

AUG 26 2015

Robert Moultrie
CCC Property I, LLC
2233 Lake Park Drive, Suite 205
Atlanta, GA 30080

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: S-8594
Project Number: S-1144581

Dear Mr. Moultrie:

Enclosed for your review and comment is the District's analysis of CCC Property I, LLC's application for an Authority to Construct for a Cheese Processing Facility, at the northeast corner of West Paige Avenue and South Enterprise St, Tulare, CA.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Richard Edgehill of Permit Services at (661) 392-5617.

Sincerely,



Arnaud Marjollet
Director of Permit Services

AM:rue/ya

Enclosures

cc: Mike Tollstrup, CARB (w/ enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

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

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

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

Facility Name: CCC Property I, LLC Date: July 28, 2015
Mailing Address: 2233 Lake Park Drive, Suite 205 Engineer: Richard Edgehill
Atlanta, GA 30080 Lead Engineer: Richard Karrs
Contact Person: Robert Moultrie and Rachael Startin (Insight Environmental)
Telephone: (770) 437-2691 (RM) (661) 282-2200 (RS),
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E-Mail: Robert.Moultrie@FDGAtlanta.com; rstartin@trinityconsultants.com
Application #(s): S-8594-1-0 through '-6-0, '-8-0 through '-16-0
Project #: 1144581
Deemed Complete: January 22, 2015

I. Proposal

CCC Property I, LLC (CCC Property) is requesting Authorities to Construct (ATCs) for a new cheese processing facility including three (3) natural gas boilers rated at 90.8 MMBtu/hr, one (1) indirect fired natural gas whey dryer rated at 13.66 MMBtu/hr, one (1) indirect fired natural gas permeate dryer rated at 26.52 MMBtu/hr, one (1) 308 bhp natural gas emergency generator, one (1) 510 bhp diesel fired emergency firewater pump engine, four (4) 37,500 gallon milk products powder storage silos, and four (4) 3,750 gallon milk products powder bagging hoppers.

Emissions from the new dryers and boilers will trigger BACT and public notice. Offsets are not required.

Facility S-8594 will not be a major source. Therefore Rules 2520 and 2530 are not applicable.

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4305	Boilers, Steam Generators and Process Heaters – Phase II (8/21/03)
Rule 4306	Boilers, Steam Generators and Process Heaters – Phase III (3/17/05)
Rule 4309	Dryers, Dehydrators, and Ovens (12/5/05)

Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/Hr (10/16/08)
Rule 4351 Boilers, Steam Generators and Process Heaters – Phase 1 (08/21/2003)
Rule 4701 Internal Combustion Engines – Phase 1 (08/21/03)
Rule 4702 Internal Combustion Engines (11/14/13)
Rule 4801 Sulfur Compounds (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The new equipment will be located within the city of Tulare, on the northeast corner of West Paige Avenue and South Enterprise Street. The facility is not within 1,000 feet of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project. A facility location map is shown in **Attachment I**. A plot plan of the proposed facility is included as **Attachment II**.

IV. Process Description

The Project is being designed to initially process 4 million pounds of milk per operating day and be easily expandable to 6 million pounds of milk a day. The building has been arranged for an efficient process flow and is designed for easy future expansion without disrupting ongoing production.

The plant is designed to support the process requirements. The process design, production equipment, installation, startup including production control systems will be provided by Tetra Pak and will be designed to produce 446,000 Pounds of American style cheese from 4,000,000 pounds of milk per operating day. In addition to the American style cheese, the project will produce 3,358,000 pounds of dilute whey per day. The primary by-product results in the production of 12,500 pounds of whey cream, 34,000 pounds of whey protein concentrate (WPC -80) powder. The final step in the process will be the drying of 226,000 pounds of dilute de-proteinized whey permeate powder. A process flow diagram and equipment specifications are provided in **Attachment III**.

The process will have the following features:

1. Receiving Bay area
2. Standardization area
3. Primary Starter area
4. Milk High-Temperature Short-Time (HTST) area
5. Make area
6. Cheese Packaging area
7. Whey Pre-treatment area
8. Whey HTST area
9. Whey area membranes and Spray Dryers
10. Finished Product Silos

Processes 1 through 8 are wet processes, therefore there are no emissions from these parts of the plant.

Processes 9 and 10

These processes will include: one whey dryer, one permeate dryer, and 5 whey/permeate storage silos and 4 bagging hoppers.

Central Utilities

A central utility plant will provide the utility services required to operate the production process and storage environments. The central utilities consist of: a steam system, a refrigeration system, chilled water system, tower water system, compressed air system and sanitation system. The central utilities will contain the following emissions sources: three boilers to provide steam and two emergency generators to provide back-up power.

1. Receiving area

The receiving area will consist of a total of five (5) bays for receiving and load-out. Four (4) receiving bays will be set up to receive raw whole milk at a rate of 400 gpm per bay. The last bay (Bay 5) will receive raw milk and load-out all finished products.

The receiving bays will have the ability to clean all tankers, plus the pump and line after unloading using the designated Clean in Place (CIP) supply line.

The raw milk will be stored in six (6) 70,000 Gallon insulated Silo Storage tanks. Raw milk silos can route to the milk HTST area, ultra filtered (UF) plant (for making UF milk), or CIP return of the silo wash. The milk routed to the cheese plant will go directly to the milk HTST area.

The receiving area will have a dedicated CIP Systems.

2. Standardization area

The raw milk from storage will feed the UF plant to make a fat and protein source for cheese milk standardization and load-out (if required).

Milk from storage will be pre-heated to 55°F by a trim heater and separated using one (1) cold milk separator. Raw cream from the UF separator will be cooled and stored in two (2) 15,000 gallon silos. Cream from Receiving Bay 4 will also have the ability to be stored in the two (2) silos. From these silos the cream can either be used for cheese milk standardization or loaded out. Pasteurized cream from the whey batch pasteurizers will be transferred to one of two (2) 20,000 gallon silos.

The skim milk from separators will feed a milk ultra-filtration system (UF) and be concentrated for load-out or milk standardization. The concentrated milk will be cooled and stored in two (2) 40,000 gallon silos. A standardization system will be located on the milk HTST and will use these above ingredients to target a certain fat and protein value that is required for the cheese-making.

3. Primary Starter area

The starter room system will be set up to receive prepared media via a funnel system. Four (4) 2,000 gallon primary starter processors will be used for blending, agitation, pasteurization and the production of the primary starter.

The starter area will have a dedicated three (3) tank/use CIP System.

4. Milk HTST area

The milk HTST is designed to handle 185,000 pounds per hour of raw milk. A heat recovery section from the whey HTST will be utilized to capture extra energy. The water loop will be designed so when the water comes out of the milk HTST section it will pass through the whey HTST then through a shell & tube to ensure a consistent outlet temperature to the milk HTST. After the heat recovery section the raw milk will pass through a regeneration section to heat the milk to 143°F. The final section will heat and hold the milk from 143°F to 162°F for pasteurization. A standardization analyzing system will be used to ensure a consistent fat and protein ratio going to the cheese vats.

The milk HTST will wash as a stand-alone system.

5. Make area

The make room will be set up with a single production lines with eight (8) cheese vats (YM-70s). The milk fill line would have a volumetric capacity up to 185,000 lb/hr of milk, at up to 15.0% solids, capable of producing up to 22,000 lb/hr of cheese.

The pasteurized milk from the HTST will fill the cheese vats from a top port. After the vat is filled the YM's will be programmed to go through the typical make procedures. The cheese vats will be set up with a total of 4 curd transfer pumps – 2 per side that would be centrally located to pump to a Draining/matting machine (DMM).

All cheese vats and associated lines will wash using the four tank make area CIP system. The milk fill, rennet, and color line will wash independently as part of the milk HTST circuit. The curd line will also wash independently of the cheese vats.

Rennet, Color, and calcium will be bulk in barrels. From the bulk barrels, an air operated diaphragm pump will transfer rennet/calcium/color to its injection point. These dosing pumps will be calibrated/metered to ensure a high level of accuracy. The color and calcium will be injected directly into the incoming milk line. The rennet will fill a dilution tank where it will mix with water and be injected into each vat when required using a specifically designed set of nozzles on the vats.

At the DMM, cheese and whey will be separated by using a dump-style weir inlet and wedge wire screen. The wedge wire screen effectively separates the whey from the curd before the curd reaches the draining belt. This curd is stirred with three reverse horizontal and one vertical agitator, which allows for free whey drainage and also levels the curd. Once the curd drops onto the 1st matting belt, it travels the length of this belt and is then inverted via a slide

onto the second matting belt. The DMM will be fitted with horizontal agitators that are placed in the belt to allow for quality stirred curd. American style cheese may have a matted residence time of up to 90 minutes and stirred curd residence time of 60 minutes. Both inlets on the belt will have the ability to curd wash the cheese to help control the pH development. All whey that is drained from the cheese on belt 1 will be collected in a small surge tank and then transferred to a second set of screens to collect all fines that didn't knit properly. The cheese will fall back onto belt 1 and the whey will be collect in the bottom and sent to the pre-draw tanks for storage.

The DMM will wash with four (4) CIP supply circuits coming from the Belt CIP system. This system will deliver solution to wash the complete belt within one hour and forty-five minutes. All associated lines will also wash as part of this CIP with the exception of the whey line going to the pre-draw tanks. This line will wash with the whey area CIP system.

Curd from the DMM will fill the salting belt using gravity. Three fixed teardrop style salt applications will apply salt when needed. The quantity needed will be derived from a measurement of the curd depth. After salting, the curd is blown over to a curd distributor. The curd distributor then sends the curd to the tower area using vacuum pumps located in the tower area. When multiple Block formers are used (more then 3), a curd distribution tank is beneficial. It gives an unbiased and equal distribution, resulting in a quick curd pick-up and a good uniform Block former operation.

The tower area will use an eight (8) Tetra Tebel-6.0 40 lb block towers. These towers will be set up as 2 banks of 4 with a dual vacuum sealing and transfer system feeding to the 40 lb. packaging line. The tower sizing is based on an approximate capacity of approximately 3,500 pph producing finished 40-pound blocks.

When 640 lb blocks are needed, the 40 pound blocks will be diverted from the 40 lb. tower lines to the 640 lb line where the 40 lb blocks are re-crumbled, mixed and filled into 640 lb boxes, under vacuum to form the 640 lb blocks. This system will have its own conveyors, accumulators & palletizers.

6. Cheese packaging area

Tetra Pak will deliver a 40-pound cheese block packaging system from the tower discharge which includes indexing conveyors, cooling tunnel, palletize, labeling and Stretch wrapper.

The cheese packaging equipment will include an individual dedicated Programmable Logic Controllers (PLCs) for operational control. Each PLC will be located in respective electro-pneumatic control cabinets. Equipment that does not include a respective PLC will have the ability to be integrated into the core control system PLC.

7. Whey pre-Treatment area

Raw whey from the DMM and salt whey area will be pumped to one of two unclarified whey tanks. The unclarified whey tanks, DMM whey line, and cheese towers whey line will wash with the whey CIP system where as the line from the salting belt will wash with the belt CIP system.

The line going to the clarifier will wash with the clarifier/ separator CIP circuit. At this point salt whey from the towers and salting belt will be collected and mixed with all whey in the unclarified whey silos.

The raw whey from the unclarified tanks will have the remaining cheese fines removed by passing through the two clarifiers.

Clarified raw whey will be sent to two separators to completely skim all cream from the finished whey product.

The sludge line will wash with the whey CIP system. The two separators skim balance tank, and associated lines will wash with the clarifier/ separator CIP circuit.

From the separators, raw whey will enter the whey HTST at approximately 100°F and will be pre-heated to up to 135°F using either the regeneration section or the heater section. After pre-heating, a bleaching agent will be added from a 150 gallon balance tank using a diaphragm pump. The bleaching agent requires 50-60 minutes to work properly.

The whey cream batch pasteurizers will be set up to receive whey cream from the separators via a small 20 gallon surge tank. The pasteurized whey cream will then be transferred to the cream silos located in the raw milk area.

8. Whey HTST area

The whey HTST is designed to handle approximately 176,000 pounds per hour of raw whey. The first section the raw whey will pass through the first regeneration section to capture as much pre-heating on the raw whey side as possible. In order to control the outlet raw whey temperature to the bleaching silos, a pasteurized whey tempering bypass valve has been added. When the regeneration section is not being utilized a heater will ensure the proper bleaching temperature is achieved. After these first two sections, the raw whey is sent to the bleaching silos to hold for 50-60 minutes. Once the whey has been bleached, it is sent to the whey HTST legal balance tank. Out of the legal balance tank the raw whey will enter the first regeneration section and then on through the heater where the whey will be heated to 165°F for pasteurization. After pasteurization a heat recovery section will be utilized to capture extra energy from the milk HTST. The final section will be a trim cooler to ensure all pasteurized whey leaving the HTST is around 60°F.

The raw whey HTST will be cleaned by using a CIP jumper line routed through the whey CIP area to pick up required chemicals.

9. Whey Area Membranes and Spray dryers

This part of the process is a dry process and will include one 13.66 MMTBu/hr Whey Dryer and one 26.52 MMBtu/hr Permeate Dryer.

The whey membrane area will be setup to produce WPC80, WPI90, and Permeate powders.

To produce WPC80 powder, whey will feed direct from the whey HTST to a large ultra-filtration system. This UF will produce WPC80 that will be stored in two (2) 15,000 gallon silos. From the silos, the WPC80 will pass through a nano-filtration system prior to feeding the WPC80 spray dryer.

The protein powder will be stored in three (3) Powder silos. The WPC packaging line includes milling, sifting, bagging, sealing and palletizer.

The Permeate from the milk UF and whey UF will combine in three (3) 60,000 gallon silos. Permeate will feed a reverse-osmosis system, evaporator, crystallizer, spray dryer and fluidized bed to produce the permeate powder. The packaging line estimate includes milling and bulk bagging operations. Both a dust control system and CIP have been included for both dryers.

A polisher has also been included to produce cow water from the reverse osmosis permeate.

10. Finished product Silos

Water from the Polisher and Evaporator will route to UV water pasteurizers and then to four (4) 70,000 gallon silos. CIP of the evaporator line, polisher line, four (4) water silos, and water header will all be setup to wash with the whey CIP system.

The two (2) 40,000 gallon slops silos will be used to store high solids coming from the separator area. CIP of all lines and silos will wash with the whey CIP system.

V. Equipment Listing

S-8594-1-0

90.8 MMBTU/HR CLEAVER BROOKS MODEL CBEX ELITE NATURAL GAS-FIRED BOILER (OR EQUIVALENT) WITH SELECTIVE CATALYTIC REDUCTION

S-8594-2-0

90.8 MMBTU/HR CLEAVER BROOKS MODEL CBEX ELITE NATURAL GAS-FIRED BOILER (OR EQUIVALENT) WITH SELECTIVE CATALYTIC REDUCTION

S-8594-3-0

90.8 MMBTU/HR CLEAVER BROOKS MODEL CBEX ELITE NATURAL GAS-FIRED BOILER (OR EQUIVALENT) WITH SELECTIVE CATALYTIC REDUCTION

S-8594-4-0

13.66 MMBTU/HR NATURAL GAS FIRED TETRA PAK MAGNA WIDE BODY WHEY DRYER VENTED TO BAGHOUSE OR EQUIVALENT

S-8594-5-0

26.52 MMBTU/HR NATURAL GAS FIRED RELCO L-TECH PERMEATE DRYER VENTED TO TWO BAGHOUSES. OR EQUIVALENT

S-8594-6-0

308 HP EPA-CERTIFIED NATURAL GAS-FIRED GENERAC MODEL MG200 EMERGENCY STANDBY INTERNAL COMBUSTION ENGINE POWERING AN ELECTRICAL GENERATOR OR EQUIVALENT.

S-8594-8-0

510 BHP JOHN DEERE 6135H TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN EMERGENCY FIREWATER PUMP ENGINE OR EQUIVALENT

S-8594-9-0

UP TO 37,500 GALLON MILK PRODUCTS POWDER STORAGE SILO SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER, OR EQUIVALENT WITH ENCLOSED CONVEYING SYSTEM

S-8594-10-0

UP TO 37,500 GALLON MILK PRODUCTS POWDER STORAGE SILO SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER, OR EQUIVALENT WITH ENCLOSED CONVEYING SYSTEM OR EQUIVALENT

S-8594-11-0

UP TO 37,500 GALLON MILK PRODUCTS POWDER STORAGE SILO SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER, OR EQUIVALENT WITH ENCLOSED CONVEYING SYSTEM OR EQUIVALENT

S-8594-12-0

UP TO 37,500 GALLON MILK PRODUCTS POWDER STORAGE SILO SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER, OR EQUIVALENT WITH ENCLOSED CONVEYING SYSTEM OR EQUIVALENT

S-8594-13-0

UP TO 3,750 GALLON MILK PRODUCTS BAGGING OPERATION WITH HOPPER SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER, OR EQUIVALENT

S-8594-14-0

UP TO 3,750 GALLON MILK PRODUCTS BAGGING OPERATION WITH HOPPER SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER, OR EQUIVALENT

S-8594-15-0

UP TO 3,750 GALLON MILK PRODUCTS BAGGING OPERATION WITH HOPPER SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER, OR EQUIVALENT

S-8594-16-0

UP TO 3,750 GALLON MILK PRODUCTS BAGGING OPERATION WITH HOPPER SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER, OR EQUIVALENT.

As per District policy APR 1035 Flexibility in Equipment Descriptions in ATCs, some flexibility in the final specifications of the equipment is requested and will be allowed as stated in the following ATC conditions:

The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Y

The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Y

Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Y

No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Y

VI. Emission Control Technology Evaluation

Pursuant to Rule 2201 Subsection 4.1.1, BACT is required for all criteria pollutants emitted by a new emissions unit with a Potential to Emit greater than 2 lb/day, or any new emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification.

S-8594-1 through -3 Boilers

The boilers will be fired on natural gas and be equipped with SCR to limit the NOx emissions to 5 ppmvd at 3% O2.

S-8594-4 and '-5 Whey and Permeate Dryers

The dryers will be fired on natural gas and will be equipped with low NO_x burners limiting NO_x emissions to 5 ppmvd at 3% O₂ and will vent to baghouses for control of PM₁₀ emissions. The baghouse control efficiency is expected to be 99%.

S-8594-6 Natural Gas Fired Emergency IC Engine

The emergency generator will be powered by a EPA-Certified, lean burn natural gas fired engine equipped with a catalyst with NO_x and VOC emissions both less than 1.0 g/bhp-hr.

S-8594-8 Diesel Fired IC Engine (Firewater Pump)

The engine is equipped with:

- Turbocharger
- Intercooler/aftercooler
- This engine is required to be, and is UL certified (EPA Certified Tier 3)
- Catalytic particulate filter
- Very Low (0.0015%) sulfur diesel

The emission control devices/technologies and their effect on diesel engine emissions detailed below are from *Non-catalytic NO_x Control of Stationary Diesel Engines*, by Don Koeberlein, CARB.

The turbocharger reduces the NO_x emission rate from the engine by approximately 10% by increasing the efficiency and promoting more complete burning of the fuel.

The intercooler/aftercooler functions in conjunction with the turbocharger to reduce the inlet air temperature. By reducing the inlet air temperature, the peak combustion temperature is lowered, which reduces the formation of thermal NO_x. NO_x emissions are reduced by approximately 15% with this control technology.

The use of very low-sulfur diesel fuel (0.0015% by weight sulfur maximum) reduces SO_x emissions by over 99% from standard diesel fuel.

The engine is EPA certified Tier 3.

S-8594-9 through '-15 Milk Silos and Bagging Hoppers

The storage silos and bagging operations will be controlled by bin vents with an expected PM₁₀ control efficiency of 99%.

VII. General Calculations

A. Assumptions

- Daily fuel usage for each boiler and dryer is based on 24 hours/day operation.
- Natural gas HHV is 1,000 Btu/scf

- Natural gas F-factor is 8,578 dscf/MMBtu, per EPA Method 19, Table 19-2

S-8594-1 through '-3

- Annual fuel usage for the boilers and dryers is as follows:
 - Combined boiler fuel usage: 3,936 MMBtu/day, 1,541,493 MMBtu/yr

S-8594-4 Whey Dryer

- Whey throughput: 27 tons/day, 6,030 tons/yr
- Whey dryer: 72,740 MMBtu/yr
- Whey baghouse: 47,079 scfm

S-8594-5 Permeate Dryer

- Permeate throughput: 232 tons/day, 51,484 tons/yr
- Permeate Dryer: 141,219 MMBtu/yr
- Permeate baghouses combined flowrate: 129,091 scfm

S-8594-6 NaturalGas fired IC Engine

- Natural gas fired emergency engine will each operate no more than 24 hr/day, 100 hr/yr for testing and maintenance.

S-8594-8 Diesel Fired FireWater Pump IC Engine

- Diesel fired emergency firewater pump engine will operate no more than 20 hr/yr for testing and maintenance. For the BACT analysis the engine is assumed to operate 24 hr/day.

S-8694-9 through '-16 Storage Silos and Bagging Operations with Hoppers

PM-10 Emissions are based on storage of combined throughput of Permeate and/or Whey, with a combined (SLC) throughput of 259 tons/day, 57,514 tons/yr for each the two groups of S-8594-9 through '-12 and '-14 through '-16.

B. Emission factors

S-8594-1-through '-3 boilers

Pollutant	Emission Factor	Unit	Source
NOx	5, 0.0061	ppmv @3%O ₂ , lb/MMBtu	SCR Manufacturer Guarantee, based on 5 ppmv @ 3% O ₂
SOx	0.00185	lb/MMBtu	District Standard for natural gas
PM10	0.0076	lb/MMBtu	AP-42 Chapter 1.4, 2-5-14 email
CO	50, 0.037	ppmv @ 3% O ₂ , lb/MMBtu	Boiler Manufacturer Guarantee
VOC	9, 0.0038	ppm, lb/MMBtu	Boiler Manufacturer Guarantee

$$\begin{aligned}
 &*(5 \text{ ft}^3/10^6 \text{ ft}^3 @ 3\% \text{ O}_2 \times [(20.9 - 0)/(20.9 - 3)] \text{ ft}^3 @ 19\% \text{ O}_2) / \text{ft}^3 @ 0\% \text{ O}_2 \\
 &\times 8,578 \text{ ft}^3 @ 0\% \text{ O}_2/\text{MMBtu} \times (46 \text{ lb/lbmol})(\text{lbmol}/379.5 \text{ scf}) = \underline{0.0061 \text{ lb/MMBtu}} \\
 &(50 \text{ ft}^3/10^6 \text{ ft}^3 @ 3\% \text{ O}_2 \times [(20.9 - 0)/(20.9 - 3)] \text{ ft}^3 @ 19\% \text{ O}_2) / \text{ft}^3 @ 0\% \text{ O}_2 \\
 &\times 8,578 \text{ ft}^3 @ 0\% \text{ O}_2/\text{MMBtu} \times (28 \text{ lb/lbmol})(\text{lbmol}/379.5 \text{ scf}) = \underline{0.037 \text{ lb/MMBtu}}
 \end{aligned}$$

S-8594-4, '-5 whey and permeate dryers

Pollutant	Emission Factor	Unit	Source
NOx*	5, 0.0061	ppmv @3%O ₂ , lb/MMBtu	Burner Manufacturer Guarantee
SOx	0.00185	lb/MMScf	District Standard for natural gas
PM10	0.0076	lb/MMBtu	AP-42 Chapter 1.4
CO*	210, 0.155	ppmv @ 3% O ₂ , lb/MMBtu	Burner Manufacturer Guarantee
VOC	0.0055	lb/MMBtu	AP-42 Chapter 1.4

$$\begin{aligned}
 &*(5 \text{ ft}^3/10^6 \text{ ft}^3 @ 3\% \text{ O}_2 \times [(20.9 - 0)/(20.9 - 3)] \text{ ft}^3 @ 19\% \text{ O}_2) / \text{ft}^3 @ 0\% \text{ O}_2 \\
 &\times 8,578 \text{ ft}^3 @ 0\% \text{ O}_2/\text{MMBtu} \times (46 \text{ lb/lbmol})(\text{lbmol}/379.5 \text{ scf}) = \underline{0.0061 \text{ lb/MMBtu}} \\
 &(210 \text{ ft}^3/10^6 \text{ ft}^3 @ 3\% \text{ O}_2 \times [(20.9 - 0)/(20.9 - 3)] \text{ ft}^3 @ 19\% \text{ O}_2) / \text{ft}^3 @ 0\% \text{ O}_2 \\
 &\times 8,578 \text{ ft}^3 @ 0\% \text{ O}_2/\text{MMBtu} \times (28 \text{ lb/lbmol})(\text{lbmol}/379.5 \text{ scf}) = \underline{0.155 \text{ lb/MMBtu}}
 \end{aligned}$$

Note that concentration permit limits for '-4 and '-5 corrected to 19% O₂ are

$$5 \times [(20.9 - 19)/(20.9 - 3)] = \underline{0.1 \text{ ppmv @ 19\% O}_2}$$

$$210 \times [(20.9 - 19)/(20.9 - 3)] = \underline{22.3 \text{ ppmv @ 19\% O}_2}$$

S-8594-4 Whey Dryer Baghouse

Pollutant	Emission Factor	Unit	Source
PM10	0.0012	gr/dscf	Baghouse Manufacturer Guarantee

S-8594-5 Permeate Dryer Baghouse

Pollutant	Emission Factor	Unit	Source
PM10	0.0007	gr/dscf	Baghouse Manufacturer Guarantee

S-8594-6 308 bhp Natural Gas Emergency Generator

Pollutant	Emission Factor	Unit	Source
NOx	0.130	g/hp-hr	Manufacturer emission factor
SOx	0.00185	lb/MMBtu	AP-42 Chapter 3.2
PM10	0.0002	lb/MMBtu	AP-42 Chapter 3.2
CO	0.530	g/hp-hr	Manufacturer emission factor
VOC	0.530	g/hp-hr	Manufacturer emission factor

$$0.00185 \frac{lb - SO_x}{MMBtu} \times \frac{1 MMBtu}{1,000,000 Btu} \times \frac{2,542.5 Btu}{bhp - hr} \times \frac{1 bhp input}{0.35 bhp out} \times \frac{453.6 g}{lb} = 0.0061 \frac{g - SO_x}{bhp - hr}$$

$$0.0002 \frac{lb - PM10_x}{MMBtu} \times \frac{1 MMBtu}{1,000,000 Btu} \times \frac{2,542.5 Btu}{bhp - hr} \times \frac{1 bhp input}{0.35 bhp out} \times \frac{453.6 g}{lb} = 0.000659 \frac{g - PM10_x}{bhp - hr}$$

S-8594-8 510 bhp Diesel Emergency Generator Emission Factors

Pollutant	Emission Factor	Unit	Source
Nox	2.461	g/hp-hr	EPA Certification
Sox	0.0051	g/hp-hr	Based on sulfur content of low sulfur diesel (15 ppm).
PM10	0.074571	g/hp-hr	EPA Certification
CO	0.447	g/hp-hr	EPA Certification
VOC	0.075	g/hp-hr	EPA Certification

$$\frac{0.000015 lb - S}{lb - fuel} \times \frac{7.1 lb - fuel}{gallon} \times \frac{2 lb - SO_2}{1 lb - S} \times \frac{1 gal}{137,000 Btu} \times \frac{1 bhp input}{0.35 bhp out} \times \frac{2,542.5 Btu}{bhp - hr} \times \frac{453.6 g}{lb} = 0.0051 \frac{g - SO_x}{bhp - hr}$$

S-8694-9 through '-12 Storage Silos

Emissions Factor: 0.015 lb/ton

S-8694-13 through '-16 Bagging Operations

Emissions Factor: 0.004 lb/ton

C. Calculations

S-8594-1-0 through '-6-0, '-8-0 through '-16-0

1. Pre-Project Potential to Emit (PE1)

Since these are a new emissions units, PE1 = 0 for all pollutants.

2. Post Project Potential to Emit (PE2)

S-8594-1 through '-3 boilers (combined annual emissions)

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO_x	0.006	90.8	24	13.3
SO_x	0.00285	90.8	24	6.2
PM₁₀	0.0076	90.8	24	16.6
CO	0.037	90.8	24	80.6
VOC	0.0038	90.8	24	8.3

Pollutant	Annual PE2		
	EF2 (lb/MMBtu)	Heat Input (MMBtu/year)	Annual PE2 (lb/year)
NO_x	0.006	1,184,245	7,224
SO_x	0.00285	1,184,245	3,375
PM₁₀	0.0076	1,184,245	9,000
CO	0.037	1,184,245	43,817
VOC	0.0038	1,184,245	4,500

S-8594-4 13.66 MMBtu/hr Whey Dryer

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO_x	0.006	13.66	24	2.0
SO_x	0.00285	13.66	24	0.9
PM₁₀	0.0076	13.66	24	2.5
CO	0.155	13.66	24	50.8
VOC	0.0055	13.66	24	1.8

Pollutant	Annual PE2		
	EF2 (lb/MMBtu)	Heat Input (MMBtu/year)	Annual PE2 (lb/year)
NO_x	0.006	72,740	444
SO_x	0.00285	72,740	207
PM₁₀	0.0076	72,740	553
CO	0.155	72,740	11,275
VOC	0.0055	72,740	400

Whey baghouse

$0.0012 \text{ gr/scf} \times 47,079 \text{ scf/min} \times \text{lb}/7000 \text{ gr} \times 1440 \text{ min/day} = 11.62 \text{ lb/day} (4,241 \text{ lb/yr})$

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	2.0	444
SO _x	0.9	207
PM ₁₀	2.5 + 11.6 = 14.1	553 + 4,241 = 4,794
CO	50.8	11,275
VOC	1.8	400

S-8594-5 26.52 MMBtu/hr Permeate Dryer

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO_x	0.006	26.52	24	3.9
SO_x	0.00285	26.52	24	1.8
PM₁₀	0.0076	26.52	24	4.8
CO	0.155	26.52	24	98.7
VOC	0.0055	26.52	24	3.5

Pollutant	Annual PE2		
	EF2 (lb/MMBtu)	Heat Input (MMBtu/year)	Annual PE2 (lb/year)
NO_x	0.006	141,219	861
SO_x	0.00285	141,219	402
PM₁₀	0.0076	141,219	1,073
CO	0.155	141,219	21,889
VOC	0.0055	141,219	777

Permeate baghouse

$$0.0007 \text{ gr/scf} \times 129,091 \text{ scf/min} \times \text{lb}/7000 \text{ gr} \times 1440 \text{ min/day} = 18.6 \text{ lb/day} (6,785 \text{ lb/yr})$$

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	3.9	861
SO _x	1.8	402
PM ₁₀	4.8 + 18.6 = 23.4	1,073 + 6,785 = 7,858
CO	98.7	21,889
VOC	3.5	777

S-8594-6, 308 HP natural gas-fired IC engine

NOx: $0.130 \text{ g/hp-hr} \times 308 \text{ hp} \times 24 \text{ hr/day} \times \text{lb}/453.6 \text{ g} = 2.1 \text{ lb/day}$
 $0.130 \text{ g/hp-hr} \times 308 \text{ hp} \times 100 \text{ hr/yr} \times \text{lb}/453.6 \text{ g} = 9 \text{ lb/yr}$

SOx: $0.0061 \text{ g/hp-hr} \times 308 \text{ hp} \times 24 \text{ hr/day} \times \text{lb}/453.6 \text{ g} = 0.1 \text{ lb/day}$
 $0.0061 \text{ g/hp-hr} \times 308 \text{ hp} \times 100 \text{ hr/yr} \times \text{lb}/453.6 \text{ g} = 1 \text{ lb/yr}$

PM10: $0.000659 \text{ g/hp-hr} \times 308 \text{ hp} \times 24 \text{ hr/day} \times \text{lb}/453.6 \text{ g} = 0.0 \text{ lb/day}$
 $0.000659 \text{ g/hp-hr} \times 308 \text{ hp} \times 100 \text{ hr/yr} \times \text{lb}/453.6 \text{ g} = 1 \text{ lb/yr}$

CO: $0.530 \text{ g/hp-hr} \times 308 \text{ hp} \times 24 \text{ hr/day} \times \text{lb}/453.6 \text{ g} = 8.6 \text{ lb/day}$
 $0.530 \text{ g/hp-hr} \times 308 \text{ hp} \times 100 \text{ hr/yr} \times \text{lb}/453.6 \text{ g} = 36 \text{ lb/yr}$

VOC: $0.530 \text{ g/hp-hr} \times 308 \text{ hp} \times 24 \text{ hr/day} \times \text{lb}/453.6 \text{ g} = 8.6 \text{ lb/day}$
 $0.530 \text{ g/hp-hr} \times 308 \text{ hp} \times 100 \text{ hr/yr} \times \text{lb}/453.6 \text{ g} = 36 \text{ lb/yr}$

S-8574-8 Diesel Fired IC Engine

NOx: $2.461 \text{ g/hp-hr} \times 510 \text{ hp} \times 24 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 66.4 \text{ lb/day}$
 $2.461 \text{ g/hp-hr} \times 510 \text{ hp} \times 20 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 55 \text{ lb/yr}$

SOx: $0.0051 \text{ g/hp-hr} \times 510 \text{ hp} \times 24 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 0.1 \text{ lb/day}$
 $0.0051 \text{ g/hp-hr} \times 510 \text{ hp} \times 20 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 1 \text{ lb/yr}$

PM10: $0.074571 \text{ g/hp-hr} \times 510 \text{ hp} \times 24 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 2.0 \text{ lb/day}$
 $0.074571 \text{ g/hp-hr} \times 510 \text{ hp} \times 20 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 2 \text{ lb/yr}$

CO: $0.447 \text{ g/hp-hr} \times 510 \text{ hp} \times 24 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 12.1 \text{ lb/day}$
 $0.447 \text{ g/hp-hr} \times 510 \text{ hp} \times 20 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 10 \text{ lb/yr}$

VOC: $0.075 \text{ g/hp-hr} \times 510 \text{ hp} \times 24 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 2.0 \text{ lb/day}$
 $0.075 \text{ g/hp-hr} \times 510 \text{ hp} \times 20 \text{ hr/day(yr)} \times \text{lb}/453.6 \text{ g} = 2 \text{ lb/yr}$

S-8574-9 through '-13 Storage Silos (combined emissions)

PM10: $259 \text{ tons/day} \times 0.015 \text{ lb/ton} = 3.9 \text{ lb/day}$
 $57,514 \text{ tons/yr} \times 0.015 \text{ lb/ton} = 863 \text{ lb/yr}$

S-8574-13 through '-16 Bagging Operations (combined emissions)

PM10: $259 \text{ tons/day} \times 0.004 \text{ lb/ton} = 1.0 \text{ lb/day}$
 $57,514 \text{ tons/yr} \times 0.004 \text{ lb/ton} = 230 \text{ lb/yr}$

PE2										
Permit Unit	NO _x		SO _x		PM ₁₀		CO		VOC	
	lb/day	lb/yr	lb/day	lb/yr	lb/day	lb/yr	lb/day	lb/yr	lb/day	lb/yr
S-8574-1-0	13.3	7,224	6.2	3,375	16.6	9,000	80.6	43,817	8.3	4,500
S-8574-2-0	13.3		6.2		16.6		80.6		8.3	
S-8574-3-0	13.3		6.2		16.6		80.6		8.3	
S-8574-4-0	2.0	444	0.9	207	14.1	4,794	50.8	11,275	1.8	400
S-8574-5-0	3.9	861	1.8	402	23.4	7,858	98.7	21,889	3.5	777
S-8574-6-0	2.1	9	0.1	1	0	1	8.6	36	8.6	36
S-8574-8-0	66.4	55	0.1	1	2.0	2	12.1	10	2.0	2
S-8574-9-0	0	0	0	0	3.9	863	0	0	0	0
S-8574-10-0	0	0	0	0			0	0	0	0
S-8574-11-0	0	0	0	0			0	0	0	0
S-8574-12-0	0	0	0	0			0	0	0	0
S-8574-13-0	0	0	0	0	1.0	230	0	0	0	0
S-8574-14-0	0	0	0	0			0	0	0	0
S-8574-15-0	0	0	0	0			0	0	0	0
S-8574-16-0	0	0	0	0			0	0	0	0
Total		8,593		3,986		22,748		77,027		5,715

Emissions Profiles are included in **Attachment IV**.

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

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

Since this is a new facility, there are no valid ATCs, PTOs, or ERCs at the Stationary Source; therefore, the SSPE1 is equal to zero.

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

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

The SSPE 2 was calculated above and is listed in the following table:

SSPE2 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	8,593	3,986	22,748	77,027	5,715

5. Major Source Determination

Rule 2201 Major Source Determination:

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

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

Rule 2201 Major Source Determination (lb/year)						
	NO _x	SO _x	PM ₁₀	PM _{2.5}	CO	VOC
SSPE1	0	0	0	0	0	0
SSPE2	8,593	3,986	22,748	22,748	77,027	5,715
Major Source Threshold	20,000	140,000	140,000	200,000	200,000	20,000
Major Source?	No	No	No	No	No	No

Note: PM2.5 assumed to be equal to PM10

As seen in the table above, the facility is not an existing Major Source and is not becoming a Major Source as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Estimated Facility PE before Project Increase	0	0	0	0	0	0
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source ? (Y/N)	N	N	N	N	N	N

As shown above, the facility is not an existing PSD major source for any regulated NSR pollutant expected to be emitted at this facility.

6. Baseline Emissions (BE)

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

Pursuant to District Rule 2201, BE = PE1 for:

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

otherwise,

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

S-8594-1-0 through '-6-0, '-8-0 through '-16-0

Since these are new emissions units, BE = PE1 = 0 for all pollutants.

7. SB 288 Major Modification

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

Since this facility is not a major source for any of the pollutants addressed in this project, this project does not constitute an SB 288 major modification.

8. Federal Major Modification

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in the Federal Major Modification determination.

Since this facility is not a Major Source for any pollutants, this project does not constitute a Federal Major Modification. Additionally, since the facility is not a major source for PM₁₀ (140,000 lb/year), it is not a major source for PM_{2.5} (200,000 lb/year).

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

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

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10
- Sulfuric acid mist
- Hydrogen sulfide (H2S)
- Total reduced sulfur (including H2S)
- Reduced sulfur compounds
-

I. Project Emissions Increase - New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new major source subject to PSD requirements.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). The PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO2	VOC	SO2	CO	PM	PM10
Total PE from New and Modified Units	4.3	2.9	2.0	38.5	11.4	11.4
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	N	N	N	N	N	N

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

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. As the permit units are new QNEC = PE2/4.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

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

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

As seen in Section VII.C.2 above, the applicant is proposing to install boilers, dryers, IC engines, and silos. BACT is triggered for the following emissions units/pollutants:.

Permit Unit	PE2 (lb/day)					BACT*
	NO _x	SO _x	PM ₁₀	CO	VOC	
Boilers '1 thru '3	13.3	6.2	16.6	80.6	8.3	NO _x , SO _x , PM ₁₀ , VOCs
Whey Dryer '4	2.0	0.9	14.1	50.8	1.8	PM ₁₀
Permeate Dryer '5	3.9	1.8	23.4	98.7	3.5	NO _x , PM ₁₀ , VOCs
ICE '6 (gas emerg)	2.1	0.1	0	8.6	8.6	NO _x , VOCs
ICE '8 (diesel, firewater))	55.3	0.1	1.7	10.0	1.70	NO _x
'9 through '13 (each)	0	0	3.9	0	0	PM ₁₀
'13 through '16 (each)	0	0	1.0	0	0	

*BACT is not triggered for CO since the SSPE2 for CO is not greater than 200,000 lb/year, as demonstrated in Section VII.C.5 above.

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

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

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

As discussed in Section I above, there are no modified emissions units associated with this project. Therefore BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 and/or Federal Major Modification for NO_x emissions. Therefore BACT is not triggered for SB 288/Federal Major Modification purposes.

2. BACT Guideline – See Attachment V

S-8594-1 through '-3 Boilers (NO_x, SO_x, PM₁₀, VOCs)

The NO_x requirements of BACT Guideline 1.1.2 for this stationary source category is less stringent than Rule 4320 and has been rescinded. Compliance with the Rule 4320 NO_x limit, which is 5 ppmv NO_x @3% O₂, has the effect of satisfying BACT for this class and category of source.

S-8574-4 (PM₁₀) and '-5 Dryers (NO_x, PM₁₀, VOCs)

BACT Guideline 1.6.15 applies to Dryers – Milk Spray < 20 MMBtu/hr which is a similar stationary source category.

S-8574-6 Natural Gas Fired IC Engine (NO_x and VOCs)

BACT Guideline 3.1.8 applies to emergency gas-fired IC engines greater than or equal to 250 hp, lean burn.

S-8574-8 Diesel Emergency Firewater Pump Engine (NO_x, VOCs)

BACT Guideline 3.1.4 applies to Emergency Diesel I.C. Engines Driving a Fire Pump.

S-8574-9 through '-13 Storage Silos

BACT Guideline 8.4.1 applies to Dry Material Storage and Conveying Operation, 100 tons/day

3. Top-Down BACT Analysis – Attachment VI

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

S-8594-1 through '-3 Boilers

The boilers will be fired on natural gas and will be equipped with SCR to limit the NOx emissions to 5ppmv at 3% O2. This satisfies BACT for NOx, SOx, PM10, and VOCs.

S-8574-4 and '-5 Dryers

BACT for NOx, PM10, and VOCs (S-8574-4) has been satisfied with NOx emissions of 5 ppmv @ 3% O2, use of baghouses, and natural gas combustion, respectively.

S-8574-6 Natural Gas Fired IC Engine (NOx and VOCs)

BACT has been satisfied with use of EPA-Certified, lean-burn natural gas-fired engine with catalyst with NOx and VOC emissions both less than 1.0 g/bhp-hr.

S-8574-8 Diesel Emergency Firewater Pump Engine

BACT has been satisfied with certified NOx emissions of 6.9 g/bhp-hr or less. EPA certification is equivalent to positive crankcase ventilation for VOCs.

S-8574-9 through '-13 Storage Silos

BACT has been satisfied with (whey and permeate) storage silos and vacuum or pressure conveying (2-11-15 email) vented to fabric filter baghouse.

B. Offsets

1. Offset Applicability

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

7

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

Offset Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	8,593	3,986	22,748	77,027	5,715
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	No

2. Quantity of Offsets Required

As seen above, the SSPE2 is not greater than the offset thresholds for all the pollutants; therefore offset calculations are not necessary and offsets will not be required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSPE of greater than 20,000 lb/year for any pollutant.
- e. Any project which results in a Title V significant permit modification

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

New Major Sources are new facilities, which are also Major Sources. As shown in Section VII.C.5 above, the SSPE2 is not greater than the Major Source threshold for any pollutant. Therefore, public noticing is not required for this project for new Major Source purposes.

As demonstrated in Sections VII.C.7 and VII.C.8, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

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

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	0	8,593	20,000 lb/year	No
SO _x	0	3,986	54,750 lb/year	No
PM ₁₀	0	22,748	29,200 lb/year	No
CO	0	77,027	200,000 lb/year	No
VOC	0	5,715	20,000 lb/year	No

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

d. SSIPE > 20,000 lb/year

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

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	8,593	0	8,593	20,000 lb/year	No
SO _x	3,986	0	3,986	20,000 lb/year	No
PM ₁₀	22,748	0	22,748	20,000 lb/year	Yes
CO	77,027	0	77,027	20,000 lb/year	Yes
VOC	5,715	0	5,715	20,000 lb/year	No

As demonstrated above, the SSIPEs for PM10 and CO were greater than 20,000 lb/year; therefore public noticing for SSIPE purposes is required.

e. Title V Significant Permit Modification

Since this facility does not have a Title V operating, this change is not a Title V significant Modification, and therefore public noticing is not required.

2. Public Notice Action

As discussed above, public noticing is required for this project for PM10 and CO emissions excess of 20,000 lb/yr. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions:

S-8594-1 through '-3

Except during start-up and shutdown, emissions from this unit shall not exceed any of the following limits: 5 ppmvd NOx @ 3% O₂, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 210 ppmvd CO @ 3% O₂, or 0.0038 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] N

The ammonia emissions shall not exceed 10 ppmvd @ 3% O₂. [District Rule 4102] N

Combined heat input from boilers '-1 through '-3 shall not exceed 3,936 MMBtu/day nor 1,541,493 MMBtu/yr. [District Rule 2201]

S-8594-4 and '-5

Dryer shall combust natural gas only with a sulfur content not exceeding 1 gr S/100 scf. [District Rule 2201] N

Emissions dryer shall not exceed any of the following limits: 0.1 ppmv NOx @ 19% O₂, 0.0076 lb-PM₁₀/MMBtu, 22.3 ppmv CO @ 19% O₂, or 0.0055 lb-VOC/MMBtu. [District Rules 2201 and 4309] N

S-8494-6

For this emergency standby IC engine, the DELs are stated in the form of emission factors, the maximum engine horsepower rating, and the maximum operational time of 24 hours per day. Therefore, the following condition (previously proposed in this engineering evaluation) will be listed on the ATC to ensure compliance:

{3491} This IC engine shall be fired on Public Utility Commission (PUC) regulated natural gas only. [District Rules 2201 and 4801]

Emissions from this IC engine shall not exceed any of the following limits: 0.13 g-NO_x/bhp-hr, 0.000659 g-PM₁₀/bhp-hr, 0.53 g-CO/bhp-hr, or 0.53 g-VOC/bhp-hr. [District Rule 2201] N

S-8494-8

{3395} Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] N

Emissions from this IC engine shall not exceed any of the following limits: 2.461g-NO_x/bhp-hr, 0.447 g-CO/bhp-hr, or 0.075 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] N

Emissions from this IC engine shall not exceed 0.075 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] N

S-8498-9 through '-16

For the storage silos and bagging operations, the DELs will be stated in the form of PM₁₀ emission factors.

Emissions from the storage silo (bagging operation) shall not exceed 0.015 lb-PM₁₀/ton (0.004 lb-PM₁₀/ton)

Maximum combined throughput of whey and/or permeate to storage silos S-8594-9 through '-12 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201] N

Maximum combined throughput of whey and/or permeate to bagging operations S-8594-13 through '-16 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201] N

E. Compliance Assurance

1. Source Testing

Boilers S-8594-1 thru '-3

Startup source testing of the boilers '-1 through '3 and whey and permeate dryers '-4 and '-5 for NO_x, CO, and O₂ will be required to demonstrate compliance with Rules 2201, 4309 and 4320.

District Rule 4309 and 4320 require NO_x and CO emission testing not less than once every 12 months. Gaseous fuel fired units demonstrating compliance on two consecutive compliance source tests may defer the following source test for up to thirty-six months. The District Source Test Policy (APR 1705) requires annual testing for all pollutants controlled by catalysts. The control equipment will include a SCR system and ammonia slip is an indicator of how well the SCR system is performing.

Therefore, source testing for NO_x, CO, and ammonia will be required within 60 days of initial operation and at least once every 12 months thereafter. Upon demonstrating compliance on two consecutive source tests, the following source test may be deferred

for up to thirty-six months. Source testing for Rule 4320 also satisfies any source testing requirements for Rule 2201. No additional source testing is required.

2. Monitoring

District Rules 4309 and 4320 requires the owner of any unit equipped with NO_x reduction technology shall either install and maintain continuous emissions monitoring equipment for NO_x, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install and maintain APCO-approved alternate monitoring plan. Since the boiler will be equipped with a low NO_x burner and a selective catalytic reduction system, this requirement applies.

The applicant proposed to utilize pre-approve alternate monitoring plan "A" (Periodic Monitoring NO_x, CO, and O₂ Emissions Concentrations) to meet the requirements of District Rule 4320. Monitoring for Rule 4320 also satisfies the monitoring requirements for Rule 2201. No additional monitoring is required.

3. Recordkeeping

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

S-8594-1 through '-3

Records of the combined daily and annual natural gas consumption of boilers '-1 through '-3 in MMBtu/day and MMBtu/yr shall be maintained. [District Rules 1070, 2201 and 40 CFR 60.48c (g)] N

The applicant will also be required to keep records of all of the parameters that are required by the Rules 4309 and 4320 alternate monitoring requirements.

The permittee shall maintain records of the date and time of NO_x, CO, and O₂ measurements, the measured NO₂ and CO concentrations corrected to 3% O₂, and the O₂ concentration. The records must also include a description of any corrective action taken to maintain the emissions within the acceptable range. These records shall be maintained, retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 4320]

S-8594-4 and '-5

Records of annual fuel consumption in MMBtu/yr shall be maintained. [District Rules 1070 and 2201] N

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

S-8494-9 through '-16

Records of the combined whey and permeate throughput shall be maintained. [District Rule 2201]

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to **Attachment VII** of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO_x, CO, and SO_x. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO_x, CO, or SO_x.

The proposed location is in an attainment area for the state's PM₁₀ and nonattainment for federal and state PM_{2.5} thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM₁₀ and PM_{2.5}.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII. C. 9. above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60.

S-8594-1 through '-3

40 CFR Part 60, Subpart Dc applies to Small Industrial-Commercial-Industrial Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr (post-6/9/89 construction, modification or, reconstruction)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. 40 CFR Part 60, Subpart Dc applies to Small Industrial-Commercial-Industrial Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr (post-6/9/89 construction, modification or, reconstruction). Subpart Dc has standards for SO_x and PM₁₀. The 90.8 MMBtu/hr boilers are subject to Subpart Dc requirements.

60.42c – Standards for Sulfur Dioxide

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

60.43c – Standards for Particulate Matter

The boiler is not fired on coal, nor combusts mixtures of coal with other fuels, nor combusts wood, nor combusts mixture of wood with other fuels, nor oil; therefore it will not be subject to the requirements of this section.

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

Since the boiler in this project is not subject to the sulfur dioxide requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

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

Since the boiler in this project is not subject to the particulate matter requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

60.46c – Emission Monitoring for Sulfur Dioxide

Since the boiler in this project is not subject to the sulfur dioxide requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

60.47c – Emission Monitoring for Particulate Matter

Since the boiler in this project is not subject to the particulate matter requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the boiler generator in this project.

60.48c – Reporting and Recordingkeeping Requirements

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

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

The design heat input capacity and type of fuel combusted at the facility will be listed on the unit's equipment description. No conditions are required to show compliance with this requirement.

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

This requirement is not applicable since the unit is not subject to §60.42c or §40.43c.

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

The facility has not proposed an annual capacity factor; therefore one will not be required.

- (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator

This requirement is not applicable since the unit will not be equipped with an emerging technology used to control SO₂ emissions.

District Rule 4001, §3.0 defines the Administrator as the APCO of the District. The following condition ensures compliance:

- Permittee shall submit notification to the District of the date of construction, anticipated startup, and actual startup. Notifications shall be postmarked no later than 30 days after construction and 15 days after actual startup. The notifications shall include the design heat input and identification of fuels for this permit unit. [40 CFR 60.48c (a)]

Section 60.48c (g) states that the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The following conditions will be added to the permit to ensure compliance with this section.

- A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c (g)]
- Records of the combined annual natural gas consumption of boilers '-1 through '-3 in MMBtu/yr shall be maintained. [District Rules 1070, 2201 and 40 CFR 60.48c (g)]

Section 60.48c (i) states that all records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. District Rule 4320 requires that records be kept for five years. Compliance is ensured with the following condition:

- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, 4320, and 40 CFR 60.48c (i)]

Therefore, compliance with the requirements of this rule is expected.

S-8594-6 Emergency NG ICE

40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

The proposed emergency IC engine (ICE) is a 2013 EPA Certified natural gas-fired spark ignition emergency engines. The following requirements apply under Subpart JJJJ:

Standards:

§60.4233(e) – Table 1 emissions standards

Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) to comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.

For stationary emergency ICE > 25 HP the Table 1 limits are as follows:

NOx: 2 g/hp hr, CO 4 g/hp-hr, VOC 1 g/hp-hr (also for non-emergency ICE)

Monitoring/Testing:

§60.4243(a)(1) – for certified ICE and control device keep records of maintenance plan

§60.4244(a), (b), (c), (d) – source test procedures (for non certified engines)

§60.4237 (b)-install hour meter if ICE does not meet emissions standards for non emergency ICEs – not applicable

Applicant proposes the installation of a Certified SI ICE which will be in compliance with the above emission limits in Table 1 of this subpart, 40 CFR 60.4243(g) for catalyst, and 40 CFR 60.4243 (b)(1).

S-8594-8 Emergency Diesel Firewater Pump ICE

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

§60.4200 - Applicability

This subpart is applicable to owners and operators of stationary compression ignited internal combustion engines that commence construction after July 11, 2005, where the engines are:

- 1) Manufactured after April 1, 2006, if not a fire pump engine.
- 2) Manufactured as a National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

Since the proposed engine will be installed after July 11, 2005 and will be manufactured after April 1, 2006, this subpart applies.

The proposed diesel firewater pump engine is subject to this rule. Per §60.4205(c), Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must

comply with the emission standards in Table 4 to this subpart, for all pollutants. The proposed engine meets these requirements, therefore compliance with this rule is expected.

Table 4 Emissions Standards

NOx + VOCs: 3.0 g/hp-hr, PM: 0.15 g/hp-hr

Compliance with the above Subparts is expected.

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

The facility is not a major HAPs source and therefore the rule is not applicable.

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Subpart ZZZZ applies to stationary RICE at a major or area source of HAP emissions.

The District has not been delegated the authority to implement NESHAP regulations for Area Source requirements for non-Major Sources; therefore, no requirements shall be included on the permit(s).

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity).

S-8594-1 through '-5, 7

As the boilers, dryers, and gas fired emergency IC engine are fired solely on natural gas, visible emissions are not expected to exceed Ringelmann 1 or 20% opacity.

S-8594-8 diesel-fired IC engine

The following condition will be listed on the ATC to ensure compliance:

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

S-8594-9 through '-16

Visible emissions from the bin vents will be limited to not 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]

Compliance is expected.

Rule 4102 Nuisance

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, the following condition will be listed on the ATCs to ensure compliance:

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

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 - Risk Management Policy for Permitting New and Modified Sources (dated 3/2/01) specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (**Attachment VII**), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
S-8594-1-0 through '6-0, '8-0 through '16-0	2.71 per million	Yes

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is required for this project because the HRA indicates that the risk is above the District's thresholds for triggering T-BACT requirements.

For this project T-BACT is triggered for ICE S-8594-6 VOC emissions. T-BACT is satisfied as the ICE meets BACT for VOCs.

The following conditions are required for S-8594-8:

The PM10 emissions rate shall not exceed 0.075 g/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201]

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]

This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems". Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rules 2201 and 4702 and 17 CCR 93115] N

Rule 4201 Particulate Matter Concentration

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

Boilers and Dryers S-8594-1 through '-5

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

F-Factor for NG:	8,578 dscf/MMBtu at 60 °F
PM10 Emission Factor:	0.0076 lb-PM10/MMBtu
Percentage of PM as PM10 in Exhaust:	100%
Exhaust Oxygen (O ₂) Concentration:	3%
Excess Air Correction to F Factor =	$\frac{20.9}{(20.9 - 3)} = 1.17$

$$GL = \left(\frac{0.0076 \text{ lb-PM}}{\text{MMBtu}} \times \frac{7,000 \text{ grain}}{\text{lb-PM}} \right) / \left(\frac{8,578 \text{ ft}^3}{\text{MMBtu}} \times 1.17 \right)$$

$$GL = 0.0053 \text{ grain/dscf} < 0.1 \text{ grain/dscf}$$

IC Engines S-8594-6 and '-8

Rule 4201 limits particulate matter emissions from any single source operation to 0.1 g/dscf, which, as calculated below, is equivalent to a PM₁₀ emission factor of 0.4 g-PM₁₀/bhp-hr.

$$0.1 \frac{\text{grain-PM}}{\text{dscf}} \times \frac{\text{g}}{15.43 \text{ grain}} \times \frac{1 \text{ Btu}_{in}}{0.35 \text{ Btu}_{out}} \times \frac{9,051 \text{ dscf}}{10^6 \text{ Btu}} \times \frac{2,542.5 \text{ Btu}}{1 \text{ bhp-hr}} \times \frac{0.96 \text{ g-PM}_{10}}{1 \text{ g-PM}} = 0.4 \frac{\text{g-PM}_{10}}{\text{bhp-hr}}$$

Both '-6 and '-8 have PM₁₀ emission factors less than 0.4 g/bhp-hr.

Compliance is expected and the following condition will be listed on the ATCs:

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

Rule 4202 Particulate Matter Emission Rate

Rule 4202 establishes PM emission limits as a function of process weight rate in tons/hr as calculated by the following:

$$E = 3.59 P^{0.62} \text{ for } P \text{ less than or equal to } 30 \text{ tons/hr}$$

$$E = 17.31 P^{0.16} \text{ for } P \text{ greater than } 30 \text{ tons/hr}$$

where:

E = Emission in Pounds per hour.

P = Process weight rate in tons per hour.

The process weight rate is 4,000,000 pounds per day of milk, equivalent to 83 tons/hr. The allowable PM emission rate is $E = 17.31 * 83^{0.16} = 35 \text{ lb/hr}$. Assuming PM10 is 50% by wt PM the maximum allowable PM10 emissions are 17.5 lb/hr PM10 (140 lb/day, 8 hr day). The DELs (emission rates) of PM from the source operation are much less than this limit, therefore compliance with this rule is expected.

District Rule 4301 Fuel Burning Equipment

This rule specifies maximum emission rates in lb/hr for SO₂, NO₂, and combustion contaminants (defined as total PM in Rule 1020). This rule also limits combustion contaminants to $\leq 0.1 \text{ gr/scf}$. According to AP-42 (Table 1.4-2, footnote c), all PM emissions from natural gas combustion are less than 1 μm in diameter.

This rule applies to the boilers. The emission limits in this rule will be met, therefore compliance with this rule is expected.

Rule 4309 Dryers, Dehydrators, and Ovens

The purpose of this rule is to limit emissions of oxides of nitrogen (NO_x) and carbon monoxide (CO) from dryers, dehydrators, and ovens. This rule applies to any dryer, dehydrator, or oven that is fired on gaseous fuel, liquid fuel, or is fired on gaseous and liquid fuel sequentially, and the total rated heat input for the unit is 5.0 million British thermal units per hour (5.0 MMBtu/hr) or greater. Since the proposed dryers in this project have a heat input rating greater than 5.0 MMBtu, the dryer is subject to the requirements of this rule.

Section 5.0, Requirements

Section 5.0 states that all ppmv limits specified in this section are referenced at dry stack gas conditions and adjusted using an oxygen correction factor of 19% by volume.

Section 5.2 requires that except for dehydrators, NO_x and CO emissions shall not exceed the limits specified in the table below on and after the full compliance schedules specified in

Sections 7.1 and 7.3, as appropriate. All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 19 percent by volume stack gas oxygen. Emission concentrations shall be corrected to 19 percent oxygen in accordance with Section 5.0.

NO_x and CO Limits				
Process Description	NO _x Limit (in ppmv)		CO Limit (in ppmv)	
	Gaseous Fuel Fired	Liquid Fuel Fired	Gaseous Fuel Fired	Liquid Fuel Fired
Milk, Cheese, and Dairy Processing < 20 MMBtu/hr	3.5	3.5	42	42
Milk, Cheese, and Dairy Processing ≥ 20 MMBtu/hr	5.3	5.3	42	42

The proposed emissions limits of 5 ppmv NO_x @3% O₂ and 210 ppmv CO @ 3% O₂ are equivalent to

$$5 \times [(20.9 - 19)/(20.9 - 3)] = \underline{0.1 \text{ ppmv @ 19\% O}_2}$$

$$210 \times [(20.9 - 19)/(20.9 - 3)] = \underline{22.3 \text{ ppmv @ 19\% O}_2}$$

Compliance with above emissions limits is expected.

A permit condition listing the emissions limits will be listed on the permit as shown in the DEL section above.

Section 5.3 states that the applicable emission limits in Section 5.2 shall not apply during start-up or shutdown provided an operator complies with the requirements specified below.

The facility has not requested relaxed emission limit requirements for their unit during startup or shutdown, therefore this section does not apply to the unit in this project.

Section 5.4, Monitoring Requirements

Section 5.4.1 states that except for dehydrators, the operator of any unit subject to the applicable emission limits in Sections 4.3.2, or 5.2 shall monitor emissions using one of the techniques specified in Sections 5.4.1.1 or 5.4.1.2.

Section 5.4.1.1 states the first technique as the installation and maintenance of an APCO-approved CEMS for NO_x, and oxygen that meets the following requirements.

- 40 CFR Part 51, and
- 40 CFR Parts 60.7 and 60.13 (except subsection h), and
- 40 CFR Part 60 Appendix B (Performance Specifications), and
- 40 CFR Part 60 Appendix F (Quality Assurance Procedures), and
- The applicable provisions of District Rule 1080 (Stack Monitoring).
- The APCO shall only approve CEMS that meets the requirements of Sections 5.4.1.1.1 through 5.4.1.1.5 of this rule.

Section 5.4.1.2 states the second technique as the installation and maintenance of an alternate emissions monitoring method that meets the requirements of Sections 5.4.1.2.1 through 5.4.1.2.3 of this rule.

Section 5.4.1.2.1 states that the APCO shall not approve an alternative monitoring system unless it is documented that continued operation within ranges of specified emissions-related performance indicators or operational characteristics provides a reasonable assurance of compliance with applicable emission limits.

Section 5.4.1.2.2 states that the approved alternate emission monitoring system shall monitor operational characteristics necessary to assure compliance with the emission limit. Operational characteristics shall be one or more of the following:

- Periodic NO_x exhaust emission concentrations,
- Periodic exhaust oxygen concentration,
- Flow rate of reducing agent added to exhaust,
- Catalyst inlet and exhaust temperature,
- Catalyst inlet and exhaust oxygen concentration,
- Periodic flue gas recirculation rate,
- Other surrogate operating parameter(s) that demonstrate compliance with the emission limit.

Since the operation of the units subject to this rule are very similar to the operation of the units subject to the requirements of District Rule 4306, *Boilers, Steam Generators, and Process Heaters – Phase 3*, the pre-approved alternate monitoring plans in District Policy SSP-1105 will be considered approved alternate monitoring plans for District Rule 4309 compliance.

In order to satisfy the requirements of District Rule 4309, the applicant has proposed to use pre-approved alternate monitoring scheme A (pursuant to District Policy SSP-1105), which requires that monitoring of NO_x, CO, and O₂ exhaust concentrations shall be conducted at least once per month (in which a source test is not performed) using a portable analyzer. The following conditions will be incorporated into the permit in order to ensure compliance with the requirements of the proposed alternate monitoring plan:

The permittee shall monitor and record the stack concentration of NO_x, 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]

If either the NO_x or CO concentrations corrected to 19% 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 the performing the notification and testing required by this condition. [District Rule 4309]

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]

The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% 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 Rule 4309]

Section 5.5, Compliance Determination

Section 5.5.1 states that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the PTO.

Section 5.5.2 states that except for as provided in Section 5.5.3, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

The following condition will be added to the permit to assure compliance with Sections 5.5.1 and 5.5.2.

All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309]

Section 5.5.3 states that notwithstanding the requirements of Section 5.5.2, the APCO, ARB, and US EPA may approve a longer or shorter period before compliance determination, if an operator submits an application for a PTO condition which provides a justification for the requested duration.

Section 5.5.4 states that all CEMS emissions measurements shall be averaged over a period of 15 consecutive minutes to demonstrate compliance with the applicable emission limits of this rule. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule. The facility has not proposed to utilize a CEMS; therefore the requirements of this section are not applicable to the dryer in this project.

Section 5.5.5 states that for emissions monitoring pursuant to Section 5.4.1.2.2.1, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive-minute period.

The following condition will be added to the permit to assure compliance with this section.

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]

Section 5.5.6 states that for emissions source testing performed pursuant to Section 6.3.1 to determine compliance with an applicable emission limit of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the unit, even if the averaged emissions of all three test runs is less than the applicable limit. The following condition will be added to the permit to assure compliance with this section.

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 4309]

Section 6.1, Recordkeeping

Section 6.1.1 states the recordkeeping requirements of a unit that uses CEMS to monitor emissions. Since the applicant has not proposed a CEMS to monitor emissions, the requirements of this section do not apply to the unit in this project.

Section 6.1.2 states that operators using an alternate emissions monitoring system shall maintain the following records on a periodic basis:

- Total hours of operation.
- Type and quantity of fuel used during operations.
- Measurement for each surrogate parameter.
- Range of allowed values for each surrogate parameter.

- The period for recordkeeping shall be specified in the PTO conditions.

Section 6.1.3 only applies to dehydrators; therefore this section is not applicable to the unit in this project.

Section 6.1.4 states that the operator of a unit subject to Section 5.2 and performing start-up or shutdown of that unit shall keep records of the duration of each start-up and each shutdown. The facility has not proposed start-up or shutdown emissions for the dryer in this operation; therefore the requirements of this section do not apply to the dryer in this project.

Section 6.1.5 states the recordkeeping requirements of an operator of any unit operated under the exemption of Section 4.3.

Since the applicant has not applied for the exemption in Section 4.3, the requirements in this section do not apply to the dryer in this project.

Section 6.1.6 states the records and manufacturer's specifications required by Sections 6.1.1 through 6.1.5 shall meet all of the following requirements.

- The records shall be maintained for five (5) calendar years,
- The records shall be made available on-site during normal business hours, and
- The records shall be submitted to the APCO upon request.

The following condition will be added to the permit to assure compliance with this section.

All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4309]

Section 6.2, Test Methods

Section 6.2 lists the test methods required by the rule. In lieu of the test methods listed below the facility can utilize alternative APCO and US EPA approved test methods.

Pollutant	Units	Test Method Required
Fuel hhv	Fuel hhv shall be certified by third party fuel supplier or:	
	Liquid fuels	ASTM D 240-87 or D 2382-88
	Gaseous fuels	ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89
NO _x	ppmv	EPA Method 7E or ARB Method 100
CO	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O ₂	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4

The following permit conditions will be listed on the permit as follows:

NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309]

CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309]

Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309]

Section 6.3.2 states that each unit subject to the requirements in Sections 4.3, or 5.2 shall be initially source tested to determine compliance with the applicable emission limits not later than the applicable full compliance schedule specified in Section 7.0. Thereafter, each unit subject to Section 5.2 emission limits shall be source tested at least once every 24 months. Units subject to Section 5.2 and operating less than 50 days per calendar year shall follow the source test frequency prescribed in Section 6.3.3. The following condition will be added to the permit to assure compliance with this section.

Source testing to measure NO_x and CO emissions from this unit when fired on natural gas shall be conducted within 60 days of initial start-up and at least once every 24 months thereafter. [District Rules 2201 and 4309]

Section 6.3.5 states that the APCO shall be notified according to the provisions of Rule 1081 (Source Sampling). The following conditions will be added to the permit to assure compliance with this section.

{109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

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

Section 6.3.6 states that emissions source testing shall be conducted with the unit operating either at conditions representative of normal operations or conditions specified in the PTO. The requirements of this section will be satisfied by the condition listed in Sections 5.5.1 and 5.5.2 of this rule evaluation.

Section 6.3.7 states that all test results for NO_x and CO shall be reported in ppmv, corrected to dry stack conditions and adjusted using the oxygen correction factor. The following condition will be added to the permit to assure compliance with this section.

All test results for NO_x and CO shall be reported in ppmv @ 19% O₂, corrected to dry stack conditions. [District Rule 4309]

Section 6.3.8 states that for the purpose of determining compliance with an applicable emission limit, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply.

Section 6.3.9 states that if two of the three runs specified by Section 6.3.8 individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the unit, even if the averaged emissions of all three runs is less than the applicable limit.

The requirements of Sections 6.3.8 and 6.3.9 will be satisfied by the condition listed in Section 5.5.6 of this rule evaluation.

Section 6.4 lists the source testing requirements for asphalt/concrete plants. Since this facility is not an asphalt or concrete plant, the requirements of this section do not apply to the dryer in this project

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

The proposed boiler is propane-fired with a maximum heat input of 62.0 MMBtu/hr. Pursuant to Section 2.0 of District Rule 4305, the unit is subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters – Phase 2*.

In addition, the unit is also subject to District Rule 4306, *Boilers, Steam Generators and Process Heaters – Phase 3*.

Since emissions limits of District Rule 4306 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4306 requirements will satisfy requirements of District Rule 4305. Therefore, compliance with District Rule 4305 requirements is expected and no further discussion is required.

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

The proposed boilers are natural gas-fired with a maximum heat input of 90.8 MMBtu/hr. Pursuant to Section 2.0 of District Rule 4306, the unit is subject to District Rule 4306, *Boilers, Steam Generators and Process Heaters – Phase 3*.

In addition, the unit is also subject to District Rule 4320, *Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters Greater than 5 MMBtu/hr*

Since emissions limits of District Rule 4320 and all other requirements are equivalent or more stringent than District Rule 4306 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4306.

District Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters Greater than 5 MMBtu/hr

This rule limits NO_x, CO, SO₂ and PM₁₀ emissions from boilers, steam generators and process heaters rated greater than 5 MMBtu/hr. This rule also provides a compliance option of payment of fees in proportion to the actual amount of NO_x emitted over the previous year.

The unit in this project is rated at greater than 5 MMBtu/hr heat input and is subject to this rule.

Section 5.1 NOx Emission Limits

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

- 5.1.1 Operate the unit to comply with the emission limits specified in Sections 5.2 and 5.4; or
- 5.1.2 Pay an annual emissions fee to the District as specified in Section 5.3 and comply with the control requirements specified in Section 5.4; or
- 5.1.3 Comply with the applicable Low-use Unit requirements of Section 5.5.

Section 5.2.1 states that on and after the indicated Compliance Deadline, units shall not be operated in a manner which exceeds the applicable NOx limit specified in Table 1 of this rule, shown below. On and after October 1, 2008, units shall not be operated in a manner to which exceeds a carbon dioxide (CO) emissions limit of 400 ppmv.

Rule 4320 NOx Emission Limits			
Category	NOx Limit	Authority to Construct	Compliance Deadline
B. Units with a total rated heat input > 20.0 MMBtu/hr, except for Categories C through G units	a) Standard Schedule 7 ppmv or 0.008 lb/MMBtu; or	400 ppmv	40 ppmv or 0.052 lb/MMBtu
	b) Enhanced Schedule 5 ppmv or 0.0062 lb/MMBtu	January 1, 2013	January 1, 2014

The subject boiler will have a NOx limit of 5 ppmv @ 3% O₂ (0.0061 lb/MMBtu). Therefore, compliance with the rule emission requirements is expected.

Section 5.2.4 applies to units firing on a combination of gaseous and liquid fuels. The applicant is not proposing to fire on liquid fuels.

Section 5.4 Particulate Matter Control Requirements

Section 5.4.1 states that to limit particulate matter emissions, an operator shall comply with one of the options listed in the rule.

Section 5.4.1.1 provides option for the operator to comply with the rule by firing the unit exclusively on PUC-quality gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases;

Section 5.4.1.2 provides option for the operator to comply with the rule by limiting the fuel sulfur content to no more than five (5) grains of total sulfur per hundred (100) standard cubic feet.

Section 5.4.1.3 provides option for the operator to comply with the rule by installing and properly operating an emissions control system that reduces SO₂ emissions by at least 95% by weight; or limit exhaust SO₂ to less than or equal to 9 ppmv corrected to 3 % O₂.

The boilers will be fired on PUC regulated natural gas. Compliance with this section of the rule is expected.

Section 5.5 Low-Use Unit

This section discusses the requirements of low-use units. The applicant is not requesting low-use status; therefore, this section of the rule is not applicable to this project.

Section 5.6 Startup and Shutdown Provisions

Section 5.6 states that on and after the full compliance deadline specified in Section 5.0, the applicable emission limits of Sections 5.2 Table 1 and 5.5.2 shall not apply during start-up or shutdown provided an operator complies with the requirements specified in Sections 5.6.1 through 5.6.5.

Emissions during start-up and shutdown will not be subject to the emission limits in Sections 5.2 and 5.2.2. The following conditions will be listed on the ATC:

- *Start-up: The period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 4305, 4306 and 4320]*
- *Shutdown: The period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 and 4320]*
- *Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 2201, 4305, 4306, and 4320]*

Section 5.7 Monitoring Provisions

Section 5.7.1 requires that permit units subject to District Rule 4320, Section 5.2 shall install and maintain an operational APCO approved Continuous Emission Monitoring System (CEMS) for NO_x, CO and O₂, or implement an APCO-approved alternate monitoring.

The applicant has proposed to implement Alternate Monitoring Scheme A (pursuant to District Policy SSP-1105), which requires periodic monitoring of NO_x, CO and O₂ concentrations. The conditions will be placed in the ATCs, as shown above for Rule 2201, to ensure compliance with the requirements of this alternate monitoring plan:

- *{4319} The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH₃ monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306 and 4320]*
- *{4320} If the NO_x, CO or NH₃ concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continues to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]*
- *{4321} All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]*
- *{4322} Ammonia emission readings shall be conducted at the time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 4305, 4306 and 4320]*

Section 5.7.6 requires monitoring SO_x emissions. The following condition will be placed in the ATCs to be in compliance with this rule requirement:

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

Section 5.8 Compliance Determination

Section 5.8.1 requires that the operator of any unit have the option of complying with either the applicable heat input (lb/MMBtu), emission limits or the concentration (ppmv) emission limits specified in Section 5.2. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling). Therefore, the following condition will be retained or listed on the ATCs as follows:

- *{4350} The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]*

Section 5.8.2 requires that 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. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0. Therefore, the following permit condition will be listed on the ATCs as follows:

- *{4351} 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. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 4306 and 4320]*

Section 5.8.4 requires that for emissions monitoring pursuant to Sections 5.7.1 and 6.3.1 using a portable NO_x analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive-minute period. Therefore, the following previously listed permit condition will be on the ATCs as follows:

- *{4321} All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]*

Section 5.8.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs

shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. Therefore, the following permit condition will be listed on the permit as follows:

- *{4352} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320]*

Section 6.1 Recordkeeping

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.5 shall be maintained for five calendar years and shall be made available to the APCO and EPA upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

A permit condition will be listed on the permits as follows:

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

Section 6.2, Test Methods

Section 6.2 identifies test methods to be used when determining compliance with the rule. The following existing permit conditions will be retained on the ATCs:

- *{109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]*
- *{4346} NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] N*
- *{4347} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] N*
- *{4348} Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] N*
- *Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 4102]*

Section 6.3, Compliance Testing

Section 6.3.1 requires that each unit subject to the requirements in Section 5.2 shall be source tested at least once every 12 months, except if two consecutive annual source tests demonstrate compliance, source testing may be performed every 36 months. If such a source test demonstrates non-compliance, source testing shall revert to every 12 months. The following conditions will be included in the appropriate ATCs:

- *Source testing to measure NO_x, CO, and NH₃ emissions from this unit while fired on natural gas shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320]*
- *Source testing to measure natural gas combustion NO_x, CO, and NH₃ emissions from this unit shall be conducted at least once every twelve months. After demonstrating compliance on two consecutive annual source tests when unit is fired on natural gas, 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 twelve months. [District Rules 2201, 4102, 4305, 4306, and 4320]*
- *{110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]*

Section 6.3.1.2 specifies tune-up requirements. The permittee will utilize pre-approved Alternate Monitoring Scheme "A" using a portable analyzer. Therefore, the tune-up requirements listed in Section 6.3.1.2 are not applicable. This section also requires that during the 36-month source testing interval, the owner/operator shall monitor monthly operational characteristics recommended by the unit manufacturer. Since the pre-approved alternate monitoring requires monthly monitoring of NO_x, CO and O₂ exhaust emission concentrations using a portable analyzer, the operational characteristics monitoring requirement is satisfied.

Conclusion

Conditions will be incorporated into the ATC in order to ensure compliance with each section of this rule. Therefore, compliance with District Rule 4320 requirements is expected.

Rule 4702 Internal Combustion Engines

The purpose of this rule is to limit the emissions of nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines.

This rule applies to any internal combustion engine with a rated brake horsepower greater than 50 horsepower.

S-8594-6 Gas-Fired

Pursuant to Section 4.2, except for the requirements of Sections 5.7 and 6.2.3, the requirements of this rule shall not apply to an internal combustion engine that meets the following condition:

- 1) An emergency standby engine as defined in Section 3.0 of this rule, and provided that it is operated with a nonresettable elapsed operating time meter. In lieu of a nonresettable time meter, the owner of an emergency engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Section 3.15 defines an "Emergency Standby Engine" as an internal combustion engine which operates as a temporary replacement for primary mechanical or electrical power during an unscheduled outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the operator. An engine shall be considered to be an emergency standby engine if it is used only for the following purposes: (1) periodic maintenance, periodic readiness testing, or readiness testing during and after repair work; (2) unscheduled outages, or to supply power while maintenance is performed or repairs are made to the primary power supply; and (3) if it is limited to operate 100 hours or less per calendar year for non-emergency purposes. An engine shall not be considered to be an emergency standby engine if it is used: (1) to reduce the demand for electrical power when normal electrical power line service has not failed, or (2) to produce power for the utility electrical distribution system, or (3) in conjunction with a voluntary utility demand reduction program or interruptible power contract.

Therefore, the emergency standby IC engine involved with this project will only have to meet the requirements of Sections 5.7 and 6.2.3 of this Rule.

Section 5.7 of this Rule requires that the owner of an emergency standby engine shall comply with the requirements specified in Section 5.7.2 through Section 5.7.5 below:

- 1) Properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier.
- 2) Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier.
- 3) Install and operate a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and is allowed by Permit-to-Operate or Stationary Equipment Registration condition. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

The following conditions will be listed on the ATC to ensure compliance:

- *{3405} This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]*
- *{3478} During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]*
- *{3404} This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]*
- *{3807} An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]*
- *{3808} This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]*
- *{3806} This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702]*

Section 6.2.3 requires that an owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and submitted to the APCO upon request and at the end of each calendar year in a manner and form approved by the APCO. Therefore, the following condition (previously proposed in this engineering evaluation) will be listed on the ATC to ensure compliance:

- *{3496} The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702]*
- *{3497} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702]*

S-8594-8

Pursuant to Section 4.3, except for the requirements of Section 6.2.3, the requirements of this rule shall not apply to an internal combustion engine that meets the following conditions:

- 1) The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood, and
- 2) Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed operating time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine, and
- 3) The engine is operated with a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Therefore, the emergency IC engine involved with this project will only have to meet the requirements of Section 6.2.3 of this Rule.

Section 6.2.3 requires that an owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and submitted to the APCO upon request and at the end of each calendar year in a manner and form approved by the APCO. Therefore, the following conditions will be listed on the ATC to ensure compliance:

- *{3816} This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702 and 17 CCR 93115]*
- *{3489} The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]*
- *{3475} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]*

In addition, the following conditions will be listed on the ATC to ensure compliance:

- {3404} This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
- {3807} An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]

Rule 4801 Sulfur Compounds

Rule 4801 requires that sulfur compound emissions (as SO₂) shall not exceed 0.2% by volume. Using the ideal gas equation, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = (n \times R \times T) \div P$$

n = moles SO₂

T (standard temperature) = 60 °F or 520 °R

$$R (\text{universal gas constant}) = \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}}$$

S-8594-6 Natural Gas-Fired IC Engine

$$2.85 \frac{\text{lb} - \text{S}}{\text{MMscf} - \text{gas}} \times \frac{1 \text{ scf} - \text{gas}}{1,000 \text{ Btu}} \times \frac{1 \text{ MMBtu}}{8,578 \text{ scf}} \times \frac{1 \text{ lb} - \text{mol}}{64 \text{ lb} - \text{S}} \times \frac{10.73 \text{ psi} - \text{ft}^3}{\text{lb} - \text{mol} - ^\circ\text{R}} \times \frac{520^\circ\text{R}}{14.7 \text{ psi}} \times 1,000,000 = 1.97 \text{ ppmv}$$

Since 1.97 ppmv is ≤ 2,000 ppmv, this engine is expected to comply with Rule 4801. Therefore, the following condition (previously proposed in this engineering evaluation) will be listed on the ATC to ensure compliance:

- {3491} This IC engine shall be fired on Public Utility Commission (PUC) regulated natural gas only. [District Rules 2201 and 4801]

S-8594-8 Diesel-Fired Firewater Pump IC Engine

$$\frac{0.000015 \text{ lb} - \text{S}}{\text{lb} - \text{fuel}} \times \frac{7.1 \text{ lb}}{\text{gal}} \times \frac{64 \text{ lb} - \text{SO}_2}{32 \text{ lb} - \text{S}} \times \frac{1 \text{ MMBtu}}{9,051 \text{ scf}} \times \frac{1 \text{ gal}}{0.137 \text{ MMBtu}} \times \frac{1 \text{ lb} - \text{mol}}{64 \text{ lb} - \text{SO}_2} \times \frac{10.73 \text{ psi} - \text{ft}^3}{\text{lb} - \text{mol} - ^\circ\text{R}} \times \frac{520^\circ\text{R}}{14.7 \text{ psi}} \times 1,000,000 = 1.0 \text{ ppmv}$$

Since 1.0 ppmv is ≤ 2,000 ppmv, this engine is expected to comply with Rule 4801. Therefore, the following condition (previously proposed in this engineering evaluation) will be listed on the ATC to ensure compliance:

- {3395} Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]

California Health & Safety Code 42301.6 (School Notice)

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

Title 13 California Code of Regulations (CCR), Section 2423 – Exhaust Emission Standards and Test Procedures, Off-Road Compression-Ignition Engines and Equipment (Required by Title 17 CCR, Section 93115 for New Emergency Diesel IC Engines)

Particulate Matter and VOC + NO_x, and CO Exhaust Emissions Standards:

This regulation stipulates that off-road compression-ignition engines shall not exceed the following applicable emissions standards.

Title 13 CCR, Section 2423 lists a diesel particulate emission standard of 0.15 g/bhp-hr (with 1.341 bhp/kW, equivalent to 0.20 g/kW-hr) for 2001 - 2005 model year engines with maximum power ratings of 301.7 - 603.4 bhp (equivalent to bhp 225 - 450 kW). The PM standards given in Title 13 CCR, Section 2423 are less stringent than the PM standards given in Title 17 CCR, Section 93115 (ATCM), thus the ATCM standards are the required standards and will be discussed in the following section.

Title 17 CCR, Section 93115, (e)(2)(A)(3)(b) stipulates that new stationary emergency diesel-fueled CI engines (> 50 bhp) must meet the VOC + NO_x, and CO standards for off-road engines of the same model year and maximum rated power as specified in the Off-Road Compression-Ignition Engine Standards (Title 13 CCR, Section 2423) or the Tier 1 standards for an off-road engine if no standards have been established for an off-road engine of the same model year and maximum rated power.

The engine involved with this project is a Tier 3 Certified 2014 model engine. The following table compares the requirements of Title 13 CCR, Section 2423 to the emissions factors for the 510 bhp John Deere 6135H Tier 3 diesel-fired emergency IC engine as given by the manufacturer.

Requirements of Title 13 CCR, Section 2423							
Source	Maximum Rated Power	Model Year	NO _x	VOC	NO _x + VOC	CO	PM
Title 13 CCR, §2423	301.7 – 603.4 bhp (225 - 450 kW)	1996-2001 (Tier 1)	6.9 g/bhp-hr (9.2 g/kW-hr)	1.0 g/bhp-hr (1.3 g/kW-hr)	--	8.5 g/bhp-hr (11.4 g/kW-hr)	0.40 g/bhp-hr (0.54 g/kW-hr)
Title 13 CCR, §2423	301.7 – 603.4 bhp (225 - 450 kW)	2001-2005 (Tier 2)	--	--	4.8 g/bhp-hr (6.4 g/kW-hr)	2.6 g/bhp-hr (3.5 g/kW-hr)	0.15 g/bhp-hr (0.20 g/kW-hr)
Title 13 CCR, §2423	301.7 – 603.4 bhp (225 - 450 kW)	2006 and later (Tier 3)	--	--	3.0 g/bhp-hr (4.0 g/kW-hr)	2.6 g/bhp-hr (3.5 g/kW-hr)	0.15 g/bhp-hr (0.20 g/kW-hr)
John Deere, 6135H Tier 3	510 bhp	2014	2.5 g/bhp-hr (3.3 g/kW-hr)	0.08 g/bhp-hr (0.1 g/kW-hr)	2.6 g/bhp-hr (3.4 g/kW-hr)	0.5 g/bhp-hr (0.6 g/kW-hr)	0.08 g/bhp-hr (0.1 g/kW-hr)
Meets Standard?			Yes	Yes	Yes	Yes	Yes

As presented in the table above, the proposed engine will satisfy the requirements of this section and compliance is expected.

Title 17 California Code of Regulations (CCR), Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines

Emergency Operating Requirements:

This regulation stipulates that no owner or operator shall operate any new or in-use stationary diesel-fueled compression ignition (CI) emergency standby engine, in response to the notification of an impending rotating outage, unless specific criteria are met.

This section applies to emergency standby IC engines that are permitted to operate during non-emergency conditions for the purpose of providing electrical power. However, District Rule 4702 states that emergency standby IC engines may only be operated during non-emergency conditions for the purposes of maintenance and testing. Therefore, this section does not apply and no further discussion is required.

Fuel and Fuel Additive Requirements:

This regulation also stipulates that as of January 1, 2006 an owner or operator of a new or in-use stationary diesel-fueled CI emergency standby engine shall fuel the engine with CARB Diesel Fuel.

Since the engine involved with this project is a new or in-use stationary diesel-fueled CI emergency standby engine, these fuel requirements are applicable. Therefore, the following condition (previously proposed in this engineering evaluation) will be listed on the ATC to ensure compliance:

- *{3395} Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]*

At-School and Near-School Provisions:

This regulation stipulates that no owner or operator shall operate a new stationary emergency diesel-fueled CI engine, with a PM₁₀ emissions factor > than 0.01 g/bhp-hr, for non-emergency use, including maintenance and testing, during the following periods:

1. Whenever there is a school sponsored activity, if the engine is located on school grounds, and
2. Between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds.

The District has verified that the engine is not located within 500 feet of a K-12 school. Therefore, conditions prohibiting non-emergency usage of the engine during school hours will not be placed on the permit.

Recordkeeping Requirements:

This regulation stipulates that as of January 1, 2005, each owner or operator of an emergency diesel-fueled CI engine shall keep a monthly log of usage that shall list and document the nature of use for each of the following:

- a. Emergency use hours of operation;
- b. Maintenance and testing hours of operation;
- c. Hours of operation for emission testing;
- d. Initial start-up hours; and
- e. If applicable, hours of operation to comply with the testing requirements of National Fire Protection Association (NFPA) 25 — “Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems,” 1998 edition;
- f. Hours of operation for all uses other than those specified in sections ‘a’ through ‘d’ above; and
- g. For in-use emergency diesel-fueled engines, the fuel used. The owner or operator shall document fuel use through the retention of fuel purchase records that account for all fuel used in the engine and all fuel purchased for use in the engine, and, at a minimum, contain the following information for each individual fuel purchase transaction:
 - I. Identification of the fuel purchased as either CARB Diesel, or an alternative diesel fuel that meets the requirements of the Verification Procedure, or an alternative fuel, or CARB Diesel fuel used with additives that meet the requirements of the Verification Procedure, or any combination of the above;
 - II. Amount of fuel purchased;
 - III. Date when the fuel was purchased;
 - IV. Signature of owner or operator or representative of owner or operator who received the fuel; and
 - V. Signature of fuel provider indicating fuel was delivered.

The proposed new emergency diesel IC engine powering a firewater pump is exempt from the operating hours limitation provided the engine is only operated the amount of hours necessary to satisfy National Fire Protection Association (NFPA) regulations. Therefore, the following

conditions (previously proposed in this engineering evaluation) will be listed on the ATC to ensure compliance:

- *{3489} The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]*
- *{3475} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]*

PM Emissions and Hours of Operation Requirements for New Diesel Engines:

This regulation stipulates that as of January 1, 2005, no person shall operate any new stationary emergency diesel-fueled CI engine that has a rated brake horsepower greater than 50, unless it meets all of the following applicable emission standards and operating requirements.

1. Emits diesel PM at a rate greater than 0.01 g/bhp-hr or less than or equal to 0.15 g/bhp-hr; or
2. Meets the current model year diesel PM standard specified in the Off-Road Compression Ignition Engine Standards for off-road engines with the same maximum rated power (Title 13 CCR, Section 2423), whichever is more stringent; and
3. Does not operate more than 50 hours per year for maintenance and testing purposes. Engine operation is not limited during emergency use and during emissions source testing to show compliance with the ATCM.

The proposed emergency diesel IC engine powering a firewater pump is exempt from the PM emissions rate limitation because the engine is rated at 301.7 to 603.4 bhp (as discussed previously in the Title 13 CCR, Section 2423 compliance section) and is also exempt from the operating hours limitation provided the engine is only operated the amount of hours necessary to satisfy National Fire Protection Association (NFPA) regulations. Therefore, the following conditions (previously proposed in this engineering evaluation) will be listed on the ATC to ensure compliance:

- *{edited 3486} Emissions from this IC engine shall not exceed 0.08 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]*
- *{3816} This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard*

for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115]

- *{3809} This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115]*

California Health & Safety Code 42301.6 (School Notice)

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

California Environmental Quality ACT (CEQA)

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

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

The City of Tulare (City) is the public agency having principal responsibility for approving the Project. As such, the City served as the Lead Agency for the project. On July 13, 2015, the City certified the Environmental Impact Report (EIR), finding that emissions from agriculture, traffic, electricity and natural gas, and cumulative impacts on agriculture would have a significant, unavoidable impact. The City approved the project and adopted a Statement of Overriding Consideration (SOC).

The District is a Responsible Agency for the project because of its discretionary approval power over the project via its Permits Rule (Rule 2010) and New Source Review Rule (Rule 2201), (CEQA Guidelines §15381). As a Responsible Agency the District complies with CEQA by considering the EIR prepared by the Lead Agency, and by reaching its own conclusion on whether and how to approve the project involved (CEQA Guidelines §15096). The District has considered the Final EIR certified by the City for the environmental effects of the stationary source project emissions regulated by the District.

Through a combination of project design elements, mitigation measures, compliance with applicable District rules and regulations, and compliance with District air permit conditions, it

has been determined that the impact on air quality from stationary source project emissions will be reduced to less than significant.

As a Responsible Agency the District is required to issue findings for significant air quality impacts detailed in the Lead Agency's EIR. The District has prepared its own findings, available at the District upon request, for each significant effect identified in the certified EIR for the project and concludes that the identified significant effects are not within the responsibilities and jurisdiction of the District. These significant effects have been or should have been addressed by the public agencies with the respective responsibilities and jurisdiction (CEQA Guidelines §15091 and §15096).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATC S-8594-1-0 through '-6-0, '-8-0 through '-16-0 subject to the permit conditions on the attached draft ATCs in **Attachment VIII**.

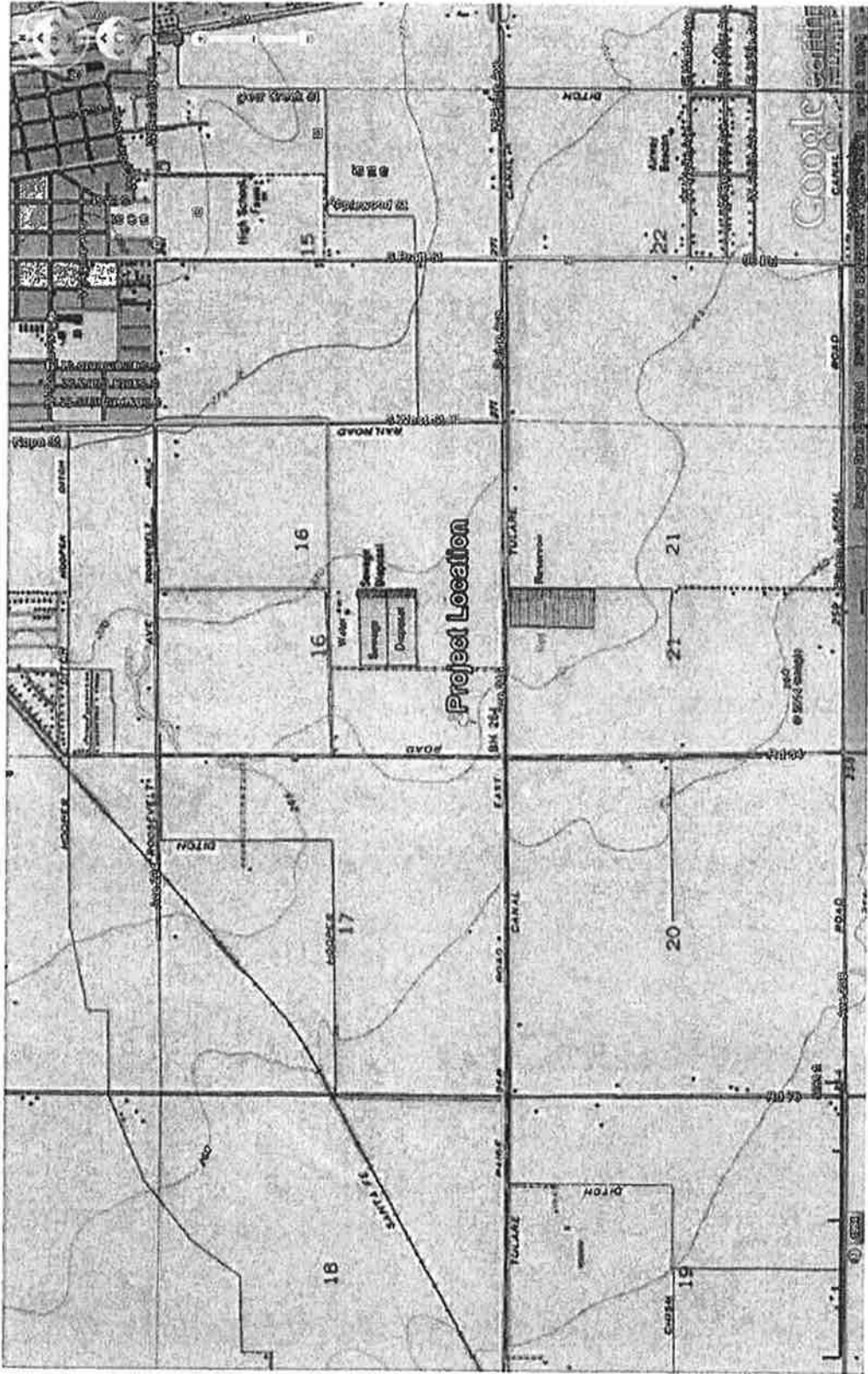
X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-8594-1	3020-02H	90.8 MMBtu/hr	\$1030.00
S-8594-2	3020-02H	90.8 MMBtu/hr	\$1030.00
S-8594-3	3020-02H	90.8 MMBtu/hr	\$1030.00
S-8594-4	3020-02G	13.66 MMBtu/hr	\$ 815.00
S-8594-5	3020-02H	26.52 MMBtu/hr	\$ 1030.00
S-8594-6	3020-10C	308 hp	\$ 240.00
S-8594-8	3020-10D	510 hp	\$ 479.00
S-8594-9 thru '-12	3020-05C	37,500 gallon	\$ 135.00
S-8594-13 thru '-16	3020-05A	3,750 gallons	\$ 75.00

Attachments

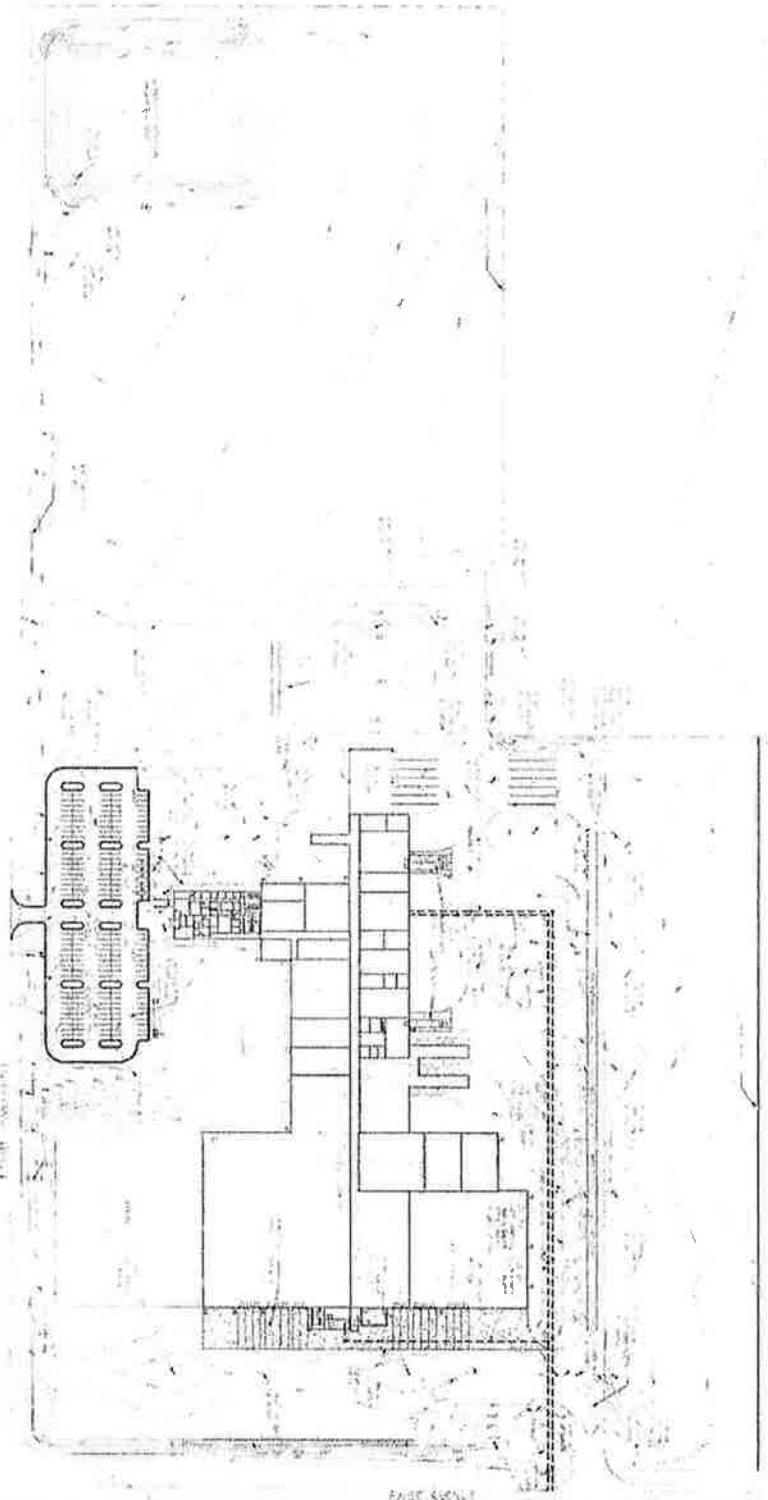
- I: Location Map
- II: Plot Plan
- III: Process Flow Diagram and Equipment Specifications
- IV: Emissions Profiles
- V: BACT Guideline
- VI: BACT Analyses
- VII: AAQA/HRA
- VIII: Draft ATCs

Attachment I
Location Map



Attachment II
Plot Plan

① 2014-01-15
1000 1000



PAGE 4/10

DATE: 01/15/14
SCALE: AS SHOWN
SHEET: 4/10

PROJECT NAME

CLIENT NAME

PROJECT ADDRESS

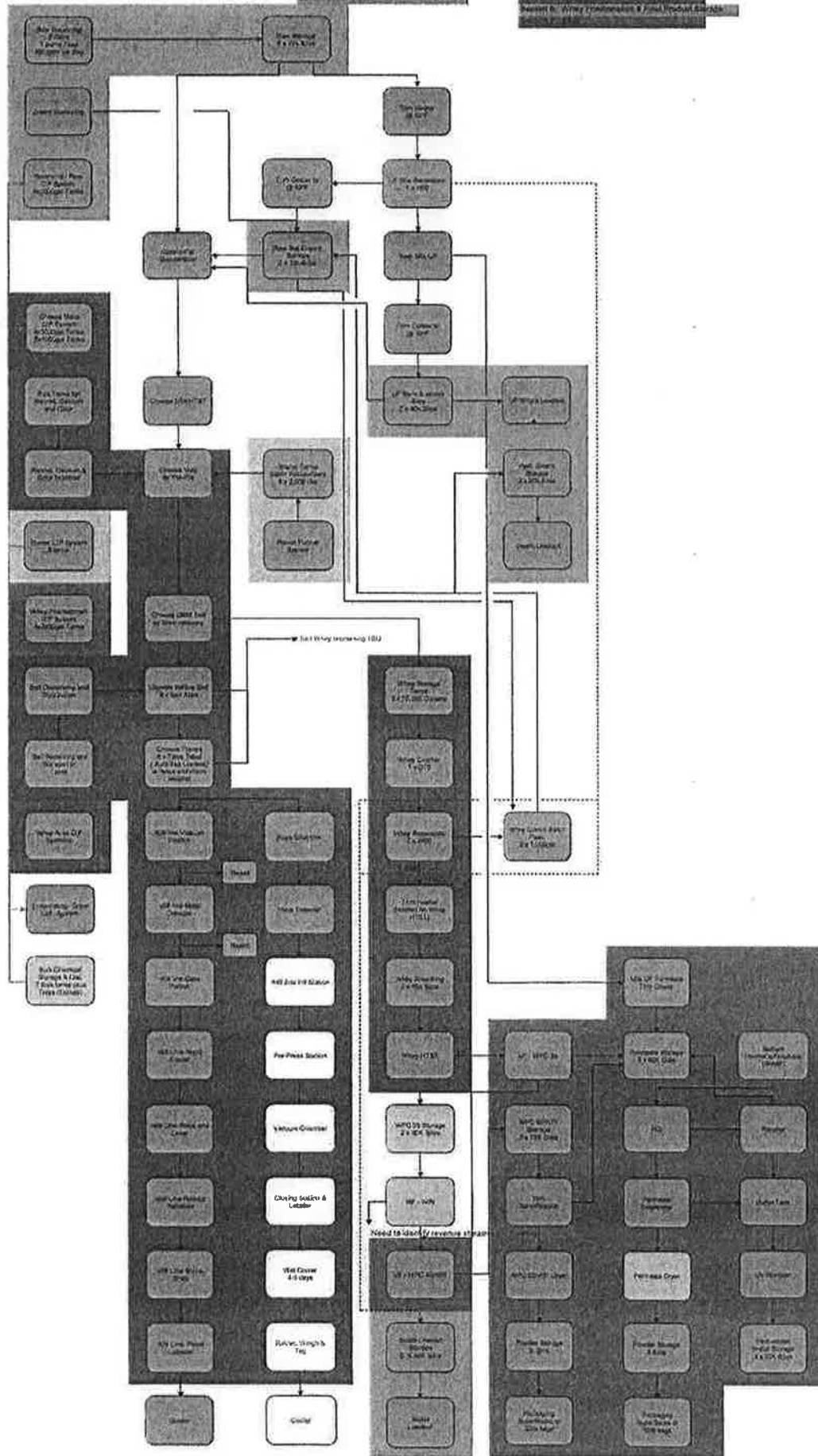
PROPOSED
CHEESE PROCESSING
PLANT

CaliCheese

PROJECT DESCRIPTION



Attachment III
Process Flow Diagram and Equipment Specifications



Cleaver-Brooks Boiler Expected Emission Data					
Date Author Customer City & State	Producing Steam Firing BACKGROUND INFORMATION		Nat Gas		Boiler Model Allitude (feet) Operating Pressure (psig) Furnace Volume (cuft) Furnace Heat Release (Btu/hr/cu ft) Heating Surface (sqft) Nox System
	09/03/14 I.C. Banks Call Cheese ---				CBEX Elite 700 150.00 731.00 124,223 8640 30
Nat Gas		Firing Rate			
		13%	60%	75%	100%
Horsepower		275	1100	1650	2200
Input, Btu/hr		11,217,000	44,970,000	67,743,000	90,807,000
CO	ppm	100	50	50	50
	lb/MMBtu	0.0750	0.0375	0.0375	0.0375
	lb/hr	0.84	1.69	2.54	3.40
	tpy	3.683	7.364	11.121	14.908
NOx	ppm	30	30	30	30
	lb/MMBtu	0.0350	0.0350	0.0350	0.0350
	lb/hr	0.39	1.57	2.37	3.18
	tpy	1.720	6.895	10.385	13.921
NO	ppm	25.5	25.5	25.5	25.5
	lb/MMBtu	0.030	0.030	0.030	0.030
	lb/hr	0.33	1.34	2.02	2.70
	tpy	1.38	5.52	8.31	11.14
NO ₂	ppm	4.5	4.5	4.5	4.5
	lb/MMBtu	0.005	0.005	0.005	0.005
	lb/hr	0.08	0.24	0.36	0.48
	tpy	0.34	1.38	2.08	2.78
SOx	ppm	0.34	0.34	0.34	0.34
	lb/MMBtu	0.0008	0.0008	0.0008	0.0008
	lb/hr	0.008	0.0265	0.0399	0.0535
	tpy	0.029	0.110	0.176	0.234
VOCs (Non-Methane Only)	ppm	9	9	9	9
	lb/MMBtu	0.0038	0.0038	0.0038	0.0038
	lb/hr	0.042	0.168	0.254	0.341
	tpy	0.184	0.740	1.114	1.494
VOCs does not include any background VOC emissions					
PM10 (Filterable)	ppm	N/A	N/A	N/A	N/A
	lb/MMBtu	0.0081	0.0061	0.0081	0.0061
	lb/hr	0.069	0.273	0.412	0.552
	tpy	0.299	1.197	1.804	2.418
PM10 (Condensable)	lb/MMBtu	0.0074	0.0074	0.0074	0.0074
	lb/hr	0.082	0.331	0.498	0.668
	tpy	0.361	1.449	2.182	2.925
PM2.5 (Filterable)	lb/MMBtu	0.0061	0.0061	0.0061	0.0061
	lb/hr	0.068	0.273	0.412	0.552
	tpy	0.299	1.197	1.804	2.418
PM2.5 (Condensable)	lb/MMBtu	0.0074	0.0074	0.0074	0.0074
	lb/hr	0.082	0.331	0.498	0.668
	tpy	0.361	1.449	2.182	2.925
Exhaust Data					
Temperature, F		378	412	435	457
	Flow	ACFM	3,397	14,190	21,943
	SCFM (70 Degrees Fah.)	2,200	8,823	13,288	17,813
	DSCFM	1,954	7,834	11,799	15,817
	lb/hr	9,902	39,703	59,708	80,157
	ft/sec	5.38	22.39	34.83	47.82
Velocity	ft/min	322	1,344	2,078	2,857

1-13

+ 0.035
in gpc

HRA

- Notes:
- 1) All ppm levels are corrected to dry at 3% oxygen.
 - 2) Emission data based on actual boiler efficiency.
 - 3) % H₂O, by volume in exhaust gas is 17.24 % O₂, by volume 2.47
 - 4) Water vapor in exhaust gas is 98.91 lbs/MMBtu of fuel fired
 - 5) CO₂ produced is 116.31 lbs/MMBtu of fuel fired
 - 6) Particulate is exclusive of any particulates in combustion air or other sources of residual particulates from material.
 - 7) PM level indicated on this form is based on combustion air and fuel being clean and turndown up to 4:1.
 - 8) Heat input is based on high heating value (HHV).
 - 9) Emission produced in tons per year (tpy) is based on 24 hours per day for 365 days = 8,760 hours per year
 - 10) Exhaust data is based on a clean and properly sealed boiler.
 - 11) Emission data is based on a burner turndown of 4 to 1.

14) Fuel High Heating Value = 1000 Btu/FT³



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~ since 1956

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Fresno, CA 93706
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Fax: 559.498.7086
www.rfmacdonald.com

SAN FRANCISCO
FRESNO
LAS VEGAS
MODESTO
RENO
SAN DIEGO

Performance Warranty Values

Haldor Topsoe, Inc. warrants the catalyst charge will meet the guaranteed values found in Table 3 below provided the goods are used within the range of process conditions specified by the Buyer or within the generally accepted range of process conditions for which such goods are intended.

Catalyst Design	HP Hood
Fuel	Natural Gas
Guaranteed NOx removal, %	87.5
Guaranteed outlet NOx, ppm	5
Guaranteed NH ₃ -slip, ppm	≤ 10
Guaranteed NH ₃ usage as pure ammonia, , lbs/ hr	≤ 1.5
Guaranteed pressure drop, in W.C.	≤ 1.5

5 ppm

Table: Guaranteed Performance, Calc. #1743489

The warranty period is a maximum of 39 calendar months from the date of delivery or 36 calendar months from the initial flue gas through the catalyst or 24,000 hours, whichever expires earlier. The expected lifetime of the initial charge is greater than 25,000 hours based on HTI industrial experience with this type of application.

AER (Application Engineering Request) - Version 2.0

Metric ▼

1.1 - SITE DETAILS

Eclipse Opp No:		Submitted Date:	2015-Jan-26
Company Name:	Tetra Pak	Due Date:	
End User:	Cali Cheese		
Installation City:	Tulare	State:	CA
Site Elevation:	4421	Meters	Country:
Contact Name:			
Work Phone:		E-mail:	
Customer Ref:		Completed By:	Bob Shaffer

1.2 - EQUIPMENT AND APPLICATION DETAILS

Application Type: ER Heater

One ER Size 8 heaters with Minnox burner. Requires 5 ppmv NOx and 210 ppmv CO at nominal conditions.
 Emissions guarantee is required for the state emissions application.
 Heater Performance Estimate is attached (Heater B).

1-4-0
 13.66 $\frac{\text{MMBTU}}{\text{hr}}$
 why dryer

1.3 - SCOPE OF SUPPLY

Are there attachments included with this AER? Yes (Include list of attachments) ▼

Equipment Category	Integrated	Qty:	Separated	Qty:	Comment
Sets of Integrated Equipment	Qty:	1			
Burner(s) per Installation	Qty:	1	Qty:		
Combustion Air Fan	Qty:		Qty:		
Process Air Fan	Qty:		Qty:		
Pilot/Purge Air	Qty:		Qty:		
Main Valve Train	Qty:		Qty:		
Pilot Valve Train	Qty:		Qty:		
Control Panel	Qty:		Qty:		
Combustion Chamber/Heater	Qty:		Qty:		
Heat Exchanger/Recuperator	Qty:		Qty:		
Loose Items	Qty:		Qty:		
	Qty:		Qty:		
	Qty:		Qty:		

Eclipse Services	Service Notes
Performance Test ▼	
Installation ▼	
Commissioning Days @ Site	
Training Days @ Site	

AER Form v2.0: Process and Burner Details						Metric	
2.1 - Process Air	Heating Method: <input type="radio"/> Direct <input checked="" type="radio"/> Indirect		Min. Design Max.				
	Inlet Temp.			0		C	
	Outlet Temp.			180		C	
	Does the process air enter the combustion chamber? No (Indirectly Heated) ▼		Inlet Flow	66000		kg/hr Dry Air ▼	
2.2 - Fuel	Moisture					kg/kg of dry air ▼	
	Oxygen					% Volume Dry ▼	
	Pressure					mbar(g)	
2.3 - Comb. Air	If*, provide analysis SG		Heating Value			MJ/Nm3 - LHV	
	Excess Air		Min. Design Max.				
	15	% Volume ▼	Temperature			C	
	Source of Air: Fresh ▼		Oxygen			% Volume, Dry	
2.4 - Chamber	Moisture					% Relative Humidity ▼	
	Operating Temp.	450	C	Width, ID	120.875	mm	
	Operating Press.	-2.5	mbar(g)	Height, ID	91.625	mm	
	Press. Fluctuations	Negative - Constant ▼		Length, ID	63	mm	
	If *, add range and details to Notes below			Diameter, ID		mm	
2.5 - FGR	Applicable?	No (Skip This Section) ▼		Flue Temp.		C	
	Flow Rate		Nm3/hr	Flue O ₂ Content		% Volume, Dry	
	% FGR			Flue H ₂ O Content		% Relative Humidity	
	Method		Other* (add details in 1.2) ▼		No. Burners per Controller		
2.6 - Control	Ratio			Burners Stages			
	Signal			Scanning			
	Model / Size		Minnox 4000 CCS-T		Max. Each		kW - LHV
2.7 - Burner	Curbustor Option			Min. Each		kW - LHV	
	Combustor Material			Process Air dP		mbar(g)	
	Firing Position			(if air from process)			
	Emissions Guarantee (Complete sections 1.1 through 2.8 of this AER) ▼						
2.8 - Guarantees	<input checked="" type="checkbox"/> NO _x	Units:	<input type="checkbox"/> mg/MJ	<input type="checkbox"/> mg/Nm3	<input type="checkbox"/> PPMvd @		<input type="checkbox"/> lbs/hr
	<input checked="" type="checkbox"/> CO		<input type="checkbox"/> lbs/mmBtu	<input type="checkbox"/> Other	Specify:		
	<input type="checkbox"/> Other	Specify:					
	Requested Values:		5 ppmv NO _x and 210 ppmv CO at 3% O ₂ at Nominal Conditions				
	Permit Conditions:						
Permit Firing Range:							
2.9 - Location	Position						
	Area		*Specify				
	Environment		*Specify				
	Standards		*Specify				
Protection			*Specify				
Notes							

AER Form v2.0: Support Equipment Details

Metric

3.1 - Utilities	Main Power	<input type="text"/>	V	Phase	<input type="text"/>	Frequency	<input type="text"/>
	Control Power	<input type="text"/>	V			Frequency	<input type="text"/>
	Signal Wire	<input type="text"/>					
	Oxygen	<input type="text"/>		Pressure	<input type="text"/>	bar (g)	Purity <input type="text"/> %
	Comp. Air	<input type="text"/>		Pressure	<input type="text"/>	bar (g)	
	Instrum. Air	<input type="text"/>		Pressure	<input type="text"/>	bar (g)	

3.2 - Control Panel	Style	<input type="text"/>	Protection	<input type="text"/>	*Specify	<input type="text"/>
	Main Components	<input type="checkbox"/>	Burner Safety (FGS)	<input type="checkbox"/>	Leak Test (VPS)	<input type="checkbox"/>
	<input type="checkbox"/>	VFD	<input type="checkbox"/>	Temp. Controller	<input type="checkbox"/>	Process Interlock
	<input type="checkbox"/>	PLC <input type="text"/>	<input type="checkbox"/>	High Temp. Limit	<input type="checkbox"/>	Alarm Horn
		<input type="checkbox"/>	Temp. Recorder	<input type="checkbox"/>	Alarm Lamps	<input type="text"/>
		<input type="checkbox"/>	Motor Starter	<input type="checkbox"/>		<input type="text"/>

3.3 - Valve Train	Position	<input type="text"/>	
	Area	<input type="text"/>	*Specify <input type="text"/>
	Environment	<input type="text"/>	*Specify <input type="text"/>
	Standards	<input type="text"/>	*Specify <input type="text"/>
	Protection	<input type="text"/>	*Specify <input type="text"/>
	Connections	<input type="text"/>	Mounting Frame <input type="text"/>
	Threads	<input type="text"/>	Wiring <input type="text"/>
	Pilot Line	<input type="text"/>	Panel <input type="text"/>

3.4 - Other	<input type="checkbox"/>	Temp. Sensor	Qty.	<input type="text"/>	Details	<input type="text"/>
	<input type="checkbox"/>	Pressure Switch	Qty.	<input type="text"/>	Details	<input type="text"/>
	<input type="checkbox"/>	Gauge	Qty.	<input type="text"/>	Details	<input type="text"/>
	<input type="checkbox"/>	<input type="text"/>	Qty.	<input type="text"/>	Details	<input type="text"/>

3.5 - Additional Remarks / Sketches / Approval Provisions

- Guaranteed emissions valid only when commissioned, operated, and measured per Eclipse's Emissions Guarantee Policy
- Combustion Air Blower to be sized to provide at least 70% excess air.
- Requires a high resolution parallel positioning control system ie: Honeywell control links or Siemens LMV.
- Gasses flowing over the burner will be laminar and uniform (+/- 10%) over the full cross sectional area of the duct at a velocity of between 2,400 to 3,000 ft/min at operating conditions.
- Emissions are guaranteed for steady-state conditions only. Emissions during other operating modes, transitions, upset conditions, or conditions other than the required operating set-point, may vary and are beyond the scope of this guarantee.
- Eclipse commissioning engineers shall be present during all source testing. We reserve the right to make final adjustments at this time.

AER Form v2.0: Application Statements		Metric												
4.1 - Approval Provisions														
4.2 - Emission Guarantees	NOx	<= 5 ppm @ 3% O2												
	CO	<= 210 ppm @ 3% O2												
	Other													
4.3 - Emissions Guarantee Policy	<p>This policy has been established to address the need, when required, for a written emissions guarantee per customer. It is not a general guarantee for all products and random installations. It applies to the burner(s) purchased within 180 days of the date of this guarantee for the specific application described on this form (AER).</p> <p>Eclipse will guarantee, following a thorough engineering analysis of the application, and after acceptance by the customer of the combustion system being supplied by Eclipse, that the stated burner(s) will meet or exceed the emissions required on this form (Field 2.8). The guarantee is valid through the standard twelve-month product warranty period and through the term of any optional Eclipse warranty purchased with the burner and which includes parts, labor, and travel. Additionally, this guarantee is valid only when the startup is performed or supervised by an Eclipse service technician or engineer and the equipment is maintained in accordance with Eclipse specifications. Eclipse will not be responsible for product or environmental influences on system emissions. The guarantee is made only at the burner firing rate and operating conditions stated on this form.</p> <p>The guarantee will be substantiated by an approved independent testing agency which has the required equipment capable of measuring emissions in a highly diluted air stream at customer's expense. The EPA methods found in 40CFR, Part 60, Appendix A shall be used for emissions measurement.</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">NOx USEPA Method 7E</td> <td style="text-align: center;">CO2 USEPA Method 3A</td> </tr> <tr> <td style="text-align: center;">CO USEPA Method 10</td> <td style="text-align: center;">O2 USEPA Method 3A</td> </tr> </table> <p>If necessary, the testing agency may be required to measure emissions directly downstream of the burner, no more than 12" from the end of the flame.</p> <p>Non-Conformance If the independent testing indicates the emissions guarantee is not met, Eclipse reserves the right, at its expense, to modify, add, or delete components of the system provided. At Eclipse expense, we may also contract a second testing agency for opinion.</p> <p>After system modifications are completed, the customer again will contract the independent testing agency to verify emissions. If the guarantee is still not met, Eclipse will arrange and pay for the removal of the equipment from the plant and will refund the cost of the equipment to the customer. Included in the refund, will be the two emissions tests run to substantiate this guarantee.</p> <p>Not included in the refund: 1.) Removal of or cost of prior equipment, 2.) Installation of the equipment, 3.) Re-Installing or replacement equipment; 4.) Loss of production, 5.) Repairs to process equipment that may have been modified to suit this installation.</p> <p>The content of this guarantee is restricted to the original installation only. Any unauthorized alterations to the system or relocation of the equipment shall void this commitment.</p>		NOx USEPA Method 7E	CO2 USEPA Method 3A	CO USEPA Method 10	O2 USEPA Method 3A								
NOx USEPA Method 7E	CO2 USEPA Method 3A													
CO USEPA Method 10	O2 USEPA Method 3A													
4.4 - Acceptance	<p>Eclipse Application Review TRR: 1021</p> <p style="text-align: center;"> <input checked="" type="checkbox"/> Emissions Guaranteed <input type="checkbox"/> Application Approved </p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Engineer</td> <td colspan="2">Chad LaBarge</td> </tr> <tr> <td>Signature</td> <td style="border: 1px solid black; padding: 5px;"><i>Chad LaBarge</i></td> <td>Date January 28, 2015</td> </tr> <tr> <td>AER Acceptance Customer Name</td> <td colspan="2" style="border: 1px solid black; height: 20px;"></td> </tr> <tr> <td>Signature</td> <td style="border: 1px solid black; height: 20px;"></td> <td>Date _____</td> </tr> </table>		Engineer	Chad LaBarge		Signature	<i>Chad LaBarge</i>	Date January 28, 2015	AER Acceptance Customer Name			Signature		Date _____
Engineer	Chad LaBarge													
Signature	<i>Chad LaBarge</i>	Date January 28, 2015												
AER Acceptance Customer Name														
Signature		Date _____												
<p>Opportunity No. TRR1021 Submission Date: 2015-Jan-26 Page 4 of 4</p>														

AER (Application Engineering Request) - Version 2.0

Metric ▼

1.1 - SITE DETAILS

Eclipse Opp No.:		Submitted Date:	2015-Jan-26
Company Name:	Tetra Pak	Due Date:	
End User:	Cali Cheese		
Installation City:	Tulare	State:	CA
Site Elevation:	4421	Meters	Country:
Contact Name:			
Work Phone:		E-mail:	
Customer Ref:		Completed By:	Bob Shaffer

1.2 - EQUIPMENT AND APPLICATION DETAILS

Application Type: ER Heater

Two ER Size 8 heaters with Minnox burner. Requires 5 ppmv NOx and 210 ppmv CO at nominal conditions.
 Emissions guarantee is required for the state emissions application.
 Heater Performance Estimate is attached (Heater A).

Are there attachments included with this AER? Yes (include list of attachments) ▼

1.3 - SCOPE OF SUPPLY

Equipment Category	Integrated	Qty:	Separated	Qty:	Comment
Sets of Integrated Equipment	Qty:	2			
Burner(s) per Installation	Qty:	1	Qty:		
Combustion Air Fan	Qty:		Qty:		
Process Air Fan	Qty:		Qty:		
Pilot/Purge Air	Qty:		Qty:		
Main Valve Train	Qty:		Qty:		
Pilot Valve Train	Qty:		Qty:		
Control Panel	Qty:		Qty:		
Combustion Chamber/Heater	Qty:		Qty:		
Heat Exchanger/Recuperator	Qty:		Qty:		
Loose Items	Qty:		Qty:		
	Qty:		Qty:		
	Qty:		Qty:		

Eclipse Services	Service Notes
Performance Test ▼	
Installation ▼	
Commissioning Days @ Site	
Training Days @ Site	

AER Form v2.0: Process and Burner Details						Metric
2.1 - Process Air	Heating Method: <input type="radio"/> Direct <input checked="" type="radio"/> Indirect		Min. Design Max.			
	Inlet Temp.			0		C
	Outlet Temp.			175		C
	Does the process air enter the combustion chamber? No (Indirectly Heated)		Inlet Flow		65000	kg/hr Dry Air
			Moisture			kg/kg of dry air
2.2 - Fuel			Pressure			mbar(g)
	If*, provide analysis SG		Heating Value			MJ/Nm3 - LHV
2.3 - Comb. Air	Excess Air		Min. Design Max.			
	15	% Volume	Temperature			C
	Source of Air: Fresh		Oxygen			% Volume, Dry
			Moisture			% Relative Humidity
2.4 - Chamber	Operating Temp.		450	C		
	Operating Press.		-2.5	mbar(g)	Width, ID 120.875 mm	
	Press. Fluctuations		Negative - Constant		Height, ID 91.625 mm	
	If*, add range and details to Notes below				Length, ID 63 mm	
					Diameter, ID	
2.5 - FGR	Applicable? No (Skip This Section)		Flue Temp.			C
	Flow Rate			Nm3/hr	Flue O ₂ Content	
	% FGR				Flue H ₂ O Content	
2.6 - Control	Method Other* (add details in 1.2)		No. Burners per Controller			
	Ratio		Burners Stages			
	Signal		Scanning			
2.7 - Burner	Model / Size Minnox 3875 CCS-T		Max. Each			kW - LHV
	Combustor Option		Min. Each			kW - LHV
	Combustor Material		Process Air dP			mbar(g)
	Firing Position		(if air from process)			
2.8 - Guarantees	Emissions Guarantee (Complete sections 1.1 through 2.8 of this AER)					
	<input checked="" type="checkbox"/> NO _x	Units:		<input type="checkbox"/> mg/MJ	<input type="checkbox"/> mg/Nm3	<input type="checkbox"/> PPMvd @
	<input checked="" type="checkbox"/> CO			<input type="checkbox"/> lbs/mmBtu	<input type="checkbox"/> Other	Specify:
	<input type="checkbox"/> Other	Specify:				
	Requested Values:		5 ppmv NO _x and 210 ppmv CO at 3% O ₂ at Nominal Conditions			
Permit Conditions:						
Permit Firing Range:						
2.9 - Location	Position					
	Area		*Specify			
	Environment		*Specify			
	Standards		*Specify			
Protection		*Specify				
Notes						

AER Form v2.0: Support Equipment Details

Metric

3.1 - Utilities	Main Power	<input type="text"/>	V	Phase	<input type="text"/>	Frequency	<input type="text"/>
	Control Power	<input type="text"/>	V			Frequency	<input type="text"/>
	Signal Wire	<input type="text"/>					
	Oxygen	<input type="text"/>		Pressure	<input type="text"/>	bar (g)	Purity <input type="text"/> %
	Comp. Air	<input type="text"/>		Pressure	<input type="text"/>	bar (g)	
	Instrum. Air	<input type="text"/>		Pressure	<input type="text"/>	bar (g)	

3.2 - Control Panel	Style	<input type="text"/>	Protection	<input type="text"/>	*Specify	<input type="text"/>
	Main Components	<input type="checkbox"/>	Burner Safety (FGS)	<input type="checkbox"/>	Leak Test (VPS)	<input type="checkbox"/>
	<input type="checkbox"/>	VFD	<input type="checkbox"/>	Temp. Controller	<input type="checkbox"/>	Process Interlock
	<input type="checkbox"/>	PLC	<input type="checkbox"/>	High Temp. Limit	<input type="checkbox"/>	Alarm Horn
	<input type="checkbox"/>		Temp. Recorder	<input type="checkbox"/>	Alarm Lamps	<input type="text"/>
	<input type="checkbox"/>		Motor Starter	<input type="checkbox"/>		<input type="text"/>

3.3 - Valve Train	Position	<input type="text"/>	
	Area	<input type="text"/>	*Specify <input type="text"/>
	Environment	<input type="text"/>	*Specify <input type="text"/>
	Standards	<input type="text"/>	*Specify <input type="text"/>
	Protection	<input type="text"/>	*Specify <input type="text"/>
	Connections	<input type="text"/>	Mounting Frame <input type="text"/>
	Threads	<input type="text"/>	Wiring <input type="text"/>
Pilot Line	<input type="text"/>	Panel <input type="text"/>	

3.4 - Other	<input type="checkbox"/>	Temp. Sensor	Qty.	<input type="text"/>	Details	<input type="text"/>
	<input type="checkbox"/>	Pressure Switch	Qty.	<input type="text"/>	Details	<input type="text"/>
	<input type="checkbox"/>	Gauge	Qty.	<input type="text"/>	Details	<input type="text"/>
	<input type="checkbox"/>	<input type="text"/>	Qty.	<input type="text"/>	Details	<input type="text"/>

3.5 - Additional Remarks / Sketches / Approval Provisions

- Guaranteed emissions valid only when commissioned, operated, and measured per Eclipse's Emissions Guarantee Policy
- Combustion Air Blower to be sized to provide at least 70% excess air.
- Requires a high resolution parallel positioning control system i.e: Honeywell control links or Siemens LMV.
- Gasses flowing over the burner will be laminar and uniform (+/- 10%) over the full cross sectional area of the duct at a velocity of between 2,400 to 3,000 ft/min at operating conditions.
- Emissions are guaranteed for steady-state conditions only. Emissions during other operating modes, transitions, upset conditions, or conditions other than the required operating set-point, may vary and are beyond the scope of this guarantee.
- Eclipse commissioning engineers shall be present during all source testing. We reserve the right to make final adjustments at this time.

AER Form v2.0: Application Statements

Metric

4.2 - Emission Guarantees	NOx	<= 5 ppm @ 3% O2
	CO	<= 210 ppm @ 3% O2
	Other	

4.3 - Emissions Guarantee Policy

This policy has been established to address the need, when required, for a written emissions guarantee per customer. It is not a general guarantee for all products and random installations. It applies to the burner(s) purchased within 180 days of the date of this guarantee for the specific application described on this form (AER).

Eclipse will guarantee, following a thorough engineering analysis of the application, and after acceptance by the customer of the combustion system being supplied by Eclipse, that the stated burner(s) will meet or exceed the emissions required on this form (Field 2.8). The guarantee is valid through the standard twelve-month product warranty period and through the term of any optional Eclipse warranty purchased with the burner and which includes parts, labor, and travel. Additionally, this guarantee is valid only when the startup is performed or supervised by an Eclipse service technician or engineer and the equipment is maintained in accordance with Eclipse specifications. Eclipse will not be responsible for product or environmental influences on system emissions. The guarantee is made only at the burner firing rate and operating conditions stated on this form.

The guarantee will be substantiated by an approved independent testing agency which has the required equipment capable of measuring emissions in a highly diluted air stream at customer's expense. The EPA methods found in 40CFR, Part 60, Appendix A shall be used for emissions measurement.

NOx USEPA Method 7E	CO2 USEPA Method 3A
CO USEPA Method 10	O2 USEPA Method 3A

If necessary, the testing agency may be required to measure emissions directly downstream of the burner, no more than 12" from the end of the flame.

Non-Conformance

If the independent testing indicates the emissions guarantee is not met, Eclipse reserves the right, at its expense, to modify, add, or delete components of the system provided. At Eclipse expense, we may also contract a second testing agency for opinion.

After system modifications are completed, the customer again will contract the independent testing agency to verify emissions. If the guarantee is still not met, Eclipse will arrange and pay for the removal of the equipment from the plant and will refund the cost of the equipment to the customer. Included in the refund, will be the two emissions tests run to substantiate this guarantee.

Not included in the refund: 1.) Removal of or cost of prior equipment, 2.) Installation of the equipment, 3.) Re-installing or replacement equipment, 4.) Loss of production, 5.) Repairs to process equipment that may have been modified to suit this installation.

The content of this guarantee is restricted to the original installation only. Any unauthorized alterations to the system or relocation of the equipment shall void this commitment.

4.4 - Acceptance

Eclipse Application Review TRR: 1021

Emissions Guaranteed
 Application Approved

Engineer:

Signature: Date:

AER Acceptance

Customer Name:

Signature: Date:

OLYMPIAN™

2013 EPA SPARK-IGNITED EXHAUST EMISSIONS DATA

Effective since 2009, the EPA has implemented exhaust emissions regulations on stationary spark-ignited (gaseous) engine generators for emergency applications. All Olympian spark-ignited gensets, including LG and LTA series gensets, that are built with engines manufactured in 2009 and later meet the requirements of 40CFR part 60 subpart JJJJ and are EPA certified. These generator sets are labeled as EPA Certified with decals affixed to the engines' valve cover(s).

The attached documents summarize the general information relevant to EPA certification on these generator sets. This information can be used for submittal data and for permitting purposes, if required. These documents include the following information:

EPA Engine Family

The EPA Engine Family is assigned by the Manufacturer under EPA guidelines for certification purposes and appears on the EPA certificate.

Catalyst Required

Indicates whether an exhaust catalyst and Air/Fuel Ratio control system are required on the generator set to meet EPA certification requirements. Generally, units rated 80kW and smaller do not require a catalyst to meet EPA certification requirements. Please note that some units that do not require a catalyst to meet EPA requirements do need a catalyst if the California SCAQMD option is selected. Please see "California SCAQMD" below for additional information on this option.

Combination Catalyst or Separate Catalyst

LG series generator sets typically utilize a single combination catalyst/silencer as part of meeting EPA certification requirements. Many LTA series generator sets use the same engines as LG series units, but have different exhaust configurations that require the use of conventional silencers with additional separate catalysts installed.

EPA Certificate Number

Upon certification by the EPA, a Certificate Number is assigned by the EPA.

Emissions Actuals - Grams/bhp-hr

Actual exhaust emission data for Total Hydrocarbons (THC), Nitrogen Oxides (NOx) and Carbon Monoxide (CO) that were submitted to EPA and are official data of record for certification. This data can be used for permitting if necessary. Values are expressed in grams per brake horsepower-hour; to convert to grams/kW-hr, multiply by 1.341. Please see advisory notes below for further information.

California Units, SCAQMD CEP Number

A separate low-emissions option is available on many Olympian gaseous-fueled generator sets to comply with the more stringent South Coast Air Quality Management District requirements that are recognized in certain areas in California. Gensets that include this option are also EPA Certified.

16
308H
955 fired

General Advisory Note to Dealers

The information provided here is proprietary to Olympian and its' authorized dealers. This information may only be disseminated upon request, to regulatory governmental bodies for emissions permitting purposes or to specifying organizations as submittal data when expressly required by project specifications, and shall remain confidential and not open to public viewing. This information is not intended for compilation or sales purposes and may not be used as such, nor may it be reproduced without the expressed written permission of Olympian Power Systems, Inc.

Advisory Notes on Emissions Actuals

- The stated values are actual exhaust emission test measurements obtained from units representative of the generator types and engines described.
- Values are official data of record as submitted to the EPA and SCAQMD for certification purposes. Testing was conducted in accordance with prevailing EPA protocols, which are typically accepted by SCAQMD and other regional authorities.
- No emission values provided are to be construed as guarantees of emissions levels for any given Olympian generator unit.
- Olympian Power Systems reserves the right to revise this information without prior notice.
- Consult state and local regulatory agencies for specific permitting requirements.
- The emissions performance data supplied by the equipment manufacturer is only one element required toward completion of the permitting and installation process. State and local regulations may vary on a case-by-case basis and must be consulted by the permit applicant/equipment owner prior to equipment purchase or installation. The data supplied herein by Olympian Power Systems cannot be construed as a guarantee of installability of the generator set.
- The emission values provided are the result of multi-mode, weighted scale testing in accordance with EPA testing regulations, and may not be representative of any specific load point.
- The emission values provided are not to be construed as emission limits.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2014 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT OF 1990


**OFFICE OF TRANSPORTATION
 AND AIR QUALITY**
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: Deere & Company
 (U.S. Manufacturer or Importer)

Certificate Number: EJDXL13.5103-014

Effective Date:
 09/10/2013

Expiration Date:
 12/31/2014


 Byron J. Bunker, Division Director
 Compliance Division

Issue Date:
 09/10/2013

Revision Date:
 N/A

Model Year: 2014

Manufacturer Type: Original Engine Manufacturer

Engine Family: EJDXL13.5103

Mobile/Stationary Indicator: Stationary
Emissions Power Category: 225<=KW<450

Fuel Type: Diesel

After Treatment Devices: No After Treatment Devices Installed

Non-after Treatment Devices: Electronic/Electric EGR - Cooled, Non-standard Non-After Treatment Device Installed, Electronic Control, Smoke Puff Limiter, Engine Design Modification

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

The actual engine power may lie outside the limits of the Emissions Power Category shown above. See the certificate application for details.

1-8
 Finewater
 ICE

Rating Specific Emissions Data - John Deere Power Systems



Nameplate Rating Information

Clarke Model	JX6H-UFAD60
Power Rating (BHP / kW)	510 / 380
Certified Speed (RPM)	1760

18
diesel
510 HP

Rating Data

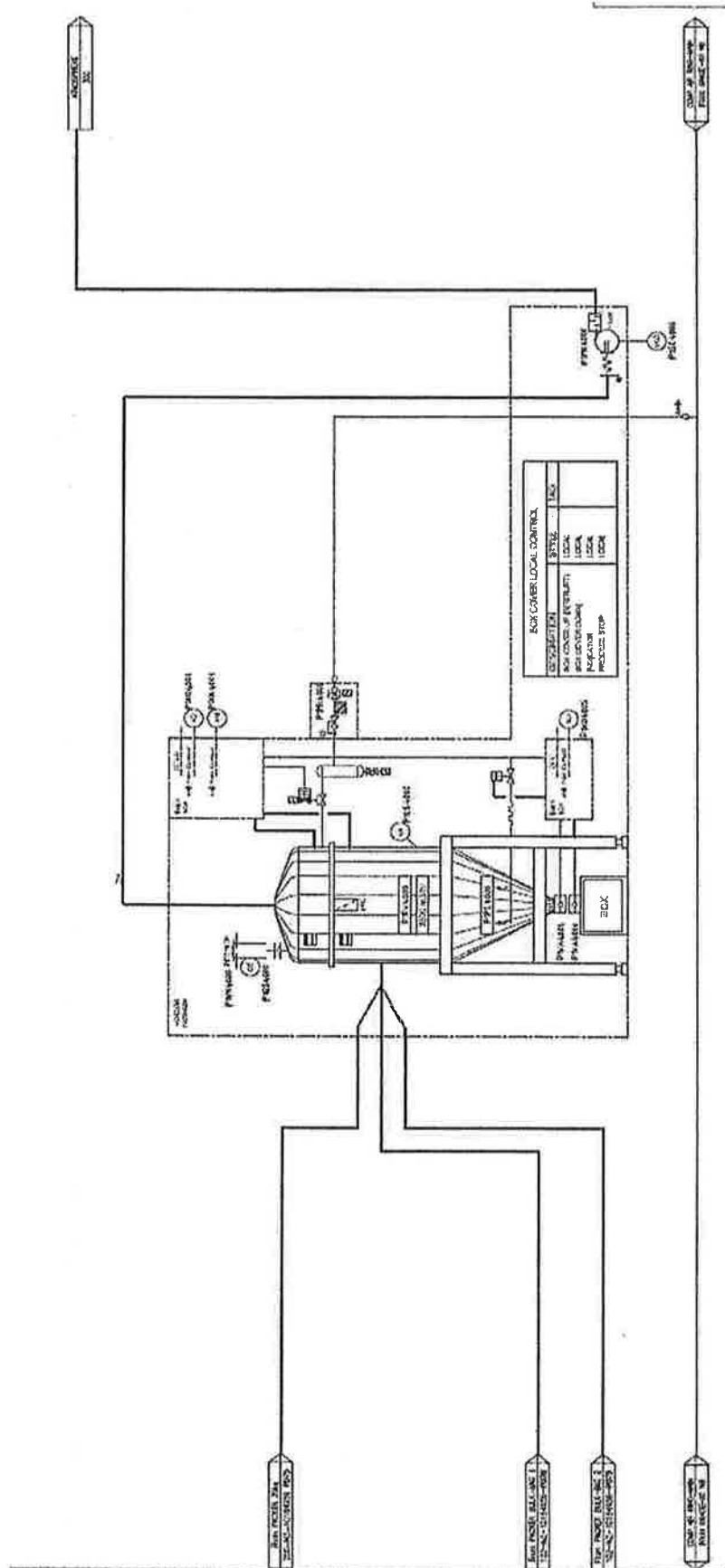
Rating	6135HFC48B	
Certified Power (kW)	460	
Rated Speed	1760	
Vehicle Model Number	Clarke Fire Pump	
Units	g/kW-hr	g/hp-hr
NOx	3.5	2.6
HC	0.1	0.1
NOx + HC	3.6	2.7
Pm	0.12	0.09
CO	0.7	0.5

Certificate Data

Engine Model Year	2014
EPA Family Name	EJDXL13.5103
EPA JD Name	650HAA
EPA Certificate Number	EJDXL13.5103-014
CARB Executive Order	Not Applicable
Parent of Family	6135HF485A
Units	g/kW-hr
NOx	3.3
HC	0.1
NOx + HC	3.4
Pm	0.10
CO	0.6

* The emission data listed is measured from a laboratory test engine according to the test procedures of 40 CFR 89 or 40 CFR 1039, as applicable. The test engine is intended to represent nominal production hardware, and we do not guarantee that every production engine will have identical test results. The family parent data represents multiple ratings and this data may have been collected at a different engine speed and load. Emission results may vary due to engine manufacturing tolerances, engine operating conditions, fuels used, or other conditions beyond our control.

This information is property of Deere & Company. It is provided solely for the purpose of obtaining certification or permits of Deere powered equipment. Unauthorized distribution of this information is prohibited



1-13 - 1-16

bagging
hoppers

Attachment IV
Emissions Profiles

Permit #: S-8594-1-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	7224.0	3375.0	9000.0	43817.0	4500.0
Daily Emis. Limit (lb/Day)	13.3	6.2	16.6	80.6	8.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1806.0	843.0	2250.0	10954.0	1125.0
Q2:	1806.0	844.0	2250.0	10954.0	1125.0
Q3:	1806.0	844.0	2250.0	10954.0	1125.0
Q4:	1806.0	844.0	2250.0	10955.0	1125.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-2-0	Last Updated
Facility: CALICHEESE, LLC	02/14/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	0.0
Daily Emis. Limit (lb/Day)	13.3	6.2	16.6	80.6	8.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-3-0	Last Updated
Facility: CALICHEESE, LLC	02/14/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	0.0
Daily Emis. Limit (lb/Day)	13.3	6.2	16.6	80.6	8.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-4-0	Last Updated
Facility: CALICHEESE, LLC	02/14/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	444.0	207.0	4794.0	11275.0	400.0
Daily Emis. Limit (lb/Day)	2.0	0.9	14.1	50.8	1.8
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	111.0	51.0	1198.0	2818.0	100.0
Q2:	111.0	52.0	1198.0	2819.0	100.0
Q3:	111.0	52.0	1199.0	2819.0	100.0
Q4:	111.0	52.0	1199.0	2819.0	100.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-5-0	Last Updated
Facility: CALICHEESE, LLC	02/14/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	861.0	402.0	7858.0	21889.0	777.0
Daily Emis. Limit (lb/Day)	3.9	1.8	23.4	98.7	3.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	215.0	100.0	1964.0	5472.0	194.0
Q2:	215.0	100.0	1964.0	5472.0	194.0
Q3:	215.0	101.0	1965.0	5472.0	194.0
Q4:	216.0	101.0	1965.0	5473.0	195.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-6-0	Last Updated
Facility: CALICHEESE, LLC	03/09/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	9.0	1.0	1.0	36.0	36.0
Daily Emis. Limit (lb/Day)	2.1	0.1	0.0	8.6	8.6
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	2.0	1.0	1.0	9.0	9.0
Q2:	2.0	0.0	0.0	9.0	9.0
Q3:	2.0	0.0	0.0	9.0	9.0
Q4:	3.0	0.0	0.0	9.0	9.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-8-0	Last Updated
Facility: CALICHEESE, LLC	05/06/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	55.0	1.0	2.0	10.0	2.0
Daily Emis. Limit (lb/Day)	66.4	0.1	2.0	12.1	2.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	13.0	1.0	1.0	2.0	1.0
Q2:	14.0	0.0	1.0	2.0	1.0
Q3:	14.0	0.0	0.0	3.0	0.0
Q4:	14.0	0.0	0.0	3.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-9-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	863.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	3.9	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	215.0	0.0	0.0
Q2:	0.0	0.0	216.0	0.0	0.0
Q3:	0.0	0.0	216.0	0.0	0.0
Q4:	0.0	0.0	216.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-10-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

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

Permit #: S-8594-11-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

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

Permit #: S-8594-12-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

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

Permit #: S-8594-13-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	230.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	1.0	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	57.0	0.0	0.0
Q2:	0.0	0.0	57.0	0.0	0.0
Q3:	0.0	0.0	58.0	0.0	0.0
Q4:	0.0	0.0	58.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-8594-14-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

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

Permit #: S-8594-15-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

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

Permit #: S-8594-16-0	Last Updated
Facility: CALICHEESE, LLC	04/20/2015 EDGEHILR

Equipment Pre-Baselined: NO

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

Attachment V
BACT Guidelines

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 1.6.15*

Last Update: 8/4/1999

Dryer - Milk Spray, < 20 MMBtu/hr

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10	Baghouse and natural gas fuel with LPG as backup fuel		
NOx	20 ppmv Low NOx burner fired on natural gas with LPG as backup fuel	9 ppmv NOx @ 3% O2 Selective Catalytic Reduction, Low Temperature Oxidation, or equal.	

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

***This is a Summary Page for this Class of Source**

L4 → 1-5

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.1.8*

Last Update: 4/4/2002

Emergency Gas-Fired IC Engine - > or = 250 hp, Lean Burn

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	= or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)	90% control efficiency (Oxidation catalyst, or equal)	= or > 50% control efficiency (Rich-burn engine with NSCR, or equal)
PM10	Natural gas fuel		
NOx	= or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)		= or > 90% control efficiency (Rich-burn engine with NSCR, or equal)
CO	= or < 2.75 g/bhp-hr (Lean burn natural gas fired engine, or equal)	90% control efficiency (Oxidation catalyst, or equal)	> or = 80% control efficiency (Rich-burn engine with NSCR, or equal)

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

***This is a Summary Page for this Class of Source**

1-6

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 8.4.1*

Last Update 10/20/1992

Dry Material Storage and Conveying Operation, 100 tons/day

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10	Storage, augers, elevators, conveyors all enclosed and vented to a fabric filter baghouse		

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

***This is a Summary Page for this Class of Source**

1-9 thru 43

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.1.4*

Last Update: 6/30/2001

Emergency Diesel I.C. Engine Driving a Fire Pump

Pollutant	Achieved In Practice or contained In the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Positive crankcase ventilation [unless it voids the Underwriters Laboratories (UL) certification]	Catalytic Oxidation	
SOx	Low-sulfur diesel fuel (500 ppmw sulfur or less) or Very Low-sulfur diesel fuel (15 ppmw sulfur or less), where available.		
PM10	0.1 grams/bhp-hr (if TBACT is triggered) (corrected 7/16/01) 0.4 grams/bhp-hr (if TBACT is not triggered)		
NOx	Certified NOx emissions of 6.9 g/bhp-hr or less		
CO		Oxidation Catalyst	

1. Any engine model included in the ARB or EPA diesel engine certification lists and identified as having a PM10 emission rate of 0.149 grams/bhp-hr or less, based on ISO 8178 test procedure, shall be deemed to meet the 0.1 grams/bhp-hr requirement.

2. A site-specific Health Risk Analysis is used to determine if TBACT is triggered. (Clarification added 05/07/01)

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

***This is a Summary Page for this Class of Source**

L 8

Attachment VI BACT Analysis

S-9594-1 through '-3 Boilers

Top-Down BACT Analysis for NO_x for NG-fired Boiler

Step 1 – Identify All Possible Control Technologies:

The District adopted District Rule 4320 on October 16, 2008. The NO_x emission limit requirements in District Rule 4320 are lower than the current BACT limits; therefore a project specific BACT analysis will be performed to determine BACT for this project. District Rule 4320 includes a compliance option that limits boiler with heat input ratings greater than 20 MMBtu/hr to 7 ppm @ 3% O₂. This emission limit is Achieved in Practice control technology for the BACT analysis. District Rule 4320 also contains an enhanced schedule option that allows applicants additional time to meet the requirements of the rule. The enhanced schedule NO_x emission limit requirement is 5 ppmv @ 3% O₂. Since this is an enhanced option in the rule, it will be considered the Technologically Feasible control technology for the BACT analysis.

The SJVUAPCD BACT Clearinghouse guideline 1.1.1 has been rescinded. Therefore a new BACT analysis is required. The following are possible control technologies:

- 1) 5 ppmvd @ 3% O₂ with SCR
- 2) 7 ppmvd @ 3% O₂

Step 2 – Eliminate Technologically Infeasible Options:

There are no technologically infeasible options shown in Step 1.

Step 3 – Rank Remaining Control Technologies by Control Effectiveness:

1. 5 ppmvd @ 3% O₂ (0.007 lb/MMBtu) – TF
2. 7 ppmvd @ 3% O₂ (0.011 lb/MMBtu) – AIP

Step 4 – Cost Effectiveness Analysis:

Applicant has proposed NO_x of 5 ppmv @ 3% O₂ and therefore a cost effectiveness calculation is not required.

e. Step 5 - Select BACT

BACT for NO_x emissions from the boiler is a NO_x limit of 5 ppmvd @ 3% O₂; therefore BACT for NO_x emissions from the boiler is satisfied.

Top-Down BACT Analysis for SOx, PM10, and VOC Emissions:

Step 1 - Identify All Possible Control Technologies

Natural gas fuel with LPG backup

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Natural gas fuel with LPG backup

Step 4 - Cost Effectiveness Analysis

A cost effective analysis must be performed for all control options in the list from Step 3 in the order of their ranking to determine the cost effective option with the lowest emissions. Applicant has selected the only option in Step 3 therefore a cost analysis is not required.

Step 5 - Select BACT

Natural gas fuel with LPG backup

BACT Analysis for Dryer S-8594-4 Whey Dryer

BACT is required for PM10.

a. Step 1 - Identify All Possible Control Technologies

BACT guideline 1.6.15 identifies the following control technologies:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	Baghouse and natural gas fuel with LPG as backup fuel		

b. Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Baghouse and natural gas fuel with LPG as backup fuel.

d. Step 4 - Cost Effectiveness Analysis

The applicant is proposing to use the most stringent control technology from Step 3 above; therefore no cost effectiveness analysis is required.

e. Step 5 - Select BACT

Baghouse and natural gas fuel

BACT for PM₁₀ emissions is the use of a baghouse to control PM₁₀ emissions and natural gas fuel

BACT Analysis for Dryer S-8594-5 Direct-Fired Permeate Dryer

BACT is required for NOx, PM10, and VOC.

NOx

a. Step 1 - Identify All Possible Control Technologies

BACT guideline 1.6.15 identifies the following control technologies:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
NOx	20.0 ppmvd @ 3% O ₂ Low NOx burner fired on natural gas with LPG backup fuel.	9 ppmv NOx @ 3% O ₂ Selective Catalytic Reduction, Low Temperature Oxidation, or equal.	

b. Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

NOx Emissions:

20.0 ppmvd @ 3% O₂ Low NOx burner fired on NG gas with LPG backup fuel.

9 ppmvd @ 3% O₂ Selective Catalytic Reduction, Low Temperature Oxidation, or equal.

e. Step 4 - Cost Effectiveness Analysis

The applicant is proposing to use the most stringent control technology from Step 3 above; therefore no cost effectiveness analysis is required.

e. Step 5 - Select BACT

BACT for NOx has been satisfied with NOx emissions of 5 ppmv @ 3% O2, use of baghouses, and natural gas combustion, respectively.

PM10

a. Step 1 - Identify All Possible Control Technologies

BACT guideline 1.6.15 identifies the following control technologies:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	Baghouse and natural gas fuel with LPG as backup fuel		

b. Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Baghouse and natural gas fuel with LPG as backup fuel.

f. Step 4 - Cost Effectiveness Analysis

The applicant is proposing to use the most stringent control technology from Step 3 above; therefore no cost effectiveness analysis is required.

e. Step 5 - Select BACT

Baghouse and natural gas fuel

VOC

BACT is satisfied with combustion of natural gas fuel only.

S-8594-6 (Gas Fired Emergency IC Engine)

NO_x

Oxides of nitrogen (NO_x) are generated from the high temperature combustion of the natural gas fuel. A majority of the NO_x emissions are formed from the high temperature reaction of nitrogen and oxygen in the inlet air. The rest of the NO_x emissions are formed from the reaction of fuel-bound nitrogen with oxygen in the inlet air.

I. Introduction

BACT is triggered for the natural gas emergency engine (NO_x and VOC).

II. Top-Down BACT Analysis

(a) BACT Guidance

Pursuant to the District's BACT policy APR-1305, BACT determinations shall be based on the control technologies and methods for the same or similar stationary source categories listed in the District's BACT Clearinghouse. BACT Guideline 3.1.8 applies to emergency gas-fired IC engines greater than or equal to 250 hp, lean burn. This guideline shall be the basis for a "top-down" BACT analysis per District Policy. The following NO_x and VOC BACT performance levels are identified by Guideline 3.1.8:

Pollutant	Achieved in Practice or in the SIP	Technologically Feasible	Alternate Basic Equipment
NO _x	= or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)		= or > 90% control efficiency (Rich-burn engine with NSCR, or equal)
VOC	= or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)	90% control efficiency (Oxidation catalyst, or equal)	= or > 50% control efficiency (Rich-burn engine with NSCR, or equal)

(a) BACT Analysis for NO_x

Step 1- Identify all control technologies

- Alternate Basic Equipment: = or > 90% control efficiency (Rich-burn engine with NSCR, or equal)
- Technologically Feasible: None identified
- Achieved in Practice: = or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)

Step 2- Eliminate Technologically Infeasible Options

All of the above control options identified above are technologically feasible for the proposed equipment and are not eliminated.

Step 3- Rank Remaining Control Technologies by Control Effectiveness

Control Technology with Ranking	Control Efficiency or Emission Factor
1. = or > 90% control efficiency (Rich-burn engine with NSCR, or equal)	90%
2. = or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)	1.0 g/bhp-hr

Step 4 - Cost Effectiveness Analysis

An EPA-Certified lean burn engine equipped with a catalyst and with 0.13 g/hp-hr NOx emissions has been proposed. This is considered equivalent to the most stringent technology above i.e. = or > 90% control efficiency (Rich-burn engine with NSCR, or equal). Therefore, a cost effectiveness calculation is not required.

Step 5 – Select BACT

BACT for the emission unit is determined to be lean burn IC engine with catalyst and NOx emissions of 1.0 g/bhp-hr or less which has been proposed. Therefore, BACT is satisfied.

(b) BACT Analysis for VOC

Step 1- Identify all control technologies

- o Alternate Basic Equipment:
- o Technologically Feasible:
- o Achieved in Practice:

Step 2- Eliminate Technologically Infeasible Options

All of the above control options identified above are technologically feasible for the proposed equipment and are not eliminated.

Step 3- Rank Remaining Control Technologies by Control Effectiveness

Control Technology with Ranking	Control Efficiency or Emission Factor
1. 90% control efficiency (Oxidation catalyst, or equal)	90%
2. = or > 50% control efficiency (Rich-burn engine with NSCR, or equal)	50%
3. = or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)	1.0 g/bhp-hr

Step 4 - Cost Effectiveness Analysis

An EPA Certified lean burn engine equipped with a catalyst and with 0.53 g/hp-hr VOC emissions has been proposed. This is considered equivalent to the most stringent technology above i.e. = or > 90% control efficiency (Oxidation Catalyst or equal). Therefore, a cost effectiveness calculation is not required.

Step 5 – Select BACT

BACT for the emission unit is determined to be EPA Certified lean burn IC engine with catalyst and VOC emissions of 1.0 g/bhp-hr or less which has been proposed. Therefore, BACT is satisfied.

S-8594-8 Emergency Engine Driving a Firewater Pump

NO_x

Oxides of nitrogen (NO_x) are generated from the high temperature combustion of the diesel fuel. A majority of the NO_x emissions are formed from the high temperature reaction of nitrogen and oxygen in the inlet air. The rest of the NO_x emissions are formed from the reaction of fuel-bound nitrogen with oxygen in the inlet air.

1. BACT Analysis for NO_x Emissions:

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 3.1.4, 2nd Quarter 2001, identifies achieved in practice BACT for NO_x emissions from emergency diesel IC engines powering a firewater pump as follows:

- 1) Certified emissions of 6.9 g-NO_x/bhp-hr or less

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

No ranking needs to be done because the applicant has proposed the achieved in practice option.

d. Step 4 - Cost Effectiveness Analysis

The applicant has proposed the only control achieved in practice in the ranking list from Step 3. Therefore, per SJVUAPCD BACT policy, the cost effectiveness analysis is not required.

e. Step 5 - Select BACT

BACT for NO_x emissions from this emergency diesel IC engine powering a firewater pump is having certified emissions of 6.9 g-NO_x/bhp-hr or less. The applicant has proposed to install a 510 bhp emergency diesel-fired IC engine powering a firewater pump with certified emissions of 2.461 g-NO_x/bhp-hr or less; therefore BACT for NO_x emissions is satisfied.

S-8594-9 through '-13 Storage Silos

1. BACT Analysis for PM10 Emissions:

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 8.4.1 identifies Achieved in Practice BACT for PM10 emissions from Dry Material Storage and Conveying Operation as follows:

Storage, augers, elevators, conveyors, all enclosed and vented to fabric filter baghouse

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

No ranking needs to be done because the applicant has proposed the achieved in practice option.

d. Step 4 - Cost Effectiveness Analysis

The applicant has proposed the only control achieved in practice in the ranking list from Step 3. Therefore, per SJVUAPCD BACT policy, the cost effectiveness analysis is not required.

e. Step 5 - Select BACT

Applicant has proposed storage silos and receiving conveyors vented to fabric filter baghouse; therefore BACT for PM10 emissions is satisfied.

Attachment V
BACT Guidelines

Attachment VI BACT Analysis

S-9594-1 through '-3 Boilers

Top-Down BACT Analysis for NO_x for NG-fired Boiler

Step 1 – Identify All Possible Control Technologies:

The District adopted District Rule 4320 on October 16, 2008. The NO_x emission limit requirements in District Rule 4320 are lower than the current BACT limits; therefore a project specific BACT analysis will be performed to determine BACT for this project. District Rule 4320 includes a compliance option that limits boiler with heat input ratings greater than 20 MMBtu/hr to 7 ppm @ 3% O₂. This emission limit is Achieved in Practice control technology for the BACT analysis. District Rule 4320 also contains an enhanced schedule option that allows applicants additional time to meet the requirements of the rule. The enhanced schedule NO_x emission limit requirement is 5 ppmv @ 3% O₂. Since this is an enhanced option in the rule, it will be considered the Technologically Feasible control technology for the BACT analysis.

The SJVUAPCD BACT Clearinghouse guideline 1.1.1 has been rescinded. Therefore a new BACT analysis is required. The following are possible control technologies:

- 1) 5 ppmvd @ 3% O₂ with SCR
- 2) 7 ppmvd @ 3% O₂

Step 2 – Eliminate Technologically Infeasible Options:

There are no technologically infeasible options shown in Step 1.

Step 3 – Rank Remaining Control Technologies by Control Effectiveness:

1. 5 ppmvd @ 3% O₂ (0.007 lb/MMBtu) – TF
2. 7 ppmvd @ 3% O₂ (0.011 lb/MMBtu) – AIP

Step 4 – Cost Effectiveness Analysis:

Applicant has proposed NO_x of 5 ppmv @ 3% O₂ and therefore a cost effectiveness calculation is not required.

e. Step 5 - Select BACT

BACT for NO_x emissions from the boiler is a NO_x limit of 5 ppmvd @ 3% O₂; therefore BACT for NO_x emissions from the boiler is satisfied.

Top-Down BACT Analysis for SOx, PM10, and VOC Emissions:

Step 1 - Identify All Possible Control Technologies

Natural gas fuel with LPG backup

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Natural gas fuel with LPG backup

Step 4 - Cost Effectiveness Analysis

A cost effective analysis must be performed for all control options in the list from Step 3 in the order of their ranking to determine the cost effective option with the lowest emissions. Applicant has selected the only option in Step 3 therefore a cost analysis is not required.

Step 5 - Select BACT

Natural gas fuel with LPG backup

BACT Analysis for Dryer S-8594-4 Whey Dryer

BACT is required for PM10.

a. Step 1 - Identify All Possible Control Technologies

BACT guideline 1.6.15 identifies the following control technologies:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	Baghouse and natural gas fuel with LPG as backup fuel		

b. Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Baghouse and natural gas fuel with LPG as backup fuel.

d. Step 4 - Cost Effectiveness Analysis

The applicant is proposing to use the most stringent control technology from Step 3 above; therefore no cost effectiveness analysis is required.

e. Step 5 - Select BACT

Baghouse and natural gas fuel

BACT for PM₁₀ emissions is the use of a baghouse to control PM₁₀ emissions and natural gas fuel

BACT Analysis for Dryer S-8594-5 Direct-Fired Permeate Dryer

BACT is required for NOx, PM10, and VOC.

NOx

a. Step 1 - Identify All Possible Control Technologies

BACT guideline 1.6.15 identifies the following control technologies:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
NOx	20.0 ppmvd @ 3% O ₂ Low NOx burner fired on natural gas with LPG backup fuel.	9 ppmv NOx @ 3% O ₂ Selective Catalytic Reduction, Low Temperature Oxidation, or equal.	

b. Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

NOx Emissions:

20.0 ppmvd @ 3% O₂ Low NOx burner fired on NG gas with LPG backup fuel.

9 ppmvd @ 3% O₂ Selective Catalytic Reduction, Low Temperature Oxidation, or equal.

e. Step 4 - Cost Effectiveness Analysis

The applicant is proposing to use the most stringent control technology from Step 3 above; therefore no cost effectiveness analysis is required.

e. Step 5 - Select BACT

BACT for NOx has been satisfied with NOx emissions of 5 ppmv @ 3% O2, use of baghouses, and natural gas combustion, respectively.

PM10

a. Step 1 - Identify All Possible Control Technologies

BACT guideline 1.6.15 identifies the following control technologies:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	Baghouse and natural gas fuel with LPG as backup fuel		

b. Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Baghouse and natural gas fuel with LPG as backup fuel.

f. Step 4 - Cost Effectiveness Analysis

The applicant is proposing to use the most stringent control technology from Step 3 above; therefore no cost effectiveness analysis is required.

e. Step 5 - Select BACT

Baghouse and natural gas fuel

VOC

BACT is satisfied with combustion of natural gas fuel only.

S-8594-6 (Gas Fired Emergency IC Engine)

NO_x

Oxides of nitrogen (NO_x) are generated from the high temperature combustion of the natural gas fuel. A majority of the NO_x emissions are formed from the high temperature reaction of nitrogen and oxygen in the inlet air. The rest of the NO_x emissions are formed from the reaction of fuel-bound nitrogen with oxygen in the inlet air.

I. Introduction

BACT is triggered for the natural gas emergency engine (NO_x and VOC).

II. Top-Down BACT Analysis

(a) BACT Guidance

Pursuant to the District's BACT policy APR-1305, BACT determinations shall be based on the control technologies and methods for the same or similar stationary source categories listed in the District's BACT Clearinghouse. BACT Guideline 3.1.8 applies to emergency gas-fired IC engines greater than or equal to 250 hp, lean burn. This guideline shall be the basis for a "top-down" BACT analysis per District Policy. The following NO_x and VOC BACT performance levels are identified by Guideline 3.1.8:

Pollutant	Achieved in Practice or in the SIP	Technologically Feasible	Alternate Basic Equipment
NO _x	= or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)		= or > 90% control efficiency (Rich-burn engine with NSCR, or equal)
VOC	= or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)	90% control efficiency (Oxidation catalyst, or equal)	= or > 50% control efficiency (Rich-burn engine with NSCR, or equal)

(a) BACT Analysis for NO_x

Step 1- Identify all control technologies

- Alternate Basic Equipment: = or > 90% control efficiency (Rich-burn engine with NSCR, or equal)
- Technologically Feasible: None identified
- Achieved in Practice: = or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)

Step 2- Eliminate Technologically Infeasible Options

All of the above control options identified above are technologically feasible for the proposed equipment and are not eliminated.

Step 3- Rank Remaining Control Technologies by Control Effectiveness

Control Technology with Ranking	Control Efficiency or Emission Factor
1. = or > 90% control efficiency (Rich-burn engine with NSCR, or equal)	90%
2. = or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)	1.0 g/bhp-hr

Step 4 - Cost Effectiveness Analysis

An EPA-Certified lean burn engine equipped with a catalyst and with 0.13 g/hp-hr NOx emissions has been proposed. This is considered equivalent to the most stringent technology above i.e. = or > 90% control efficiency (Rich-burn engine with NSCR, or equal). Therefore, a cost effectiveness calculation is not required.

Step 5 – Select BACT

BACT for the emission unit is determined to be lean burn IC engine with catalyst and NOx emissions of 1.0 g/bhp-hr or less which has been proposed. Therefore, BACT is satisfied.

(b) BACT Analysis for VOC

Step 1- Identify all control technologies

- o Alternate Basic Equipment:
- o Technologically Feasible:
- o Achieved in Practice:

Step 2- Eliminate Technologically Infeasible Options

All of the above control options identified above are technologically feasible for the proposed equipment and are not eliminated.

Step 3- Rank Remaining Control Technologies by Control Effectiveness

Control Technology with Ranking	Control Efficiency or Emission Factor
1. 90% control efficiency (Oxidation catalyst, or equal)	90%
2. = or > 50% control efficiency (Rich-burn engine with NSCR, or equal)	50%
3. = or < 1.0 g/bhp-hr (Lean burn natural gas fired engine, or equal)	1.0 g/bhp-hr

Step 4 - Cost Effectiveness Analysis

An EPA Certified lean burn engine equipped with a catalyst and with 0.53 g/hp-hr VOC emissions has been proposed. This is considered equivalent to the most stringent technology above i.e. = or > 90% control efficiency (Oxidation Catalyst or equal). Therefore, a cost effectiveness calculation is not required.

Step 5 – Select BACT

BACT for the emission unit is determined to be EPA Certified lean burn IC engine with catalyst and VOC emissions of 1.0 g/bhp-hr or less which has been proposed. Therefore, BACT is satisfied.

S-8594-8 Emergency Engine Driving a Firewater Pump

NO_x

Oxides of nitrogen (NO_x) are generated from the high temperature combustion of the diesel fuel. A majority of the NO_x emissions are formed from the high temperature reaction of nitrogen and oxygen in the inlet air. The rest of the NO_x emissions are formed from the reaction of fuel-bound nitrogen with oxygen in the inlet air.

1. BACT Analysis for NO_x Emissions:

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 3.1.4, 2nd Quarter 2001, identifies achieved in practice BACT for NO_x emissions from emergency diesel IC engines powering a firewater pump as follows:

- 1) Certified emissions of 6.9 g-NO_x/bhp-hr or less

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

No ranking needs to be done because the applicant has proposed the achieved in practice option.

d. Step 4 - Cost Effectiveness Analysis

The applicant has proposed the only control achieved in practice in the ranking list from Step 3. Therefore, per SJVUAPCD BACT policy, the cost effectiveness analysis is not required.

e. Step 5 - Select BACT

BACT for NO_x emissions from this emergency diesel IC engine powering a firewater pump is having certified emissions of 6.9 g-NO_x/bhp-hr or less. The applicant has proposed to install a 510 bhp emergency diesel-fired IC engine powering a firewater pump with certified emissions of 2.461 g-NO_x/bhp-hr or less; therefore BACT for NO_x emissions is satisfied.

S-8594-9 through '-13 Storage Silos

1. BACT Analysis for PM10 Emissions:

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 8.4.1 identifies Achieved in Practice BACT for PM10 emissions from Dry Material Storage and Conveying Operation as follows:

Storage, augers, elevators, conveyors, all enclosed and vented to fabric filter baghouse

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

No ranking needs to be done because the applicant has proposed the achieved in practice option.

d. Step 4 - Cost Effectiveness Analysis

The applicant has proposed the only control achieved in practice in the ranking list from Step 3. Therefore, per SJVUAPCD BACT policy, the cost effectiveness analysis is not required.

e. Step 5 - Select BACT

Applicant has proposed storage silos and receiving conveyors vented to fabric filter baghouse; therefore BACT for PM10 emissions is satisfied.

Attachment VII
AAQA/HRA

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Richard Edgehill AQE – Permit Services
 From: Esteban Gutierrez AQS – Technical Services
 Date: April 20, 2015
 Facility Name: CaliCheese LLC
 Location: NW Corner of W Paige and S Enterprise in Tulare
 Application #(s): S8591-1-0 thru 16-0
 Project #: S1144581

A. RMR SUMMARY

RMR Summary				
Categories	Boiler (Unit 1-0)	Boiler (Unit 2-0)	Boiler (Unit 3-0)	Dryer (Unit 4-0)
Prioritization Score	0.24	0.24	0.24	0.04
Acute Hazard Index	0.00	0.00	0.00	0.00
Chronic Hazard Index	0.00	0.00	0.00	0.00
Maximum Individual Cancer Risk (10 ⁻⁶)	0.08	0.08	0.08	0.17
T-BACT Required?	No	No	No	No
Special Permit Conditions?	No	No	No	No

RMR Summary			
Categories	Dryer (Unit 5-0)	NG ICE (Unit 6-0)	Dice (Unit 8-0)
Prioritization Score	0.07	3.66	NA ¹
Acute Hazard Index	0.00	0.10	N/A ²
Chronic Hazard Index	0.00	0.01	N/A ²
Maximum Individual Cancer Risk (10 ⁻⁶)	0.01	1.05	0.34
T-BACT Required?	No	Yes	No
Special Permit Conditions?	No	No	No

¹Prioritization for this unit was not conducted since it has been determined that all diesel-fired IC engines will result in a prioritization score greater than 1.0.

²Acute and Chronic Hazard Indices were not calculated since there is no risk factor or the risk factor is so low that it has been determined to be insignificant for this type of unit.

RMR Summary		
Categories	Project Totals	Facility Totals
Prioritization Score	>1	>1
Acute Hazard Index	0.27	0.27
Chronic Hazard Index	0.02	0.02
Maximum Individual Cancer Risk (10⁻⁶)	2.71	2.71
T-BACT Required?		
Special Permit Conditions?		

Proposed Permit Conditions

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

Unit # 1-0 thru 6-0

No special conditions are required.

Unit # 8-0

1. The PM10 emissions rate shall not exceed **0.075 g/bhp-hr** based on US EPA certification using ISO 8178 test procedure. [District Rules 2201]
2. 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]
3. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed **50 hours per calendar year**. [District Rule 4702 and 17 CCR 93115]

B. RMR REPORT

I. Project Description

Technical Services received a request on January 21, 2015, to perform an Ambient Air Quality Analysis and a Risk Management Review for the installation of a new cheese factory with three boilers, two dryers, two NG ICE, One DICE and silos.

II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Since the total facility prioritization score was greater than one, a refined health risk assessment was required. Emissions were calculated using Ventura County emission factors for external combustion of natural gas for units 1-0 thru 5-0 and Ventura County emission factors for internal combustion of natural gas for unit 6-0 the Natural gas ICE. The District developed DICE database was used to calculate emissions for the Diesel ICE. All these emissions were input into the HEARTs database. The AERMOD model was used, with the parameters outlined below and meteorological data for 2009-2013 from Hanford to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the Hot Spots Analysis and Reporting Program (HARP) risk assessment module to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

Units 9-0 thru 16-0 were not evaluated for health risk since there is no health risk associated with storage of milk dust.

The following parameters were used for the review:

(Units)	Stack Height	Rain Cap or Pressure Plate	Inside Diameter (Units)	Gas Exit Velocity (Units)	Exhaust Discharge Direction	Gas Exit Temperature (Units)
1-0 thru 3-0	22 feet	no	44.6"	35.4 ft.sec	up	457F
4-0	72 ft	No	79"	25 FT/SEC	Horizontal	110 F
5-0	131 ft	No	79"	69 ft/sec	Up	104 F
6-0	5.6 feet	No	3.5"	374 ft/sec	Up	751 F
8-0	5.6ft	No	8"	126 ft/sec	Up	821 F
9-0 thru 13-0	32ft	No	13ft	10 m/s	Up	293
14-0 thru 16-0	10ft	No	6ft	10 m/s	Up	293

Technical Services performed modeling for criteria pollutants CO, NO_x, SO_x and PM₁₀; as well as a RMR. The emission rates used for criteria pollutant modeling were :

PE2											
Permit Unit	NO _x		SO _x		PM ₁₀		CO		VOC		
	lb/day	lb/yr	lb/day	lb/yr	lb/day	lb/yr	lb/day	lb/yr	lb/day	lb/yr	
-1-0	13.3	9,403	6.2	4393	10	9,000	80.6	57,035	8.3	5,858	
-2-0	13.3		6.2		10		80.6		8.3		
-3-0	13.3		6.2		10		80.6		8.3		
-4-0	2.0	444	0.9	207	14.1	4,794	50.8	11,275	1.8	400	
-5-0	3.9	861	1.8	402	23.4	7,858	98.7	21,889	3.5	777	
-6-0	2.1	9	0.1	1	0	1	8.6	36	8.6	36	
-8-0	55.3	55	0.1	1	1.7	2	10.0	10	1.7	2	
-9-0	0	0	0	0	3.9	863	0	0	0	0	
-10-0	0	0	0	0			0	0	0	0	0
-11-0	0	0	0	0			0	0	0	0	0
-12-0	0	0	0	0			0	0	0	0	0
-13-0	0	0	0	0	1.0	230	0	0	0	0	
-14-0	0	0	0	0			0	0	0	0	0
-15-0	0	0	0	0			0	0	0	0	0
-16-0	0	0	0	0			0	0	0	0	0
Total		10,772		5,004		22,541		90,245		7,073	

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

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

*Results were taken from the attached PSD spreadsheet.

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

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

III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk associated with the project is greater than 1.0 in a million, but less than 10 in a million. **In accordance with the District's Risk Management Policy, the project is approved with Toxic Best Available Control Technology (T-BACT).**

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

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

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

IV. Attachments

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

AAQA for CaliCheese (1-0 thru 16-0) (S8594(1144581))

All Values are in Micrograms per Cubic Meter

	NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	SOx Annual	PM 24 Hour	PM Annual
1BOILER	3.1E+00	3.3E-01	1.9E+01	1.3E+01	1.4E+00	1.3E+00	6.9E-01	1.5E-01	1.12E+00	3.14E-01
2BOILER	3.1E+00	3.3E-01	1.9E+01	1.3E+01	1.5E+00	1.3E+00	6.9E-01	1.5E-01	1.11E+00	3.12E-01
3BOILER	3.1E+00	3.2E-01	1.9E+01	1.3E+01	1.5E+00	1.3E+00	6.8E-01	1.5E-01	1.10E+00	3.10E-01
4DRYER	3.5E+00	1.3E-01	9.0E+01	3.1E+01	1.6E+00	7.2E-01	2.4E-01	6.1E-02	6.72E-01	1.62E-01
5DRYER	1.3E-01	1.3E-02	3.3E+00	2.7E+00	6.1E-02	5.6E-02	2.3E-02	6.0E-03	6.16E-02	1.60E-02
6NGICE	2.7E+00	1.9E-03	1.1E+01	3.3E+00	1.3E-01	5.1E-02	2.2E-02	2.1E-04	0.00E+00	2.14E-04
8DICE	0.0E+00	1.0E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.8E-04	0.00E+00	3.08E-04
9SILOS	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8.14E-01	1.61E-01
13HOPPER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.96E-01	5.94E-02
Background	9.9E+01	2.5E+01	4.4E+03	3.0E+03	2.4E+01	2.4E+01	5.3E+00	2.4E+01	1.04E+02	5.30E+01
Facility Totals	115.2	26.0	4,588.1	3,105.7	30.1	28.8	7.7	24.5	109.2	54.3
AAQS	188.7	56.0	23,000.0	10,000.0	195.0	1,300.0	105.0	80.0	50.0	30.0
	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Fail

EPA's Significance Level (ug/m^3)

NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	SOx Annual	PM 24 Hour	PM Annual
0.0	1.0	2000.0	500.0	0.0	25.0	5.0	1.0	5.0	1.0

*Since 5-years of meteorological data were used, an adjustment factor of 1.5 for Visalia was applied to the annual average concentrations for the devices modeled.

AAQA Emission (g/sec)

Device	NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	SOx Annual	PM 24 Hour	PM Annual
1BOILER	6.98E-02	4.51E-02	4.23E-01	4.23E-01	3.25E-02	3.25E-02	3.25E-02	2.11E-02	5.25E-02	4.31E-02
13HOPPER	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-03	3.31E-03
2BOILER	6.98E-02	4.51E-02	4.23E-01	4.23E-01	3.25E-02	3.25E-02	3.25E-02	2.11E-02	5.25E-02	4.31E-02
3BOILER	6.98E-02	4.51E-02	4.23E-01	4.23E-01	3.25E-02	3.25E-02	3.25E-02	2.11E-02	5.25E-02	4.31E-02
4DRYER	1.05E-02	6.38E-03	2.67E-01	2.67E-01	4.72E-03	4.72E-03	4.72E-03	2.98E-03	1.31E-02	7.95E-03
5DRYER	2.05E-02	1.24E-02	5.18E-01	5.18E-01	9.45E-03	9.45E-03	9.45E-03	5.78E-03	2.52E-02	1.54E-02
6NGICE	1.10E-02	1.29E-04	4.51E-02	4.51E-02	5.25E-04	5.25E-04	5.25E-04	1.44E-05	0.00E+00	1.44E-05
7NGICE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8DICE	0.00E+00	7.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-05	0.00E+00	2.44E-05
9SILOS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-02	1.24E-02

*Since 5-years of meteorological data were used, an adjustment factor of 1.5 for Visalia was applied to the annual average concentrations for the devices modeled.

Attachment VIII
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-1-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:

90.8 MMBTU/HR CLEAVER BROOKS MODEL CBEX ELITE NATURAL GAS-FIRED BOILER (OR EQUIVALENT) WITH SELECTIVE CATALYTIC REDUCTION

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
3. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
4. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
5. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
6. {4355} The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320]
7. {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]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjolle, Director of Permit Services

S-8594-1-0: Jul 28 2015 8:19AM - EDGEHLR : Joint Inspection NOT Required

8. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
9. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
10. Start-up as defined as that period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 4305, 4306 and 4320]
11. Shutdown as defined as that period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 and 4320]
12. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 2201, 4305, 4306, and 4320]
13. Except during start-up and shutdown, emissions from this unit shall not exceed any of the following limits: 5 ppmvd NO_x @ 3% O₂ (equivalent to 0.0061 lb-NO_x/MMBtu), 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 50 ppmvd CO @ 3% O₂ (equivalent to 0.037 lb-CO/MMBtu), or 9 ppmvd VOC @ 3% O₂ (equivalent to 0.0038 lb-VOC/MMBtu). [District Rules 2201, 4305, 4306, and 4320]
14. The ammonia emissions shall not exceed 10 ppmvd @ 3% O₂. [District Rule 4102]
15. Combined fuel use (heat input) for boilers S-8594-1 through '-3 shall not exceed 3,936 MMBtu/day nor 1,541,493 MMBtu/yr. [District Rules 2201 and 4102]
16. Source testing to measure NO_x, CO, and NH₃ emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320]
17. Source testing to measure NO_x, CO, and NH₃ emissions from this unit shall be conducted at least once every twelve 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 twelve months. [District Rules 2201, 4102, 4305, 4306, and 4320]
18. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
19. {110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
20. {4350} The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
21. {4351} All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320]
22. {4352} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320]
23. {4346} NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]
24. {4347} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
25. {4348} Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]

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CONDITIONS CONTINUE ON NEXT PAGE

26. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 4102]
27. {4319} The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH₃ monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306 and 4320]
28. {4320} If the NO_x, CO or NH₃ concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]
29. {4321} All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]
30. {4322} Ammonia emission readings shall be conducted at the time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 4305, 4306 and 4320]
31. {4323} The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 3% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306 and 4320]
32. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate during District inspection that the combusted gas is provided from a PUC regulated source. [District Rule 4320]
33. Records of the combined daily and annual natural gas consumption of boilers '-1 through '-3 in MMBtu/day and MMBtu/yr shall be maintained. [District Rules 1070, 2201 and 40 CFR 60.48c (g)]
34. Permittee shall submit notification to the District of the date of construction, anticipated startup, and actual startup. Notifications shall be postmarked no later than 30 days after construction and 15 days after actual startup. The notifications shall include the design heat input and identification of fuels for this permit unit. [40 CFR 60.48c (a)]
35. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c (g)]
36. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, 4320, and 40 CFR 60.48c (i)]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-2-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:
90.8 MMBTU/HR CLEAVER BROOKS MODEL CBEX ELITE NATURAL GAS-FIRED BOILER (OR EQUIVALENT) WITH
SELECTIVE CATALYTIC REDUCTION

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
3. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
4. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
5. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
6. {4355} The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320]
7. {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]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjolle, Director of Permit Services

S-8594-2-01 Jul 28 2015 11:19AM - EDGEHLR : Joint Inspection NOT Required

8. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
9. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
10. Start-up as defined as that period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 4305, 4306 and 4320]
11. Shutdown as defined as that period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 and 4320]
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13. Except during start-up and shutdown, emissions from this unit shall not exceed any of the following limits: 5 ppmvd NO_x @ 3% O₂ (equivalent to 0.0061 lb-NO_x/MMBtu), 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 50 ppmvd CO @ 3% O₂ (equivalent to 0.037 lb-CO/MMBtu), or 9 ppmvd VOC @ 3% O₂ (equivalent to 0.0038 lb-VOC/MMBtu). [District Rules 2201, 4305, 4306, and 4320]
14. The ammonia emissions shall not exceed 10 ppmvd @ 3% O₂. [District Rule 4102]
15. Combined fuel use (heat input) for boilers S-8594-1 through '3 shall not exceed 3,936 MMBtu/day nor 1,541,493 MMBtu/yr. [District Rules 2201 and 4102]
16. Source testing to measure NO_x, CO, and NH₃ emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320]
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23. {4346} NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]
24. {4347} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
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CONDITIONS CONTINUE ON NEXT PAGE

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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-3-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
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EQUIPMENT DESCRIPTION:
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Seyed Sadredin, Executive Director, APCO

Arnaud Marjolle, Director of Permit Services

8-6594-3-0 : Jul 29 2016 6:10AM - EDG/EHLR : Joint Inspection NOT Required

8. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
9. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
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15. Combined fuel use (heat input) for boilers S-8594-1 through -3 shall not exceed 3,936 MMBtu/day nor 1,541,493 MMBtu/yr. [District Rules 2201 and 4102]
16. Source testing to measure NO_x, CO, and NH₃ emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320]
17. Source testing to measure NO_x, CO, and NH₃ emissions from this unit shall be conducted at least once every twelve 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 twelve months. [District Rules 2201, 4102, 4305, 4306, and 4320]
18. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
19. {110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
20. {4350} The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
21. {4351} All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320]
22. {4352} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320]
23. {4346} NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]
24. {4347} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
25. {4348} Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]

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CONDITIONS CONTINUE ON NEXT PAGE

26. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 4102]
27. {4319} The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH₃ monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306 and 4320]
28. {4320} If the NO_x, CO or NH₃ concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]
29. {4321} All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]
30. {4322} Ammonia emission readings shall be conducted at the time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 4305, 4306 and 4320]
31. {4323} The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 3% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306 and 4320]
32. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate during District inspection that the combusted gas is provided from a PUC regulated source. [District Rule 4320]
33. Records of the combined daily and annual natural gas consumption of boilers '-1 through '-3 in MMBtu/day and MMBtu/yr shall be maintained. [District Rules 1070, 2201 and 40 CFR 60.48c (g)]
34. Permittee shall submit notification to the District of the date of construction, anticipated startup, and actual startup. Notifications shall be postmarked no later than 30 days after construction and 15 days after actual startup. The notifications shall include the design heat input and identification of fuels for this permit unit. [40 CFR 60.48c (a)]
35. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c (g)]
36. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, 4320, and 40 CFR 60.48c (i)]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-4-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:
13.66 MMBTU/HR NATURAL GAS-FIRED TETRA PAK MAGNA WIDE BODY WHEY DRYER (OR EQUIVALENT)
VENTED TO A BAGHOUSE

CONDITIONS

1. All equipment shall be constructed, maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District Rule 2201]
2. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
3. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
4. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
5. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
6. The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

Arnaud Marjollet, Director of Permit Services
S-8594-4-0, Jul 28 2015 8:19AM - EDGEHILL : Joint Inspection NOT Required

7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
8. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
9. {120} The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]
10. {73} Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
11. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201]
12. Visible emissions from baghouse serving (applicable source operation(s)) shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
13. The baghouse shall operate at all times with a minimum differential pressure of 3.2 inches water column and a maximum differential pressure of 6 inches water column. [District Rule 2201]
14. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1070]
16. Material removed from dust collector(s) shall be disposed of in a manner preventing visible emissions in excess of 0% opacity into the atmosphere. [District Rule 2201]
17. Dryer shall combust natural gas only with a sulfur content not exceeding 1 gr S/100 scf. [District Rule 2201]
18. Emissions dryer shall not exceed any of the following limits: 0.1 ppmv NOx @ 19% O2, 0.0076 lb-PM10/MMBtu, 22.3 ppmv CO @ 19% O2, or 0.0055lb-VOC/MMBtu. [District Rules 2201 and 4309]
19. Annual fuel consumption shall not exceed 72,740 MMBtu/yr. [District Rule 2201]
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 Rule 4309]
21. If either the NOX or CO concentrations corrected to 19% 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 the performing the notification and testing required by this condition. [District Rule 4309]
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 Rule 4309]
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 19% 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 Rule 4309]

CONDITIONS CONTINUE ON NEXT PAGE

24. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309]
25. 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]
26. 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]
27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309]
28. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309 (adopted 12-15-2005). [District Rule 4309] Federally Enforceable Through Title V Permit
29. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of startup and at least once every 24 months thereafter. [District Rules 2201 and 4309]
30. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309]
31. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309]
32. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309]
33. The results of each compliance test shall be submitted to the District within 60 days. [District Rule 1081]
34. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201]
35. Records of annual fuel consumption in MMBtu/yr shall be maintained. [District Rules 1070 and 2201]
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% 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 Rule 4309]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4309]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-5-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:
26.52 MMBTU/HR NATURAL GAS-FIRED RELCO L-TECH (OR EQUIVALENT) PERMEATE DRYER VENTED TO TWO BAGHOUSES

CONDITIONS

1. All equipment shall be constructed, maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District Rule 2201]
2. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
3. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
4. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
5. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
6. The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

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Arnaud Marjolle, Director of Permit Services
S-8594-5-0: Jul 28 2015 8:19AM - EDGEHLR : Joint Inspection NOT Required

7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
8. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
9. {120} The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]
10. {73} Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
11. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201]
12. Visible emissions from baghouse serving (applicable source operation(s)) shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
13. The baghouse shall operate at all times with a minimum differential pressure of 3.2 inches water column and a maximum differential pressure of 6 inches water column. [District Rule 2201]
14. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1070]
16. Material removed from dust collector(s) shall be disposed of in a manner preventing visible emissions in excess of 0% opacity into the atmosphere. [District Rule 2201]
17. Dryer shall combust natural gas only with a sulfur content not exceeding 1 gr S/100 scf. [District Rule 2201]
18. Emissions dryer shall not exceed any of the following limits: 0.1 ppmv NOx @ 19% O2, 0.0076 lb-PM10/MMBtu, 22.3 ppmv CO @ 19% O2, or 0.0055lb-VOC/MMBtu. [District Rules 2201 and 4309]
19. Annual fuel consumption shall not exceed 141,219 MMBtu/yr. [District Rule 2201]
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 Rule 4309]
21. If either the NOX or CO concentrations corrected to 19% 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 the performing the notification and testing required by this condition. [District Rule 4309]
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 Rule 4309]
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 19% 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 Rule 4309]

CONDITIONS CONTINUE ON NEXT PAGE

24. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309]
25. 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]
26. 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]
27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309]
28. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309 (adopted 12-15-2005). [District Rule 4309]
29. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of startup and at least once every 24 months thereafter. [District Rules 2201 and 4309]
30. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309]
31. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309]
32. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309]
33. The results of each compliance test shall be submitted to the District within 60 days. [District Rule 1081]
34. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201]
35. Records of annual fuel consumption in MMBtu/yr shall be maintained. [District Rules 1070 and 2201]
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x 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 Rule 4309]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4309]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-6-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:
308 HP EPA-CERTIFIED NATURAL GAS-FIRED GENERAC MODEL MG200 EMERGENCY STANDBY INTERNAL COMBUSTION ENGINE POWERING AN ELECTRICAL GENERATOR OR EQUIVALENT

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
3. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
4. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
5. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
7. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

Arnaud Marjollet, Director of Permit Services

S-8594-6-0 : Jul 28 2015 : 8:18AM - EDGEHILL : Joint Inspection NOT Required

8. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
9. {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]
10. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702]
11. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]
12. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]
13. This IC engine shall be equipped with a three-way catalyst and shall be fired on PUC regulated natural gas fuel only. [District Rules 2201 amd 4801]
14. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [NSPS Subpart JJJJ and District Rule 4702]
15. Emissions from this IC engine shall not exceed any of the following limits: 0.13 g-NOx/bhp-hr, 0.000659 g-PM10/bhp-hr, 0.53 g-CO/bhp-hr, or 0.53 g-VOC/bhp-hr. [NSPS Subpart JJJJ and District Rule 2201]
16. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
17. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]
18. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-8-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:

510 HP DIESEL-FIRED JOHN DEERE MODEL 6135 H TIER-3 CERTIFIED EMERGENCY INTERNAL COMBUSTION ENGINE (OR EQUIVALENT) POWERING A FIREWATER PUMP

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
3. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
4. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
5. 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. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
7. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

Arnaud Marjolle, Director of Permit Services

S-8594-8-0 : Jul 28 2015 8:19AM -- EDCBHR : Joint Inspection NOT Required

8. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
9. {3395} Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]
10. {3403} This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]
11. Emissions from this IC engine shall not exceed any of the following limits: 2.461g-NOx/bhp-hr, 0.447 g-CO/bhp-hr, or 0.075 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
12. Emissions from this IC engine shall not exceed 0.075 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
13. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems". Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rules 2201 and 4702 and 17 CCR 93115]
14. {3807} An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]
15. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]
16. {3475} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-9-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:

UP TO 37,500 GALLON MILK PRODUCTS POWDERED STORAGE SILO WITH VACUUM OR PRESSURE ENCLOSED CONVEYING SYSTEM DISCHARGING TO NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER OR EQUIVALENT

CONDITIONS

1. Visible emissions from the bin vent filter serving the silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
2. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
3. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
4. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
5. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. Emissions from the storage silo shall not exceed 0.015 lb-PM10/ton. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

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Arnaud Marjolle, Director of Permit Services
S-8594-9-0 Jul 28 2015 8:19 AM - EDGEHILR Joint Inspection NOT Required

8. Maximum combined throughput of whey and/or permeate to storage silos S-8594-9 through '-12 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201]
9. Permittee shall maintain a daily record of the quantity of whey and permeate (combined) conveyed into this silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rule 2201]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-10-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:

UP TO 37,500 GALLON MILK PRODUCTS POWDERED STORAGE SILO WITH VACUUM OR PRESSURE ENCLOSED CONVEYING SYSTEM DISCHARGING TO NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER OR EQUIVALENT

CONDITIONS

1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
3. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
4. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
5. Visible emissions from the bin vent filter serving the silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. Emissions from the storage silo shall not exceed 0.015 lb-PM10/ton. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

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Arnaud Marjollet, Director of Permit Services

S-8594-10-0: Jul 28, 2015 8:10AM - ECGEHLR - Joint Inspection NOT Required

8. Maximum combined throughput of whey and/or permeate to storage silos S-8594-9 through '-12 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201]
9. Permittee shall maintain a daily record of the quantity of whey and permeate (combined) conveyed into this silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rule 2201]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-11-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:

UP TO 37,500 GALLON MILK PRODUCTS POWDERED STORAGE SILO WITH VACUUM OR PRESSURE ENCLOSED CONVEYING SYSTEM DISCHARGING TO NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER OR EQUIVALENT

CONDITIONS

1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
3. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
4. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
5. Visible emissions from the bin vent filter serving the silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. Emissions from the storage silo shall not exceed 0.015 lb-PM10/ton. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

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Arnaud Marjolle, Director of Permit Services

8-8594-11-0, JUL 29 2015 8:10AM - EDGEHUR : Joint Inspection NOT Flagged

8. Maximum combined throughput of whey and/or permeate to storage silos S-8594-9 through '-12 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201]
9. Permittee shall maintain a daily record of the quantity of whey and permeate (combined) conveyed into this silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rule 2201]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-12-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:

UP TO 37,500 GALLON MILK PRODUCTS POWDERED STORAGE SILO WITH VACUUM OR PRESSURE ENCLOSED CONVEYING SYSTEM DISCHARGING TO NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER OR EQUIVALENT

CONDITIONS

1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
3. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
4. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
5. Visible emissions from the bin vent filter serving the silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. Emissions from the storage silo shall not exceed 0.015 lb-PM10/ton. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

Arnaud Marjolle, Director of Permit Services

S-8594-12-0 : Jul 26 2018 8:10AM - EDGHEHLR : Joint Inspection NOT Required

8. Maximum combined throughput of whey and/or permeate to storage silos S-8594-9 through '-12 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201]
9. Permittee shall maintain a daily record of the quantity of whey and permeate (combined) conveyed into this silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-13-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:

UP TO 3,750 GALLON MILK PRODUCTS BAGGING OPERATION WITH HOPPER SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER OR EQUIVALENT

CONDITIONS

1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
3. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
4. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
5. Visible emissions from the bin vent filter serving the silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. Emissions from the bagging operation shall not exceed 0.004 lb-PM10/ton. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services

S-8594-13-0 : Jul 28 2015 8:19AM - EDOEHLR : Joril Inspection NOT Required

8. Maximum combined throughput of whey and/or permeate to bagging operations S-8594-13 through '-16 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201]
9. Permittee shall maintain a daily record of the quantity of whey and permeate (combined) conveyed into this silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rule 2201]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-14-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:
UP TO 3,750 GALLON MILK PRODUCTS BAGGING OPERATION WITH HOPPER SERVED BY A NU-CON MODEL
NCBV 58-25-2TF BIN VENT FILTER OR EQUIVALENT

CONDITIONS

1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
3. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
4. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
5. Visible emissions from the bin vent filter serving the silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. Emissions from the bagging operation shall not exceed 0.004 lb-PM10/ton. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

Arnaud Marjollet, Director of Permit Services

S-8594-14-0 : Jul 28 2015 : 8:13AM - EDGEHILL : Joint Inspection NOT Required

8. Maximum combined throughput of whey and/or permeate to bagging operations S-8594-13 through '16 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201]
9. Permittee shall maintain a daily record of the quantity of whey and permeate (combined) conveyed into this silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rule 2201]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-8594-15-0

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:

UP TO 3,750 GALLON MILK PRODUCTS BAGGING OPERATION WITH HOPPER SERVED BY A NU-CON MODEL NCBV 58-25-2TF BIN VENT FILTER OR EQUIVALENT

CONDITIONS

1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
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6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. Emissions from the bagging operation shall not exceed 0.004 lb-PM10/ton. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjolle, Director of Permit Services
S-8594-15-0 | Jul 28 2015 8:19AM - EDGEHILL | Joint Inspection NOT Required

8. Maximum combined throughput of whey and/or permeate to bagging operations S-8594-13 through '-16 shall not exceed 259 tons/day nor 57,514 tons/yr. [District Rule 2201]
9. Permittee shall maintain a daily record of the quantity of whey and permeate (combined) conveyed into this silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rule 2201]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-8594-16-0

ISSUANCE DATE: DRAFT
DRAFT

LEGAL OWNER OR OPERATOR: CCC PROPERTY I, LLC
MAILING ADDRESS: 2233 LAKE PARK DRIVE, SUITE 205
ATLANTA, GA 30080

LOCATION: NORTHEAST CORNER OF WEST PAIGE AVENUE & SOUTH ENTERPRISE ST
TULARE, CA

EQUIPMENT DESCRIPTION:
UP TO 3,750 GALLON MILK PRODUCTS BAGGING OPERATION WITH HOPPER SERVED BY A NU-CON MODEL
NCBV 58-25-2TF BIN VENT FILTER OR EQUIVALENT

CONDITIONS

1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
3. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]
4. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
5. Visible emissions from the bin vent filter serving the silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. Emissions from the bagging operation shall not exceed 0.004 lb-PM10/ton. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

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Arnaud Marjolle, Director of Permit Services

S-8594-16-0 : Jul 26 2015 8:19AM -- EDG@HILR : Joint Inspection NOT Required

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