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Baghouses shall be equipped with pressure differential gauges to indicate the pressure drop across the filters. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Material removed from dust collection system shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
14. For each type of baghouse, a spare set of bags shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The record shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. All records shall be retained for a minimum of 5 years and made available for District inspection upon request.  
[District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1275-7-4

EXPIRATION DATE: 09/30/2013

## EQUIPMENT DESCRIPTION:

LACTOSE POWDER BAGGING SYSTEM SERVED BY A DCE MODEL C72-RK15AD DUST COLLECTOR

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from dust collection system shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
5. Dust collection system shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. PM10 emissions from this permit shall be calculated as follows:  $0.0024 \text{ lb-PM10/ton-lactose-processed} \times (\text{throughput ton-lactose-processed})$ . [District Rule 2201] Federally Enforceable Through Title V Permit
8. PM10 emissions from the dust collector system serving the lactose powder bagging system shall not exceed 0.0024 lb/ton of dried lactose. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The quantity of dried lactose processed through the bagging system shall not exceed 330 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30 \text{ tph}$ ) or  $E=17.31P^{0.16}$  ( $P > 30 \text{ tph}$ ). [District Rule 4202] Federally Enforceable Through Title V Permit
11. Filters shall be equipped with a pressure differential gauge to indicate the pressure drop across the filters. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Dust collection cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Material removed from dust collector system shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
14. For each type of filter, a spare set of filters shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. A daily record shall be kept and shall include the date and quantity of lactose processed. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-9-7

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

25.1 MMBTU/HR CLEAVER BROOKS MODEL CBLE 700-600-2005 BOILER (S/N OLO94841) WITH A NATCOM MODEL PROFIRE NT ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #2)

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. 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] Federally Enforceable Through Title V Permit
5. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the boiler shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 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 0.004 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
10. Source testing to measure NOx and CO emissions from the boiler shall be conducted at least once every 12 months. After demonstrating compliance on two 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, 4320 and 4351] Federally Enforceable Through Title V Permit
11. 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
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
13. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



14. All emissions measurements shall be made with the unit(s) 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 Rules 4305, 4306 and 4320. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 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 performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Permittee shall maintain records of the amount of fuel combusted each calendar month. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the amount of fuel combusted during each calendar year. The record shall be updated at least once every calendar month. [District Rule 4351] Federally Enforceable Through Title V Permit
27. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89. [District Rules 1081 and 4351] Federally Enforceable Through Title V Permit
28. Records of the facility-wide NOx and PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
29. 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, 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-12-4

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

ONE SINGLE STAGE MARRIOT-WALKER SPRAY DRIER WITH A 20.7 MMBTU/HR MAXON BURNER SERVED BY A WALKER STAINLESS EQUIPMENT BAGHOUSE AND A FISHER-KLOSTERMAN SCRUBBER

## PERMIT UNIT REQUIREMENTS

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1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. The spray drier shall only be fired on PUC-quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. NOx emissions shall be calculated as follows:  $0.018 \text{ lb/MMBtu} \times (\text{fuel usage}) \text{ MMscf} \times 1,000 \text{ MMBtu/MMscf}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
8. PM10 emissions shall be calculated as follows:  $0.227 \text{ lb/ton-finished-product-processed} \times (\text{throughput}) \text{ ton-finished-product-processed}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
9. The NOx emissions shall not exceed 0.018 lb/MMBtu (equivalent to 1.6 ppmvd @ 19% O2). [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
10. The CO emissions shall not exceed 0.075 lb/MMBtu (equivalent to 10.9 ppmvd @ 19% O2). [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
11. The VOC emissions shall not exceed 0.004 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The finished product throughput shall not exceed 37.4 tons during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The PM10 emissions shall not exceed 0.227 lb PM10 per ton of finished product throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202] Federally Enforceable Through Title V Permit
17. Source testing to measure NOx and CO emissions from the drier shall be conducted at least once every 24 months. [District Rule 4309] Federally Enforceable Through Title V Permit
18. 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
19. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
21. All emissions measurements shall be made with the unit(s) 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 Rule 4309. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
22. All source test results shall be reported in ppmvd @ 19% O2 or no correction if the stack O2 content is greater than 19%. [District Rule 4309] 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 1081 and 4309] 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 1081 and 4309] 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 1081 and 4309] Federally Enforceable Through Title V Permit
26. Stack gas velocities shall be determined utilizing EPA Method 2. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
27. Stack Moisture Content shall be determined utilizing EPA Method 4 [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
28. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
29. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. [District Rule 4309] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

30. If either the NO<sub>x</sub> or CO concentrations corrected to 19% O<sub>2</sub> (or no correction if measured above 19% O<sub>2</sub>), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 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 performing the notification and testing required by this condition. [District Rule 4309] Federally Enforceable Through Title V Permit
31. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309] Federally Enforceable Through Title V Permit
32. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 19% O<sub>2</sub> (or no correction if measured above 19% O<sub>2</sub>), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4309] Federally Enforceable Through Title V Permit
33. The scrubber and the scrubber fluid shall be maintained such that the scrubber provides at least 90% control of the PM<sub>10</sub> emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Monthly records of the total hours of operation and of the type and quantity of fuel used shall be kept. [District Rule 4309] Federally Enforceable Through Title V Permit
35. A daily record shall be maintained and shall include the date, amount of fuel used and the tons of finished product processed. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
36. Records of the facility-wide NO<sub>x</sub> and PM<sub>10</sub> emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
37. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070, 2201 and 4309] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-14-2

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

LACTOSE DRYING OPERATION WITH A NIRO-HUDSON FLUID BED DRYER SERVED BY A NIRO MODEL #235145 BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from the baghouse serving the lactose drying operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. PM10 emissions shall be calculated as follows:  $0.068 \text{ lb-PM}_{10}/\text{ton-material-processed} \times (\text{throughput}) \text{ ton-material-processed}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
7. The quantity of material processed by the dryer shall not exceed 114 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The PM10 emissions from baghouse serving the lactose drier shall not exceed 0.068 pounds per ton of material processed. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30 \text{ tph}$ ) or  $E=17.31P^{0.16}$  ( $P > 30 \text{ tph}$ ). [District Rule 4202] Federally Enforceable Through Title V Permit
10. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
11. For each type of baghouse, a spare set of bags shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
14. A daily record shall be maintained and shall include the date and quantity of material processed. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-15-2

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

LACTOSE MILLING OPERATION WITH A BAUERMEISTER, INC. MODEL UT-53 HAMMERMILL SERVED BY A MAC MODEL 96 LRT 80 STYLE III BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from dust collection system shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201] Federally Enforceable Through Title V Permit
5. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. PM10 emissions shall be calculated as follows:  $0.0442 \text{ lb-PM10/ton-material-processed} \times (\text{throughput}) \text{ ton-material-processed}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
7. PM10 emissions from the baghouse serving the hammermill shall not exceed  $0.0442 \text{ lb/ton-material-processed}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
8. The quantity material processed through the bagging system shall not exceed 96 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30 \text{ tph}$ ) or  $E=17.31P^{0.16}$  ( $P > 30 \text{ tph}$ ). [District Rule 4202] Federally Enforceable Through Title V Permit
10. The baghouses shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The baghouses shall be equipped with pressure differential gauges to indicate the pressure drops across the filters. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Material removed from dust collection system shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
14. For each type of baghouse, a spare set of bags shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
15. A daily log shall be maintained and shall include the date and quantity of material processed. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



16. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1275-16-3

EXPIRATION DATE: 09/30/2013

## EQUIPMENT DESCRIPTION:

WHEY PROTEIN BAGGING OPERATION SERVED BY A DCE MODEL C-72-55 BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from the baghouse serving the whey protein bagging operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. PM10 emissions shall be calculated as follows:  $0.033 \text{ lb-PM10/ton-material-processed} \times (\text{throughput}) \text{ ton-material-processed}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
7. PM10 emissions from the baghouse serving the whey protein bagging operation shall not exceed 0.033 pounds per ton of material processed. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The quantity of material processed through the whey protein bagging operation shall not exceed 73.4 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30 \text{ tph}$ ) or  $E=17.31P^{0.16}$  ( $P > 30 \text{ tph}$ ). [District Rule 4202] Federally Enforceable Through Title V Permit
10. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
11. For each type of baghouse, a spare set of bags shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
14. A daily record shall be kept and shall include the date and quantity of material processed. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-17-3

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

PROTEIN DRYING OPERATION CONSISTING OF AN INDIRECT NATURAL GAS-FIRED EXOTHERMICS ES-2465 PROCESS HEATER EQUIPPED WITH A 17.0 MMBTU/HR ECLIPSE INC. MINNOX 4250 CCS-T/C-SP LOW-NOX BURNER WITH FLUE GAS RECIRCULATION. EMISSIONS FROM THE HANDLING OF DRIED PROTEIN ARE CONTROLLED BY A NIRO MODEL 235-14-5 BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from the exhaust of the baghouse serving the protein drying operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All filters shall be properly maintained and must be in place during operation of the protein dryer. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Replacement filters numbering at least 10% of the total number of filters in the largest dust collector using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The baghouse shall operate at all times with a minimum differential pressure of 1 inch water column and a maximum differential pressure of 10 inches water column. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Dust collector exhaust fan(s) shall be switched on prior to the start-up of the protein dryer. [District Rule 2201] Federally Enforceable Through Title V Permit
13. 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] Federally Enforceable Through Title V Permit
14. This unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

15. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Emissions from the process heater shall not exceed any of the following limits: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 125 ppmvd CO @ 3 % O2 or 0.092 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
18. The quantity of finished protein processed shall not exceed 36 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
19. PM10 emissions from the exhaust of the baghouse serving the protein drying operation shall not exceed 0.233 pound per ton of finished protein processed. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
21. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202] Federally Enforceable Through Title V Permit
22. Source testing to measure NOx and CO emissions from the process heater shall be conducted at least once every 12 months. After demonstrating compliance on two 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 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
23. 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
24. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
25. 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
26. All emissions measurements shall be made with the unit(s) 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 Rules 4305, 4306 and 4320. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
28. 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 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
29. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
30. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
31. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

32. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 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 performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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
35. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
36. 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
37. Permittee shall maintain records of the amount of fuel combusted each calendar month. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
38. Permittee shall maintain records of the amount of fuel combusted during each calendar year. The record shall be updated at least once every calendar month. [District Rule 4351] Federally Enforceable Through Title V Permit
39. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89. [District Rules 1081 and 4351] Federally Enforceable Through Title V Permit
40. Records of the facility-wide NO<sub>x</sub> and PM<sub>10</sub> emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
42. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
43. Permittee shall keep a daily record of the quantity of finished protein processed. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

44. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1275-18-4

EXPIRATION DATE: 09/30/2013

## EQUIPMENT DESCRIPTION:

33.6 MMBTU/HR NATURAL GAS FIRED CLEAVER-BROOKS MODEL CEW 700-800 BOILER WITH AN ALZETA MODEL V504-G ULTRA LOW-NOX BURNER (BOILER #4)

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. 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] Federally Enforceable Through Title V Permit
5. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the boiler shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 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 0.004 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
10. Source testing to measure NOx and CO emissions from the boiler shall be conducted at least once every 12 months. After demonstrating compliance on two 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, 4320 and 4351] Federally Enforceable Through Title V Permit
11. 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
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
13. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



14. All emissions measurements shall be made with the unit(s) 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 Rules 4305, 4306 and 4320. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
16. NO<sub>x</sub> 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 1081, 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
18. Stack gas oxygen (O<sub>2</sub>) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 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 performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Permittee shall maintain records of the amount of fuel combusted each calendar month. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the amount of fuel combusted during each calendar year. The record shall be updated at least once every calendar month. [District Rule 4351] Federally Enforceable Through Title V Permit
27. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89. [District Rules 1081 and 4351] Federally Enforceable Through Title V Permit
28. Records of the facility-wide NOx and PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
29. 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, 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

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

DRAFT

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-22-3

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

50.4 MMBTU/HR NATURAL GAS FIRED CLEAVER BROOKS MODEL CBL-700-1200-200 BOILER WITH A PROFIRE NT BURNER, A FLUE GAS RECIRCULATION SYSTEM AND AN O2 CONTROLLER (BOILER #5)

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. 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] Federally Enforceable Through Title V Permit
5. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the boiler shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 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 0.005 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
10. Source testing to measure NOx and CO emissions from the boiler shall be conducted at least once every 12 months. After demonstrating compliance on two 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, 4320 and 4351] Federally Enforceable Through Title V Permit
11. 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
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
13. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. All emissions measurements shall be made with the unit(s) 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 Rules 4305, 4306 and 4320. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] 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 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 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 performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Permittee shall maintain records of the amount of fuel combusted each calendar month. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the amount of fuel combusted during each calendar year. The record shall be updated at least once every calendar month. [District Rule 4351] Federally Enforceable Through Title V Permit
27. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89. [District Rule 4351] Federally Enforceable Through Title V Permit
28. Records of the facility-wide NOx and PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
29. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-23-6

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

2.5 MILLION GALLON PER DAY CHEESE WASTEWATER ANAEROBIC DIGESTER SERVED BY CELCOTE SPT 14-84 WET SCRUBBER SYSTEM AND VAREC MODEL 244E ENCLOSED FLARE

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from the flare serving the anaerobic digesters shall not equal or exceed Ringelmann 1/4 or 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
5. {1898} 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]
6. The anaerobic digester system and its associated piping shall be maintained leak free. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This flare shall only be fired on biogas collected from the anaerobic digester system. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions from the flare shall not exceed any of the following limits: 0.06 lb-NOx/MMBtu (as NO2); 0.02 lb-PM10/MMBtu; 0.154 lb-CO/MMBtu; or 0.002 lb-VOC/MMBtu (as methane). [District Rule 2201] Federally Enforceable Through Title V Permit
11. The sulfur content of the biogas being incinerated by the flare shall not exceed 26 ppmv (as H2S). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
13. Source testing to measure NOx, CO and VOC emissions from the digester-fired flare shall be conducted at least once every 12 months. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 45 days thereafter. [District Rules 1081 and 4311] Federally Enforceable Through Title V Permit
15. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. 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 Rules 1081 and 4311] Federally Enforceable Through Title V Permit
17. 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. [District Rule 1081] Federally Enforceable Through Title V Permit
18. For source test purposes, NO<sub>x</sub> emissions from the flare shall be determined using EPA Method 19 on a heat input basis, or EPA Method 3A, EPA Method 7E, or ARB Method 100 on a ppmv basis. [District Rules 1081, 2201 and 4311] Federally Enforceable Through Title V Permit
19. For source test purposes, CO emissions from the flare shall be determined using EPA Method 10 or 10B, ARB Methods 1 through 5 with 10, or ARB Method 100. [District Rule 1081, 2201] Federally Enforceable Through Title V Permit
20. For source test purposes, VOC emissions from the flare shall be determined using EPA Method 25 or 25a. [District Rules 1081, 2201 and 4311] Federally Enforceable Through Title V Permit
21. Stack gas oxygen (O<sub>2</sub>) shall be determined using EPA Method 3A, EPA Method 7E, or ARB Method 100. [District Rules 1081, 2201 and 4311] 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 Rule 1081] Federally Enforceable Through Title V Permit
23. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 D 1945-81 in conjunction with ASTM D 3588-89. [District Rules 1081 and 4351] Federally Enforceable Through Title V Permit
24. Sampling ports for biogas testing shall be provided in accordance with District requirements. [District Rule 1081] Federally Enforceable Through Title V Permit
25. At least once every 120 days, the hydrogen sulfide concentration of the biogas shall be determined by an independent, certified laboratory using one of the following test methods: EPA Method 11, EPA Method 15, ASTM Method D1072, D3031, D4084, D3246, or D5504. Once three consecutive 120-day laboratory tests show compliance with the permitted hydrogen sulfide concentration limit, the laboratory testing frequency may be reduced to annually. If a subsequent annual laboratory test shows a violation of the permitted hydrogen sulfide concentration limit then 120-day laboratory testing shall resume and continue until three consecutive 120-day laboratory tests show compliance. Once compliance is shown on three consecutive 120-day laboratory tests, the laboratory testing frequency may return to annually. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
26. At least once every two weeks, the facility shall test the biogas to demonstrate compliance with the permitted hydrogen sulfide concentration limit using a properly calibrated gas chromatograph. Once 12 consecutive biweekly tests show compliance, the testing frequency may be reduced to monthly. If a subsequent test shows a violation of the permitted hydrogen sulfide concentration limit then biweekly testing shall resume and continue until 12 consecutive tests show compliance. Once compliance is shown on 12 consecutive biweekly tests, the testing frequency may return to monthly. It is not necessary for the facility to perform gas chromatograph testing during the week in which either the 120-day or annual laboratory testing is performed. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
27. The gas chromatograph used for the biweekly testing shall be calibrated according to the manufacturer's recommendations. Records of the gas chromatograph equipment calibration shall be kept and shall be made available for District inspection upon request. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
28. Biogas sampling shall be conducted using the methods and procedures approved by the District. The District shall be notified each time the biogas sampling frequency changes. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

29. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
30. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
31. Flare shall be equipped with a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device capable of continuously detecting at least one pilot flame or the flare flame is present. The flame detection device shall be kept operational at all times except during flare maintenance when the flare is isolated from gas flow. During essential planned power outages when the flare is operating, the pilot monitor is allowed to be non-functional if the flare flame is clearly visible to onsite operators. All pilot monitor downtime shall be reported annually pursuant to Rule 4311, Section 6.2.3.6. [District Rule 4311] Federally Enforceable Through Title V Permit
32. If the flare uses a flow-sensing automatic ignition system and does not use a continuous flame pilot, the flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
33. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Section 6.5, and all commitments listed in that plan have been met. This standard does not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere. [District Rule 4311] Federally Enforceable Through Title V Permit
34. The operator shall monitor and record the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. [District Rule 4311] Federally Enforceable Through Title V Permit
35. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of this rule shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, which ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
36. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: the results of an investigation to determine the primary cause and contributing factors of the flaring event; any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; if appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and the date, time, and duration of the flaring event. [District Rule 4311] Federally Enforceable Through Title V Permit
37. The operator of a flare subject to flare monitoring requirements pursuant to Section 5.10 shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: the total volumetric flow of vent gas in standard cubic feet for each day; if the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; a flow verification report which shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311] Federally Enforceable Through Title V Permit
38. For purposes of the flow verification report required by Section 6.2.3.8, vent gas flow shall be determined using one or more of the following methods, or by any alternative method approved by the APCO, ARB, and EPA: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment installed pursuant to Section 5.10; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311] Federally Enforceable Through Title V Permit
39. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



40. An updated FMP shall be submitted by the operator pursuant to Section 6.5 addressing new or modified equipment, prior to installing the equipment. Updated FMP submittals are only required if: (1) The equipment change would require an authority to construct (ATC) and would impact the emissions from the flare, and (2) The ATC is deemed complete after June 18, 2009, and (3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP, and has no associated increase in flare emissions. [District Rule 4311] Federally Enforceable Through Title V Permit
41. The anaerobic digester system and its associated piping shall be inspected for leaks at least annually. Any leak detected on the basis of sight, smell, or sound, shall be recorded and a corrective action shall be taken to eliminate the leak. [District Rule 2201] Federally Enforceable Through Title V Permit
42. Records of leak inspections shall contain at least an identification of a person performing an inspection, date and time of the inspection, leak location, and corrective action taken to eliminate leaks. The records shall be maintained, kept, and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
43. Records of the facility-wide NOx and PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The permittee shall maintain records of: (1) the name of the sampler, and the date and time of biogas sampling for H2S, (2) the name of the tester, and the date and time of biogas testing for H2S, (3) test results showing the biogas concentration (in ppmv) of H2S. [District Rule 1081] Federally Enforceable Through Title V Permit
45. Permittee shall maintain daily and annual records of quantity of digester gas combusted in the flare, annual test results of higher heating value of digester gas, and daily heat input for the flare. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
46. Permittee shall maintain the following records: a copy of the source testing result conducted pursuant to Section 6.4.2; a copy of the approved flare minimization plan pursuant to Section 6.5; a copy of annual reports submitted to the APCO pursuant to Section 6.2. [District Rule 4311] Federally Enforceable Through Title V Permit
47. Permittee shall maintain records of the following when the flare is used during an emergency: duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311] Federally Enforceable Through Title V Permit
48. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4311] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1275-24-1

EXPIRATION DATE: 09/30/2013

## EQUIPMENT DESCRIPTION:

LACTOSE POWDER MILLING OPERATION #3 CONSISTING OF A BAUERMEISTER MODEL UT-53 POWDER MILL SERVED BY A MAC MODEL RTSPCL BAGHOUSE, SURGE HOPPER SERVED BY A NU-CON MODEL NCBV-58-25-1TF BIN VENT FILTER, AND ASSOCIATED CONVEYING EQUIPMENT

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from baghouses and bin vent filters shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
5. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. PM10 emissions from baghouse serving the powder mill shall be calculated as follows: 0.0640 lb-PM10/ton-material-processed x (throughput) ton-material-processed. [District Rule 2201] Federally Enforceable Through Title V Permit
7. PM10 emissions from bin vent filters serving the surge hopper shall be calculated as follows: 0.0055 lb-PM10/ton-material-processed x (throughput) ton-material-processed. [District Rule 2201] Federally Enforceable Through Title V Permit
8. PM10 emissions from the baghouse serving the powder mill shall not exceed 0.0640 lb/ton-material-processed. [District Rule 2201] Federally Enforceable Through Title V Permit
9. PM10 emissions from the bin vent filter serving the surge hopper shall not exceed 0.0055 lb/ton-material-processed. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The quantity of dried lactose processed shall not exceed 96 tons in any one day [District Rule 2201] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202] Federally Enforceable Through Title V Permit
12. Bin vent filters and baghouses shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Bin vent filters and baghouses shall be equipped with a pressure differential gauge to indicate the pressure drop across the filters. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. Bin vent filters and baghouses cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Material removed from dust dust collectors shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
16. For each type of bin vent filter and baghouse, a spare set of bags and filters shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
18. A daily record shall be kept and shall include the date and quantity of material processed. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-25-2

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

LACTOSE POWDER STORAGE OPERATION CONSISTING OF SIX STORAGE SILOS WITH SILOS #1 AND #2 EACH SERVED BY A NU-CON MODEL NCBV-58-25-1TF BIN VENT FILTER (1300 CFM EACH), SILOS #3, #4 AND #6 EACH SERVED BY A NU-CON MODEL NCBV-58-25-1TF (800 CFM EACH) AND SILO #5 SERVED BY A NU-CON MODEL NCBV-41-25-3TF BIN VENT FILTER (1300 CFM)

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from the bin vent filters shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201] Federally Enforceable Through Title V Permit
5. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. PM10 emissions from each bin vent filter serving storage silos #1, #2 and #5 shall not exceed 0.0017 gr/dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. PM10 emissions from each bin vent filter serving storage silos #3, #4 and #6 shall not exceed 0.0043 gr/dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The quantity of dried lactose conveyed to each storage silo shall not exceed 120 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202] Federally Enforceable Through Title V Permit
10. Bin vent filters shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Bin vent filters shall be equipped with pressure differential gauges to indicate the pressure drop across the filters. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Bin vent filters cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Material removed from dust collection system shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
14. For each type of bin vent filter, a spare set of filters shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. The permittee shall maintain a daily log of the date and quantity of material received in each silo. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-26-1

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

WAREHOUSE VACUUM CLEANING SYSTEM SERVED BY A GARDNER DENVER/INVINCIBLE MODEL TC-78 DUST COLLECTOR

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from the dust collection system shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
5. Dust collection system shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. PM10 emissions shall be calculated as follows: 2 lb-PM10/ton-material-collected x (throughput) ton-material-collected. [District Rule 2201] Federally Enforceable Through Title V Permit
8. PM10 emissions from the dust collector serving the warehouse vacuum cleaning system shall not exceed 2 lb-PM10/ton-material-collected. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Quantity of material collected with the vacuum system shall not exceed 400 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202] Federally Enforceable Through Title V Permit
11. Filters shall be equipped with a pressure differential gauge to indicate the pressure drop across the filters. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Cleaning frequency and duration of the filters for the dust collection system shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Material removed from dust collector shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
14. For each type of filter, a spare set of filters shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. A daily record shall be kept and shall include the date and quantity of material collected. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT: N-1275-28-1**

**EXPIRATION DATE: 09/30/2013**

**EQUIPMENT DESCRIPTION:**

WHEY PROTEIN DRYING OPERATION CONSISTING OF A NIRO MODEL ES-2249 SPRAY DRYER WITH A 6.6 MMBTU/HR ECLIPSE COMBUSTION MODEL ES-2249 ULTRA LOW NOX BURNER, SERVED BY A NIRO MODEL BF-R-14-135 BAGHOUSE DUST COLLECTOR

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from the baghouse serving the whey protein drying operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All filters shall be properly maintained and must be in place during operation of the dryer. [District Rule 2201] Federally Enforceable Through Title V Permit
8. A spare set of bags shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The baghouse shall operate at all times with a minimum differential pressure of 1 inch water column and a maximum differential pressure of 19 inches water column. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



15. Emissions from the drier shall not exceed any of the following limits: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 400 ppmvd CO @ 3% O2 or 0.3 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
16. The PM10 emissions from the whey protein collection operation shall not exceed 0.23 lb/ton of finished whey protein processed. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The amount of whey protein processed shall not exceed 13.0 tons of finished product in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
19. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202] Federally Enforceable Through Title V Permit
20. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every 12 months. After demonstrating compliance on two 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, 4320 and 4351] 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. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
23. 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
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 District Rules 4305, 4306 and 4320. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
25. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
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 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
27. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
28. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

31. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 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 performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
32. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
34. 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
35. Permittee shall maintain records of the amount of fuel combusted during each calendar year. The record shall be updated at least once every calendar month. [District Rule 4351] Federally Enforceable Through Title V Permit
36. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89. [District Rules 1081 and 4351] Federally Enforceable Through Title V Permit
37. Permittee shall maintain records of the amount of fuel combusted each calendar month. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
38. Records of the facility-wide NO<sub>x</sub> and PM<sub>10</sub> emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
41. The permittee shall keep daily records of the amount of finished whey protein processed. [District Rule 2201] Federally Enforceable Through Title V Permit
42. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1275-30-1

EXPIRATION DATE: 09/30/2013

## EQUIPMENT DESCRIPTION:

50.2 MMBTU/HR SUPERIOR MODEL 8-X-6000-S200-M BOILER EQUIPPED WITH A URS CORPORATION MODEL RMBF-50-G BURNER SERVED BY A HALDOR TOPSOE INC SELECTIVE CATALYTIC REDUCTION SYSTEM (BOILER #6)

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Non-resettable, totalizing mass or volumetric fuel flow meters to measure the amount of natural gas and the amount of biogas combusted installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Only PUC-quality natural gas, biogas or a combination of PUC-quality natural gas and biogas shall be burned in this boiler. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. NOx emissions shall not exceed 5 ppmvd @ 3% O2 referenced as NO2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
9. CO emissions shall not exceed 50 ppmvd @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
10. VOC emissions shall not exceed 10 ppmvd @ 3% O2, as methane. [District Rule 2201] Federally Enforceable Through Title V Permit
11. SOx emissions shall not exceed 0.00285 lb/MMBtu while using the PUC-regulated natural gas fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The sulfur content of the biogas (as H2S) shall not exceed 26 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
13. PM10 emissions shall not exceed 0.0060 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Ammonia (NH3) emissions shall not exceed 10 ppmvd @ 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Merced County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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16. The hydrogen sulfide concentration of the biogas shall be determined at least once every 120 days. Once three consecutive 120 day tests show compliance with the fuel H<sub>2</sub>S limit, the testing frequency may be reduced to annually. If an annual test shows a violation of the permitted H<sub>2</sub>S concentration limit, the testing frequency shall increase to once every 120 days until three consecutive 120 day tests show compliance. At that time, testing may return to annually. The testing shall be conducted by an independent testing laboratory and shall be performed using one of the following methods: EPA Method 11, EPA Method 15, ASTM Method D1072, D3031, D4084, D3246, or D5504. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. At least once every two weeks, the facility shall test the biogas to demonstrate compliance with the permitted hydrogen sulfide concentration limit using properly calibrated gas chromatograph equipment. Once 12 consecutive biweekly tests show compliance, the testing frequency may be reduced to monthly. If a subsequent test shows a violation of the permitted hydrogen sulfide concentration limit then biweekly testing shall resume and continue until 12 consecutive tests show compliance. Once compliance is shown on 12 consecutive biweekly tests, the testing frequency may return to monthly. It is not necessary for the facility to perform gas chromatograph testing during the week in which either the 120-day or annual laboratory testing is performed. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
18. The gas chromatograph equipment used for the biweekly testing shall be calibrated according to the manufacturer's recommendations. Records of the gas chromatograph equipment calibration shall be kept and shall be made available for District inspection upon request. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
19. Biogas sampling shall be conducted using the methods and procedures approved by the District. The District shall be notified each time the biogas sampling frequency changes. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Source testing to determine compliance with the NO<sub>x</sub>, CO and NH<sub>3</sub> limits of this permit shall be conducted at least once every 12 months using natural gas fuel. After demonstrating compliance on two consecutive annual source tests, the unit shall not be tested 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 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
21. Within 60 days after first firing the unit on biogas or a blend of natural gas and biogas, the permittee shall conduct a source test to determine compliance with the NO<sub>x</sub>, CO, NH<sub>3</sub> and PM<sub>10</sub> emission limits in this permit. Biogas heat input rate during the source test shall be at least 20% of the total heat input to the boiler. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
22. Source testing to determine compliance with the NO<sub>x</sub>, CO and NH<sub>3</sub> limits of this permit shall be conducted at least once every 12 months using combination of biogas and natural gas fuel. Biogas heat input rate shall be at least 20% of the total heat input rate to the boiler during the source test. After demonstrating compliance on two consecutive annual source tests, the unit shall not be tested 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 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
23. 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
24. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
25. 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
26. All emissions measurements shall be made with the unit(s) 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 Rules 4305, 4306 and 4320. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

27. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
28. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
29. NH3 emissions for source test purposes shall be determined using BAAQMD method ST-1B. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
30. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
31. 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. Other methods may be utilized provided previous written District approval is obtained. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
32. 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 Rules 1081 and 2201] Federally Enforceable Through Title V Permit
33. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
34. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 on combination of natural gas and biogas fuel and on natural gas fuel alone at least once during each month. Monitoring is not required during the month in which the source test is performed. The monitoring shall be 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 at the time NOx, CO and O2 readings are taken. 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
35. If the NOx, CO or NH3 concentrations, as measured by the portable analyzer and District approved ammonia monitoring equipment, exceed the permitted emission levels, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or ammonia monitoring equipment show that emissions continue to exceed the allowable levels 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 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 and 4320] Federally Enforceable Through Title V Permit
36. All alternate monitoring parameter emission readings shall be taken with the units operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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
37. The permittee shall maintain records of: (1) permit number of the unit(s) operating during monitoring, (2) fuel type, (3) the date and time of NOx, CO, NH3 and O2 measurements, (4) the O2 concentration in percent and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (5) make and model of exhaust gas analyzer, (6) exhaust gas analyzer calibration records, (7) the method of determining the NH3 emission concentration, and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

38. The permittee shall maintain records of: (1) the name of the sampler, and the date and time of biogas sampling for H<sub>2</sub>S, (2) the name of the tester, and the date and time of biogas testing for H<sub>2</sub>S, (3) test results showing the biogas concentration (in ppmv) of H<sub>2</sub>S. [District Rule 1081] Federally Enforceable Through Title V Permit
39. Permittee shall determine sulfur content of natural gas annually or shall demonstrate that it was provided by a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
40. Permittee shall maintain records of the amount of each type of fuel combusted during each calendar month. [40 CFR Part 60.48c(g)(2)] Federally Enforceable Through Title V Permit
41. Permittee shall maintain records of the amount of each fuel combusted during each calendar year. The records shall be updated at least once every calendar month. [District Rule 4351] Federally Enforceable Through Title V Permit
42. The higher heating value (HHV) of the natural gas shall be determined and recorded at least annually. The testing shall be conducted by an independent testing laboratory and shall be performed utilizing one of the following test methods: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89. [District Rules 1081 and 4351] Federally Enforceable Through Title V Permit
43. Records of the facility-wide NO<sub>x</sub> and PM<sub>10</sub> emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
44. All records shall be maintained and retained on-site for a minimum of five 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

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

DRAFT

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1275-35-2

**EXPIRATION DATE:** 09/30/2013

**EQUIPMENT DESCRIPTION:**

SALT RECEIVING OPERATION IN ONE 21,430 GALLON (APPROX. 25' 4" HIGH, 12' DIAMETER) ABOVE GROUND BRINE TANK SERVED BY A FABRIC SOCK FILTER

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Visible emissions from the sock filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201] Federally Enforceable Through Title V Permit
5. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Material removed from the sock filter shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
7. A spare sock filter shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The amount of salt received shall not exceed 30 tons during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. PM10 emissions shall not exceed 0.00034 pounds per ton of salt received. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202] Federally Enforceable Through Title V Permit
11. The permittee shall maintain a daily record of the date and amount of salt received. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The sock filter shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of the sock filter maintenance, inspections and repair. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Records of the facility-wide PM10 emissions, on a rolling 12-month basis shall be kept. The records shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
15. All records shall be retained for a minimum of 5 years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

Appendix B  
Detailed Facility List



**Detailed Facility Report**  
For Facility=1275  
Sorted by Facility Name and Permit Number

<b>HILMAR CHEESE COMPANY</b> 9001 N LANDER AVE HILMAR, CA 95324		FAC # STATUS: TELEPHONE:	<b>N 1275</b> <b>A</b> <b>2096676076</b>	TYPE: TOXIC ID:	<b>TitleV</b>	EXPIRE ON: AREA: INSP. DATE:	<b>09/30/2013</b> <b>15 /</b> <b>08/13</b>
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-1275-1-0	8,400 KBTU	3020-02 G	1	815.00	815.00	D	BOILER, CLEAVER-BROOKS, 8.4 MMBTU/HR
N-1275-2-7	25.1 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	25.1 MMBTU/HR CLEAVER-BROOKS BOILER (NO. 1; S/N L-86827) WITH A NATCOM PROFIRE NT ULTRA LOW-NOX BURNER AND A FLUE-GAS RECIRCULATION SYSTEM
N-1275-3-2	6,700 KBTU/HR	3020-02 G	1	815.00	815.00	D	ONE (1) BLAU-KNOX DAIRY PRODUCT DRYER (MODEL # 750, 6.7 MMBTU/HR) SERVED BY TWO (2) DAMROW DUST COLLECTORS *** DELETED 7/1/99 PER APPLICANT'S REQUEST AS PART OF STATIONARY SOURCE PROJECT #990535 - NRP ***
N-1275-4-8	25.1 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	25.1 MMBTU/HR CLEAVER-BROOKS MODEL CB-200-600 BOILER (NO. 3; S/N L90961) WITH A NATCOM PROFIRE NT ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM.
N-1275-5-5	280 hp	3020-01 E	1	412.00	412.00	A	STEAM-OPERATED VIBRO-FLUIDIZER DRYER SERVED BY A NIRO HUDSON INC CYCLONE VENTED TO AN AMERICAN AIR FILTER MODEL MILLENNIUM SIZE 14-336-6304 BAGHOUSE.
N-1275-6-2	200 hp	3020-01 E	1	412.00	412.00	A	125 HP BAUERMEISTER MODEL #UT53 HAMMERMILL AND MODEL 3 CLASSIFIER SERVED BY MAC MODEL #96LRT80 STYLE III BAGHOUSE (SHARED WITH LACTOSE POWDER RECEIVER).
N-1275-7-5	4.5 hp	3020-01 A	1	87.00	87.00	A	LACTOSE POWDER BAGGING SYSTEM SERVED BY A DCE MODEL C72-RK15AD DUST COLLECTOR.
N-1275-9-6	25.1 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	25.1 MMBTU/HR CLEAVER BROOKS MODEL CBLE 700-600-2005 BOILER (NO. 2; S/N OLO94841) WITH A NATCOM MODEL PROFIRE NT ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM
N-1275-12-3	20.7 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	ONE SINGLE STAGE MARRIOT-WALKER SPRAY DRIER WITH A 20.7 MMBTU/HR MAXON BURNER SERVED BY A WALKER STAINLESS EQUIPMENT BAGHOUSE AND A FISHER-KLOSTERMAN SCRUBBER.
N-1275-14-1	150 hp	3020-01 D	1	314.00	314.00	A	LACTOSE DRYING OPERATION WITH A NIRO-HUDSON FLUID BED DRYER SERVED BY A NIRO MODEL #235145 BAGHOUSE.
N-1275-15-1	150 hp	3020-01 D	1	314.00	314.00	A	LACTOSE MILLING OPERATION WITH A BAUERMEISTER, INC. MODEL UT-53 HAMMERMILL, SERVED BY A MAC MODEL 96 LRT 80 STYLE III BAGHOUSE
N-1275-16-2	15 hp	3020-01 A	1	87.00	87.00	A	WHEY PROTEIN BAGGING OPERATION SERVED BY A DCE MODEL C-72-55 BAGHOUSE.

**Detailed Facility Report**  
For Facility=1275  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-1275-17-2	17 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	PROTEIN DRYING OPERATION CONSISTING OF AN INDIRECT NATURAL GAS-FIRED EXOTHERMICS ES-2465 PROCESS HEATER EQUIPPED WITH A 17.0 MMBTU/HR ECLIPSE INC. MINNOX 4250 CCS-T/C-SP LOW-NOX BURNER WITH FLUE GAS RECIRCULATION. EMISSIONS FROM THE HANDLING OF DRIED PROTEIN ARE CONTROLLED BY A NIRO MODEL 235-14-5 BAGHOUSE.
N-1275-18-3	33.6 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	33.6 MMBTU/HR NATURAL GAS FIRED CLEAVER-BROOKS MODEL CEW 700-800 BOILER WITH AN ALZETA MODEL V504-G ULTRA LOW-NOX BURNER
N-1275-22-2	50.4 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	50.4 MMBTU/HR NATURAL GAS FIRED CLEAVER BROOKS MODEL CBL-700-1200-200 BOILER WITH A PROFIRE NT BURNER, AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #5)
N-1275-23-5	14,780 kBtu/hr	3020-02 G	1	815.00	815.00	A	2.5 MILLION GALLON PER DAY CHEESE WASTEWATER ANAEROBIC DIGESTER SERVED BY CEILCOTE SPT 14-84 WET SCRUBBER SYSTEM AND VAREC MODEL 244E ENCLOSED FLARE
N-1275-24-0	243.5 hp	3020-01 E	1	412.00	412.00	A	LACTOSE POWDER MILLING OPERATION #3 CONSISTING OF A BAUERMEISTER MODEL UT-53 POWDER MILL SERVED BY A MAC MODEL RTSPCL BAGHOUSE, SURGE HOPPER SERVED BY A NU-CON MODEL NCBV-58-25-1TF BIN VENT FILTER, AND ASSOCIATED CONVEYING EQUIPMENT.
N-1275-25-1	70 hp	3020-01 C	1	197.00	197.00	A	LACTOSE POWDER STORAGE OPERATION CONSISTING OF SIX STORAGE SILOS WITH SILOS #1 AND #2 EACH SERVED BY A NU-CON MODEL NCBV-58-25-1TF BIN VENT FILTER (1300 CFM EACH), SILOS #3, #4 AND #6 EACH SERVED BY A NU-CON MODEL NCBV-58-25-1TF (800 CFM EACH) AND SILO #5 SERVED BY A NU-CON MODEL NCBV-41-25-3TF BIN VENT FILTER (1300 CFM).
N-1275-26-0	40 hp	3020-01 B	1	117.00	117.00	A	WAREHOUSE VACUUM CLEANING SYSTEM SERVED BY A GARDNER DENVER/INVINCIBLE MODEL TC-78 DUST COLLECTOR
N-1275-27-2	33,500 KBtu/hr	3020-02 H	1	1,030.00	1,030.00	D	33.5 MMBTU/HR NEBRASKA WATER TUBE BOILER WITH A NATIONAL COMBUSTION ULTRA LOW NOX BURNER AND INDUCED FLUE GAS RECIRCULATION (TEMPORARY REPLACEMENT EMISSIONS UNIT FOR PERMIT N-1275-9)
N-1275-28-2	6.7 MMBtu/hr	3020-02 G	1	815.00	815.00	A	WHEY PROTEIN DRYING OPERATION CONSISTING OF A NIRO MODEL ES-2249 SPRAY DRYER WITH A 6.7 MMBTU/HR ECLIPSE MINNOX BURNER AND A NIRO MODEL BF-R-14-135 BAGHOUSE
N-1275-30-2	50.2 MMBtu/hour	3020-02 H	1	1,030.00	1,030.00	A	50.2 MMBTU/HR SUPERIOR MODEL 8-X-6000-S200-M BOILER EQUIPPED WITH A URS CORPORATION MODEL RMBF-50-G BURNER SERVED BY A HALDOR TOPSOE INC SELECTIVE CATALYTIC REDUCTION SYSTEM
N-1275-31-0	62.5 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	D	62.5 MMBTU/HR NEBRASKA MODEL NOS-2A/S55 BOILER EQUIPPED WITH A TODD MODEL SV6401 GOXXX BURNER WITH CATASTAL SELECTIVE CATALYTIC REDUCTION SYTEM (TEMPORARY REPLACEMENT EMISSIONS UNIT)

**Detailed Facility Report**

For Facility=1275

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-1275-33-0	93.0 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	D	93.0 MMBTU/HR NEBRASKA MODEL NOS-2A/S-55 NATURAL GAS-FIRED BOILER WITH A TODD VARIFLAME MODEL SV6401G0XXX ULTRA LOW NOX BURNER SERVED BY A CRI MODEL CATASTAK SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA (NH3) INJECTION (TEMPORARY REPLACEMENT EMISSIONS UNIT)
N-1275-35-1	21,430 gallon	3020-05 C	1	135.00	135.00	A	SALT RECEIVING OPERATION IN ONE 21,430 GALLON (APPROX. 25' 4" HIGH, 12' DIAMETER) ABOVE GROUND BRINE TANK SERVED BY A FABRIC SOCK FILTER

Number of Facilities Reported: 1

Appendix C  
CAM Applicability Calculations

The facility is a Major Source for NO<sub>x</sub>, therefore, to determine whether CAM is required, it is necessary to calculate the uncontrolled NO<sub>x</sub> emissions from each unit that relies on a control device to comply with a NO<sub>x</sub> limit.

**N-1275-2-8, N-1275-4-9, N-1275-9-7, N-1275-30-1  
(25.1 MMBtu/hr natural gas fired boilers)**

The boilers are identical in rating, have the same NO<sub>x</sub> emission limits and utilize the same type of emission control equipment (flue gas recirculation). Therefore, the following calculations apply to all of the units. The District previously determined, based on emission factors from EPA document AP-42, that flue gas recirculation systems provide 36% control of NO<sub>x</sub> emissions.

EF <sub>NO<sub>x</sub></sub> (Controlled):	0.008 lb/MMBtu (current permits)
Amount of NO <sub>x</sub> Control:	36%
Rating:	25.1 MMBtu/hr

$$PE_{NO_x} \text{ (uncontrolled)} = (25.1 \text{ MMBtu/hr})(8,760 \text{ hr/hr})(0.008 \text{ lb/MMBtu}) \div (1-0.36) = 2,748 \text{ lb/yr}$$

The Major Source threshold for NO<sub>x</sub> is 20,000 lb/yr, therefore, the uncontrolled potential emissions of NO<sub>x</sub> from each unit is less than the Major Source threshold and CAM is not required.

**N-1275-12-4  
(20.7 MMBtu/hr Spray Drier)**

The unit does not utilize control equipment for NO<sub>x</sub> control. Therefore, CAM is not required.

**N-1275-17-3  
(17.0 MMBtu/hr Drier)**

The unit utilizes flue gas recirculation to control NO<sub>x</sub> emissions and the District previously determined, based on emission factors from EPA document AP-42, that the amount of NO<sub>x</sub> control associated with such a control system is 36%.

EF <sub>NO<sub>x</sub></sub> (Controlled):	0.011 lb/MMBtu (current permit)
Amount of NO <sub>x</sub> Control:	36%
Rating:	17.0 MMBtu/hr

$$PE_{NO_x} \text{ (uncontrolled)} = (17.0 \text{ MMBtu/hr})(8,760 \text{ hr/hr})(0.011 \text{ lb/MMBtu}) \div (1-0.36) = 2,560 \text{ lb/yr}$$

The Major Source threshold for NO<sub>x</sub> is 20,000 lb/yr, therefore, the uncontrolled potential emissions of NO<sub>x</sub> are less than the Major Source threshold and CAM is not required.

**N-1275-18-4  
(33.6 MMBtu/hr Boiler)**

The unit utilizes flue gas recirculation to control NOx emissions and the District previously determined, based on emission factors from EPA document AP-42, that the amount of NOx control associated with such a control system is 36%.

EF<sub>NOx</sub> (Controlled): 0.011 lb/MMBtu (current permits)  
Amount of NOx Control: 36%  
Rating: 33.6 MMBtu/hr

$$PE_{NOx} \text{ (uncontrolled)} = (33.6 \text{ MMBtu/hr})(8,760 \text{ hr/hr})(0.011 \text{ lb/MMBtu}) \div (1-0.36) = 5,059 \text{ lb/yr}$$

The Major Source threshold for NOx is 20,000 lb/yr, therefore, the uncontrolled potential emissions of NOx are less than the Major Source threshold and CAM is not required.

**N-1275-22-3  
(50.4 MMBtu/hr Boiler)**

The unit utilizes flue gas recirculation to control NOx emissions and the District previously determined, based on emission factors from EPA document AP-42, that the amount of NOx control associated with such a control system is 36%.

EF<sub>NOx</sub> (Controlled): 0.011 lb/MMBtu (current permits)  
Amount of NOx Control: 36%  
Rating: 50.4 MMBtu/hr

$$PE_{NOx} \text{ (uncontrolled)} = (50.4 \text{ MMBtu/hr})(8,760 \text{ hr/hr})(0.011 \text{ lb/MMBtu}) \div (1-0.36) = 7,588 \text{ lb/yr}$$

The Major Source threshold for NOx is 20,000 lb/yr, therefore, the uncontrolled potential emissions of NOx are less than the Major Source threshold and CAM is not required.

**N-1275-23-6  
(Digester Gas Fired Flare)**

The unit does not utilize control equipment for NOx control. Therefore, CAM is not required.

**N-1275-28-1  
(6.6 MMBtu/hr Drier)**

The unit does not utilize control equipment for NOx control. Therefore, CAM is not required.

**N-1275-30-1  
(50.2 MMBtu/hr Boiler)**

The unit utilizes selective catalytic reduction to control NOx emissions and such a control system would be expected to provide 90 – 95% NOx control. To ensure the most conservative case, 95% will be utilized.

EF <sub>NOx</sub> (Controlled):	0.0062 lb/MMBtu (current permit)
Amount of NOx Control:	95%
Rating:	50.2 MMBtu/hr

$$PE_{NOx} \text{ (uncontrolled)} = (50.2 \text{ MMBtu/hr})(8,760 \text{ hr/yr})(0.0062 \text{ lb/MMBtu}) + (1-0.95) = 54,529 \text{ lb/yr}$$

The Major Source threshold for NOx is 20,000 lb/yr, therefore, the uncontrolled potential emissions of NOx are higher than the Major Source threshold and CAM is required. Refer to Section VIII (40 CFR Part 64 Compliance) for a discussion of CAM requirements and timeline.

Appendix D  
Major HAP Source Determination



### Major Air Toxics Source Determination:

To determine whether the facility is a Major Air Toxics Source, the facility-wide hazardous air pollutant (HAP) emissions will be compared to the Major Air Toxics Source thresholds. Those thresholds are 10 tons/yr of any single HAP or combined HAP emissions of 25 tons/yr. To determine the facility-wide potential to emit of HAPS, the fuel usage limits will be applied to the appropriate emission factors.

The purpose of these calculations is to determine whether or not the boilers are subject to 40 CFR Part 63 Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources). Since this is a federal regulation, the analysis will include the HAPS included on the list in Section 112 of the Federal Clean Air Act.

### Natural Gas Fired Boilers and Driers:

New Title V Permit Number	Rating (MMBtu/hr)
N-1275-2-8	25.1
N-1275-4-9	25.1
N-1275-9-7	25.1
N-1275-12-4	20.7
N-1275-17-3	17.0
N-1275-18-4	33.6
N-1275-22-3	50.4
N-1275-28-2	6.6
Total	203.6

Assuming a natural gas heat content of 1,000 Btu/scf, the potential fuel usage is:

$$(203.6 \text{ MMBtu/hr})(8,760 \text{ hr/yr})(\text{scf}/1,000 \text{ Btu}) = 1,783.5 \text{ MMScf/yr}$$

The natural gas emission factors are from the California Air Toxics Emission Factors (CATEF) database.

Natural Gas Fired Boilers and Driers		
Compound	Emission Factor (lb/MMScf)	Potential to Emit (lb/yr)
Acetaldehyde	0.0147	26.2
Benzene	0.0087	15.5
Formaldehyde	0.672	1,198.5

**Digester Gas/Natural Gas Fired Boiler:**

**Fuel Use:**

New Title V Permit Number	Rating (MMBtu/hr)
N-1275-30-1	50.2
Total	

**Natural Gas:**

Assuming a natural gas heat content of 1,000 Btu/scf, the potential fuel usage is:

$$(50.2 \text{ MMBtu/hr})(8,760 \text{ hr/yr})(\text{scf}/1,000 \text{ Btu}) = 439.8 \text{ MMScf/yr}$$

**Digester Gas:**

$$(50.2 \text{ MMBtu/hr})(8,760 \text{ hr/yr}) = 439,752 \text{ MMBtu/yr}$$

**Emission Factors and Potentials to Emit:**

**Natural Gas Fire:**

The emission factors are from the California Air Toxics Emission Factors (CATEF) database.

<b>Boiler (While Firing on Natural Gas)</b>		
Compound	Emission Factor (lb/MMScf)	Potential to Emit (lb/yr)
Acetaldehyde	0.0147	6.5
Benzene	0.0087	3.8
Formaldehyde	0.672	295.5

### Digester Gas Fire:

The digester gas emission factors are from Section 3.1 of EPA guidance document AP-42. The emission factors are actually for digester gas fired turbines, but it is expected that the emissions are most dependent on the fuel type and not the emission unit type. Therefore, in the absence of HAP emission factors for a digester fired boiler/drier, these factors may be substituted.

<b>Boiler (While Firing on Digester Gas)</b>		
Compound	Emission Factor (lb/MMBtu)	Potential to Emit (lb/yr)
1,4-Dichlorobenzene	0.00002	8.8
Acetaldehyde	0.000053	23.3
Arsenic	0.0000023	1.0
Cadmium	0.00000058	0.26
Carbon Tetrachloride	0.00002	8.8
Chlorobenzene	0.000016	7.0
Chloroform	0.000017	7.5
Ethylene Dichloride	0.000015	6.6
Formaldehyde	0.00019	83.6
Chromium	0.0000012	0.53
Lead	0.0000034	1.5
Methylene Chloride	0.000013	5.7
Nickel	0.0000020	0.88
Selenium	0.000011	4.8
Tetrachloroethylene	0.000021	9.2
Trichloroethylene	0.000018	7.9
Vinyl Chloride	0.000036	15.8
Vinylidene Chloride	0.000015	6.6

### **Digester Gas Fired Flare (N-1275-23-6):**

#### **Fuel Use:**

The digester system is currently capable of providing 313 cfm of fuel. Assuming a digester gas heating capacity of 787 Btu/scf, the fuel burning capacity of the unit is:

$$(313 \text{ ft}^3/\text{min})(60 \text{ min/hr})(787 \text{ Btu/ft}^3)(24 \text{ hr/day}) = 354.7 \text{ MMBtu/day}$$

$$(354.7 \text{ MMBtu/day})(365 \text{ days/yr}) = 129,466 \text{ MMBtu/yr}$$

#### **Emission Factors and Potentials to Emit:**

The digester gas emission factors are from Section 3.1 of EPA guidance document AP-42. The emission factors are actually for digester gas fired turbines, but it is expected that the emissions are most dependent on the fuel type and not the emission unit type. Therefore, in the absence of HAP emission factors for a digester fired boiler/drier, these factors may be substituted.

<b>Flare (While Firing on Digester Gas)</b>		
<b>Compound</b>	<b>Emission Factor (lb/MMBtu)</b>	<b>Potential to Emit (lb/yr)</b>
1,4-Dichlorobenzene	0.00002	2.6
Acetaldehyde	0.000053	6.9
Arsenic	0.0000023	0.30
Cadmium	0.00000058	0.075
Carbon Tetrachloride	0.00002	2.6
Chlorobenzene	0.000016	2.1
Chloroform	0.000017	2.2
Ethylene Dichloride	0.000015	1.9
Formaldehyde	0.00019	24.6
Chromium	0.0000012	0.16
Lead	0.0000034	0.44
Methylene Chloride	0.000013	1.7
Nickel	0.0000020	0.26
Selenium	0.000011	1.4
Tetrachloroethylene	0.000021	2.7
Trichloroethylene	0.000018	2.3
Vinyl Chloride	0.000036	4.7
Vinylidene Chloride	0.000015	1.9

### Summary of HAP Emissions

Pollutant	Natural Gas Fired Boilers and Driers (lb/yr)	Natural Gas or Digester Gas Fired Boiler (lb/yr)	Digester Gas Fired Flare (lb/yr)	Total (each HAP)
1,4 Dichlorobenzene	---	8.8	2.6	11.4
Acetaldehyde	26.2	23.3	6.9	56.4
Arsenic	---	1.0	0.30	1.30
Cadmium	---	0.26	0.075	0.34
Benzene	15.5	3.8	---	19.3
Carbon Tetrachloride	---	8.8	2.6	11.4
Chlorobenzene	---	7.0	2.1	9.1
Chloroform	---	7.5	2.2	9.7
Chromium	---	0.53	0.16	0.69
Ethylene Dichloride	---	6.6	1.9	8.5
Formaldehyde	1,198.5	295.5	24.6	1,518.6
Lead	---	1.5	0.44	1.9
Methylene Chloride	---	5.7	1.7	7.4
Nickel	---	0.88	0.26	1.1
Selenium	---	4.8	1.4	6.2
Tetrachloroethylene	---	9.2	2.7	11.9
Trichloroethylene	---	7.9	2.3	10.2
Vinyl Chloride	---	15.8	4.7	20.5
Vinylidene Chloride	---	6.6	1.9	8.5
<b>Total (all HAPs combined)</b>				<b>1,714.4</b>

As can be seen, the combined potential HAP emissions from the permitted equipment at the facility are less than 25 tons per year and the potential to emit of each single HAP is less than 10 tons per year. Therefore, the facility is not a major source of HAP emissions.