Re: Final - Authorities to Construct / Certificates of Conformity (Significant Mod)
Facility Number: N-2107
Project Number: N-1201629

Dear Mr. McMurtry:

The Air Pollution Control Officer has issued Authorities to Construct (ATCs) N-2107-5-9, '-9-19, '-12-6, '-13-8, '-14-2 and '-15-2 with Certificates of Conformity to Darling Ingredients, Inc. at 11946 Carpenter Rd, Crows Landing. The proposed project is to modify existing animal rendering operations. Enclosed are the ATCs and a copy of the notice of final action that has been posted on the District’s website (www.valleyair.org).

Notice of the District’s preliminary decision to issue the ATCs was posted on September 22, 2022. The District’s analysis of the proposal was also sent to CARB and US EPA Region IX on September 22, 2022. No comments were received following the District’s preliminary decision on this project.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 60 days.

Prior to operating with the modifications authorized by the ATCs, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5. Application forms are found on the District’s website at www.valleyair.org/permits/TVforms.
Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Sincerely,

Brian Clements  
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email  
cc: Gerardo Rios, EPA (w/enclosure) via EPS
AUTHORITY TO CONSTRUCT (ATC) 

QUICK START GUIDE

1. **Pay Invoice**: Please pay enclosed invoice before due date.

2. **Modify Your Title V Permit**: Prior to operating the equipment authorized under this ATC, submit an application to modify your Title V permit. See application forms at [http://www.valleyair.org/permits/TVforms](http://www.valleyair.org/permits/TVforms).

3. **Fully Understand ATC**: Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.

4. **Follow ATC**: You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.

5. **Notify District**: You must notify the District’s Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District’s Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.

6. **Source Test**: Schedule and perform any required source testing. See [http://www.valleyair.org/busind/comply/source_testing.htm](http://www.valleyair.org/busind/comply/source_testing.htm) for source testing resources.

7. **Maintain Records**: Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years. Sample record keeping forms can be found at [http://www.valleyair.org/busind/comply/compliance_forms.htm](http://www.valleyair.org/busind/comply/compliance_forms.htm).

By operating in compliance, you are doing your part to improve air quality for all Valley residents.

**For assistance, please contact District Compliance staff at any of the telephone numbers listed below.**
AUTHORITY TO CONSTRUCT

PERMIT NO:  N-2107-5-9
ISSUANCE DATE:  11/08/2022

LEGAL OWNER OR OPERATOR: DARLING INGREDIENTS INC
MAILING ADDRESS: P O BOX 1608
TURLOCK, CA 95381

LOCATION: 11946 CARPENTER RD
CROWS LANDING, CA 95313

EQUIPMENT DESCRIPTION:
MODIFICATION OF A RAW MATERIAL RECEIVING OPERATION EQUIPPED WITH OUTDOOR RAW MATERIAL RECEIVING CONCRETE SLABS, GRINDING SYSTEM, AND PRIMARY AND SECONDARY WASTEWATER TREATMENT SYSTEM WITH DAF UNIT AND AN OUTDOOR WASTEWATER LAGOON SYSTEM (PERMIT EXEMPT LOW EMITTING UNIT): INCREASE PROCESSING RATES FROM 1,650,000 LB/DAY (825 TONS/DAY) TO 1,850,000 LB/DAY (925 TONS/DAY) AND 602,250,000 LB/YEAR (301,125 TONS/YR) TO 675,250,000 LB/YR (337,625 TONS/YR) AND INSTALL A NEW SEPARATE RAW MATERIAL GRINDER AND PUMPS

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. All equipment shall be maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District Rule 2201] Federally Enforceable Through Title V Permit

4. The Air Pollution Control District shall be immediately notified of any breakdown or malfunction that reduces or disrupts the normal processing of odors required by this permit. [District Rules 1100 and 4102] Federally Enforceable Through Title V Permit

5. The District shall have authority to investigate possible odors alleged to originate from the facility and to make a determination of whether or not a nuisance exists, either in response to a complaint or on its own initiative. [District Rules 1070 and 4102] Federally Enforceable Through Title V Permit

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO
6. The APCO or any authorized representative shall have access to inspect any equipment, operation, records, method required in this permit, to sample emissions from the source or require samples to be taken, or perform any other actions to assure compliance with the requirements of this permit and all District rules and regulations. [District Rule 1070] Federally Enforceable Through Title V Permit

7. The premises of the plant except for raw material receiving and storage areas and their associated pits and bins shall be kept clean and free from spillage of raw or finished materials, refuse, and standing pools of water which may present a nuisance condition. All raw material spills shall be cleaned up immediately. [District Rule 4102]

8. The delivery truck holding time shall not exceed 48 hours and the animal mortality holding time shall not exceed 96 hours from the time the raw materials enter the property. [District Rule 4102]

9. No storage of raw materials outside of the pits, bins, or open slab areas is permitted. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

10. Raw material receiving areas (pits/bins and open slabs) not currently holding raw material for processing shall be cleaned daily. [District Rule 4102]

11. Trucks waiting their turn to unload within the 48 or 96 hour unload time limitation are not considered storage outside of the pit/slab area. [District Rule 4102]

12. All trucks and truck tires delivering raw material shall be washed clean of raw material and raw material residue prior to exiting the facility premises in order to minimize trackout of raw material and raw material residue. [District Rule 4102]

13. All raw material trucks shall be maintained in condition to prevent leakage of any solid or liquid material. [District Rule 4102]

14. The rendering plant shall not be operated unless the odor control system is operating and in full use. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Total facility raw material process rate shall not exceed 1,850,000 pounds (925 tons) per day or 675,250,000 pounds (337,625 tons) per year. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

16. Except during periods of equipment breakdown as determined by the District under Rule 1100, all raw material received shall be processed within 24 hours of entering the receiving pits and in compliance with other conditions in this permit. Raw material shall be monitored to ensure that processing is performed within this time limit using plant processing records. [District Rules 1100 and 4102]

17. If raw material cannot be processed within the time constraints of this permit, raw material shall be diverted to other facilities. No further deliveries shall be received until a 48 (or 96) hour turnaround for raw material is achievable. [District Rule 4102]

18. The owner and/or operator shall comply with all the provisions of District Rule 4102, Nuisance. [District Rule 4102]

19. Permittee shall keep daily and annual records of the amount of raw material received. [District Rule 2201] Federally Enforceable Through Title V Permit

20. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
AUTHORITY TO CONSTRUCT

PERMIT NO: N-2107-9-19

LEGAL OWNER OR OPERATOR: DARLING INGREDIENTS INC
MAILING ADDRESS: P O BOX 1608
TURLOCK, CA 95381

LOCATION: 11946 CARPENTER RD
CROWS LANDING, CA 95313

EQUIPMENT DESCRIPTION:
MODIFICATION OF FOOD PROCESSING BYPRODUCT RECYCLING OPERATION INCLUDING THREE DUPPS PRE-HEAT COOKERS, A HAARSLEV 2564 COOKER AND AIR COOLED CONDENSER SERVED BY A SHARED 3.0 MMBTU/HR NATURAL GAS-FIRED GULF COAST ENVIRONMENTAL REGENERATIVE THERMAL OXIDIZER (RTO) WITH A VENTURI SCRUBBER PRIOR TO THE RTO (CONTROLS SHARED WITH N-2107-14-0): INCREASE PROCESSING RATES FROM 1,650,000 LB/DAY (825 TONS/DAY) TO 1,850,000 LB/DAY (925 TONS/DAY) AND 602,250,000 LB/YEAR (301,125 TONS/YR) TO 675,250,000 LB/YR (337,625 TONS/YR); REPLACE 3 DUPPS BATCH COOKERS WITH DUPPS MODEL 200U CONTINUOUS COOKER, A NEW AIR-COOLED CONDENSER, AND SUPPORTING EQUIPMENT INCLUDING 2 PRESSES, A CLOSED ENTRAINMENT TRAP AND FAT SCREEN, AND A NEW CENTRIFUGE; UPGRADE THE EXISTING ODOR CONTROL SYSTEM BY INSTALLING TWO SETS OF A VENTURI SCRUBBER AND A PACKED-BED WET SCRUBBER PRIOR TO THE EXISTING RTO AND VENTURI SCRUBBER CONFIGURATION; INSTALL TWO 15,000-GALLON DAY TANKS FOR FAT STORAGE (PERMIT-EXEMPT UNITS); AND TO REFURBISH THE RTO TO UPGRADE ITS VALVE SYSTEM FOR EXCHANGING AIR BETWEEN THE RTO CHAMBERS (NO CHANGE TO RTO EXHAUST AIRFLOW RATE OR HEAT INPUT RATE).

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
N-2107-9-19 - Iss 8 2022 10:30 AM - KAVILDU - Joint Inspection NOT Required
3. The operator shall install, maintain, and operate each scrubber in accordance with the scrubber manufacturer recommendations. The manufacturer recommendations shall be kept as record in the permit file. [District Rule 2201] Federally Enforceable Through Title V Permit

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rules 2520, 9.3.2, 4801 and Stanislaus County Rule 407] Federally Enforceable Through Title V Permit

6. Tallow and yellow grease storage tanks shall be kept in good operating condition. These tanks shall not contribute to a nuisance condition. [District Rule 4102]

7. The shared RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

8. The combined total raw material processed through the equipment under permits N-2107-9 and N-2107-14 shall not exceed any of the following limits: 1,850,000 lb/day (925 tons/day) and 675,250,000 lb/yr (337,625 tons/yr). [District Rule 2201] Federally Enforceable Through Title V Permit

9. The combined total emissions from the process lines (N-2107-9 and N-2107-14), at the RTO exhaust, shall not exceed any of the following: 0.98 lb-NOx/MMBtu and 2.94 lb-NOx/hr, 0.15 lb-SOx/ton of raw material processed, 0.07275 lb-PM10/ton of raw material processed, 1.12 lb-CO/MMBtu and 3.36 lb-CO/hr, and 0.03 lb-VOC/ton of raw material processed. [District Rule 2201] Federally Enforceable Through Title V Permit

10. Source testing to measure NOx, SOx, PM10, CO and VOC emissions, at the exhaust stack of the RTO, shall be conducted within 60 days of initial startup under this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

12. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit

13. During source testing, the equipment under permit N-2107-9 and N-2107-14 shall either be operated at or above 90% of its maximum hourly processing capability, or at or above 90% of its maximum hourly production in the previous year. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Source testing to measure NOx emissions shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

15. Source testing to measure CO emissions shall be determined using EPA Method 10 or ARB Method 100. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

16. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

17. Source testing to measure SOx emissions shall be conducted using either CARB Methods 100 or EPA Method 6, Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

18. Source testing to measure PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
19. Source testing to measure the VOC emissions shall be conducted using EPA Methods 18, 25, 25A, or 25B or CARB Method 100. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

20. Source testing to measure the VOC emissions from the shared RTO exhaust shall be conducted at least once every 24 months. [District Rule 2201] Federally Enforceable Through Title V Permit

21. During the initial source testing, the permittee shall establish minimum solution circulation rate (gallons per minute (gpm)) for each scrubber, minimum solution conductivity (micro mhos/cm) for the packed-bed wet scrubbers, and differential pressure range (inches of water column) across each scrubber. The established parameters shall be administratively included in the Permit to Operate. The permittee must maintain each scrubber at or above the established minimum solution circulation rate (gpm) and solution conductivity (micro mhos/cm), and operate the scrubbers within established differential pressure (inches of water column), at all times when equipment under permit N-2107-9 and/or N-2107-14 operates. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Each packed-bed wet scrubber shall be equipped with an operational solution conductivity analyzer that monitors and records the conductivity of scrubber solution. The instruments shall be maintained in good working condition at all times when equipment under permit N-2107-9 and/or N-2107-14 operates. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Each scrubber shall be equipped with an operational differential pressure gauge to indicate the pressure difference across the scrubber in inches of water column. The gauge shall be maintained in good working condition at all times when equipment under permit N-2107-9 and/or N-2107-14 operates. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Each scrubber shall be equipped with an operational flow meter to measure solution circulation rate (gpm). The instruments shall be maintained in good working condition at all times when equipment under permit N-2107-9 and/or N-2107-14 operates. [District Rule 2201] Federally Enforceable Through Title V Permit

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

26. The shared RTO shall be operated with a combustion chamber temperature of no less than 1400 degrees F and the retention time shall be no less than one second. A continuous temperature monitoring and recording device shall be used and kept in good working order. [District Rules 2201 and 4104] Federally Enforceable Through Title V Permit

27. The shared RTO shall be heated to proper operating temperature prior to any contaminated process air entering the oxidizer. [District Rules 2201 and 4104] Federally Enforceable Through Title V Permit

28. The shared RTO shall continue to operate after the shut-down of the rendering processes until all contaminated process air is incinerated. [District Rules 2201 and 4104] Federally Enforceable Through Title V Permit

29. The owner or operator shall keep a record of the shared RTO combustion chamber temperature readings collected from the data recorder on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit

30. The owner or operator shall keep a daily record of the combined quantity of raw material processed by units N-2107-9 and N-2107-14. [District Rule 2201] Federally Enforceable Through Title V Permit

31. The owner or operator shall maintain records of the following items on a daily basis: (a) Scrubber solution conductivity (micro mhos/cm) for each packed-bed wet scrubber; (b) Scrubber solution flow rate (gpm) for each scrubber; and (c) Differential pressure (inches of water column) across the packing (packed bed scrubber) or throat (venturi scrubber) of the scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

32. Facility-wide PM10 emissions shall not exceed 29,200 lbs per year. Operator shall maintain copies of all natural gas fuel invoices, and records of hours of operation of the shared RTO in order to show compliance with this emissions limit. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

33. All records shall be retained for a minimum of five years, and shall be made readily available for District inspection upon request. [District Rules 1070, 2201, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
34. Prior to operating equipment under this Authority to Construct permits N-2107-9-19 and '-14-2, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 805 lb, 2nd quarter - 805 lb, 3rd quarter - 806 lb, and fourth quarter - 806 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

35. ERC Certificate Numbers C-1298-2 and S-4346-2 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
AUTHORIZED TO CONSTRUCT

PERMIT NO: N-2107-12-6

LEGAL OWNER OR OPERATOR: DARLING INGREDIENTS INC

MAILING ADDRESS:
PO BOX 1608
TURLOCK, CA 95381

LOCATION:
11946 CARPENTER RD
CROWS LANDING, CA 95313

EQUIPMENT DESCRIPTION:
MODIFICATION OF PROTEIN MEAL FINISHING AND LOADOUT OPERATION WITH ONE DRAG LINE CONVEYOR, ONE 104 TON STORAGE/LOADOUT BIN, THREE 84 TON STORAGE/LOADOUT BINS, ONE 450 TON STORAGE/LOADOUT BIN, CRAX RECEIVING, THREE HAMMER MILLS, THREE SCREENS, AND A LOADOUT BUILDING WITH VERTILOK STORAGE/LOADOUT BINS; TO INSTALL A SPECIES SEGREGATION Enclosed MECHANICAL CONVEYANCE FOR DELIVERY OF PROTEIN TO A SPECIES SEGREGATION THE FOLLOWING NEW EQUIPMENT - CURING BIN, A HAMMER MILL, A SCREEN, BUCKET ELEVATOR, 400-TON STORAGE/LOADOUT BIN WITH BIN VENT FILTRATION SYSTEM, AND A NEW LOADOUT BUILDING. THE NEW HAMMER MILL AND SCREEN SYSTEM WILL BE SERVED BY AN ASPIRATOR CONNECTED TO A CYCLONE DISCHARGE ROUTED THROUGH A BAG FILTER INSIDE THE BUILDING.

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All loadout material trucks shall be maintained in condition to prevent leakage of solid or liquid material. [District Rule 4102]
4. Equipment shall be operated in such a manner as to not constitute a nuisance or annoyance to a considerable number of people. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
5. The District shall have authority to investigate possible odors alleged to originate from the facility and to make a determination of whether or not a nuisance exists, either in response to a complaint or on its own initiative. [District Rule 4102]

6. The District shall have access to the facility at any time to inspect operations, review records or perform other actions to assure compliance. [District Rule 1070] Federally Enforceable Through Title V Permit

7. The combined total quantity of protein meal loaded into trucks/containers for shipping through both the old (existing) and new loadout areas shall not exceed 1,200 tons per day. [District Rule 2201] Federally Enforceable Through Title V Permit

8. PM10 emissions from the protein meal finishing and loadout operation shall not exceed 0.00333 pounds per ton of protein meal loaded out. [District Rule 2201] Federally Enforceable Through Title V Permit

9. Permittee shall keep a daily record of the combined quantity of protein meal loaded out. [District Rule 2201] Federally Enforceable Through Title V Permit

10. All records shall be maintained and retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
AUTHORITY TO CONSTRUCT

PERMIT NO: N-2107-13-8

LEGAL OWNER OR OPERATOR: DARLING INGREDIENTS INC
MAILING ADDRESS: P O BOX 1608
TURLOCK, CA 95381

LOCATION: 11946 CARPENTER RD
CROWS LANDING, CA 95313

EQUIPMENT DESCRIPTION:
MODIFICATION OF 76.93 MMBTU/HR NEBRASKA MODEL NS-E-57 NATURAL GAS-FIRED BOILER EQUIPPED WITH A FLUE GAS RECIRCULATION (FGR) SYSTEM AND AMMONIA SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM: RE-ESTABLISH PM10 EMISSION FACTOR FROM 0.0076 LB/MMBTU TO 0.003 LB/MMBTU

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

5. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 and 4320, and 40 CFR 60.48c(d)] Federally Enforceable Through Title V Permit

6. The boiler shall be equipped with a non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
7. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.003 lb-PM10/MMBtu, 100 ppmvd CO @ 3% O2 or 0.073 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

8. The ammonia emission rate shall not exceed 10.0 ppmvd @ 3% O2 over a 15 minute averaging period. [District Rule 4102]

9. Source testing to measure natural gas combustion NOx, CO, and NH3 emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

10. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

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

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

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

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

18. Fuel sulfur content shall be determined using EPA Method 11 or EPA Method 15 or District, CARB and EPA approved alternative methods. [District Rule 4320] Federally Enforceable Through Title V Permit

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

20. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Dräger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

21. The ammonia (NH3) flow rate range shall be established during required source tests. [40 CFR Part 64] Federally Enforceable Through Title V Permit

22. The permittee shall monitor and record the ammonia (NH3) flow rate at least once during each day. 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
23. If either the NO\textsubscript{x}, CO or NH\textsubscript{3} concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

24. All NO\textsubscript{x}, CO, O\textsubscript{2} and NH\textsubscript{3} emission readings and NH\textsubscript{3} flow rate 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\textsubscript{x}, CO and O\textsubscript{2} analyzer as well as the NH\textsubscript{3} 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 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

25. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

26. Ammonia emission readings shall be conducted at the time the NO\textsubscript{x}, CO and O\textsubscript{2} readings are taken. The readings shall be converted to ppmvd @ 3% O\textsubscript{2}. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

27. The permittee shall maintain records of: (1) the date and time of NO\textsubscript{x}, CO, NH\textsubscript{3} and O\textsubscript{2} measurements, (2) the O\textsubscript{2} concentration in percent by volume and the measured NO\textsubscript{x}, CO and NH\textsubscript{3} concentrations corrected to 3% O\textsubscript{2}, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH\textsubscript{3} 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 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

28. The permittee shall record and maintain records of the amount of fuel combusted during each calendar month. The record shall be updated on at least a monthly basis. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit

29. 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, 40 CFR Part 64, and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

30. No later than May 1, 2022, the operator shall submit an emission control plan (ECP) that contains the following information: Permit to Operate number, fuel type and higher heating value (HHV) of the fuel, annual fuel consumption (expressed in Btu/yr), current emission level, including method used to determine emission level, NO\textsubscript{x} limit to be satisfied pursuant to section 5.2 Table 2 or emission fee payment to be made pursuant to section 5.3 and plan of actions, including a schedule of increments of progress, which will be taken to satisfy the requirements of Section 5.0 and the compliance schedule in Section 7.0 of District Rule 4320 (12/17/2020). [District Rule 4320]
AUTHORITY TO CONSTRUCT

PERMIT NO: N-2107-14-2

LEGAL OWNER OR OPERATOR: DARLING INGREDIENTS INC
MAILING ADDRESS: P O BOX 1608
TURLOCK, CA 95381

LOCATION: 11946 CARPENTER RD
CROWS LANDING, CA 95313

EQUIPMENT DESCRIPTION:
MODIFICATION OF FEATHER RECYCLING OPERATION CONSISTING OF AN INDOOR FEATHER RECEIVING HOPPER, A STEAM-FIRED CONTINUOUS FEATHER HYDROLYZER, A FEATHER PRESS, A STEAM-FIRED FEATHER DRYER, A BLOOD STAGING TANK, BLOOD CENTRIFUGE, SPRAY CHAMBER AND AIR COOLED CONDENSER SERVED BY A SHARED 3.0 MMBTU/HR NATURAL GAS-FIRED GULF COAST ENVIRONMENTAL REGENERATIVE THERMAL OXIDIZER (RTO) WITH A VENTURI SCRUBBER PRIOR TO THE RTO (CONTROLS SHARED WITH N-2107-9-17): INCREASE PROCESSING RATES FROM 1,650,000 LB/DAY (825 TONS/DAY) TO 1,850,000 LB/DAY (925 TONS/DAY) AND 602,250,000 LB/YEAR (301,125 TONS/YR) TO 675,250,000 LB/YR (337,625 TONS/YR); UPGRADE THE EXISTING ODOR CONTROL SYSTEM BY INSTALLING TWO SETS OF A VENTURI SCRUBBER AND A PACKED-BED WET SCRUBBER PRIOR TO THE EXISTING RTO AND VENTURI SCRUBBER CONFIGURATION; AND TO REFURBISH THE RTO TO UPGRADE ITS VALVE SYSTEM FOR EXCHANGING AIR BETWEEN THE RTO CHAMBERS (NO CHANGE TO RTO EXHAUST AIRFLOW RATE OR HEAT INPUT RATE)

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. The operator shall install, maintain, and operate each scrubber in accordance with the scrubber manufacturer recommendations. The manufacturer recommendations shall be kept as record in the permit file. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rules 2520, 9.3.2, 4801 and Stanislaus County Rule 407] Federally Enforceable Through Title V Permit

6. The shared RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

7. The combined total raw material processed through the equipment under permits N-2107-9 and N-2107-14 shall not exceed any of the following limits: 1,850,000 lb/day (925 tons/day) and 675,250,000 lb/yr (337,625 tons/yr). [District Rule 2201] Federally Enforceable Through Title V Permit

8. The combined total emissions from the process lines (N-2107-9 and N-2107-14), at the RTO exhaust, shall not exceed any of the following: 0.98 lb-NOx/MMBtu and 2.94 lb-NOx/hr, 0.15 lb-SOx/ton of raw material processed, 0.07275 lb-PM10/ton of raw material processed, 1.12 lb-CO/MMBtu and 3.36 lb-CO/hr, and 0.03 lb-VOC/ton of raw material processed. [District Rule 2201] Federally Enforceable Through Title V Permit

9. Source testing testing to measure NOx, SOx, PM10, CO and VOC emissions, at the exhaust stack of the RTO, shall be conducted within 60 days of initial startup under this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

11. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit

12. During source testing, the equipment under permit N-2107-9 and N-2107-14 shall either be operated at or above 90% of its maximum hourly processing capability, or at or above 90% of its maximum hourly production in the previous year. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Source testing to measure NOx emissions shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

14. Source testing to measure CO emissions shall be determined using EPA Method 10 or ARB Method 100. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

15. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

16. Source testing to measure SOx emissions shall be conducted using either CARB Methods 100 or EPA Method 6. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

17. Source testing to measure PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

18. Source testing to measure the VOC emissions shall be conducted using EPA Methods 18, 25, 25A, or 25B or CARB Method 100. Should it be determined that another set of test methods is more appropriate, such test methods shall be approved by the District prior to initial source testing. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
19. Source testing to measure the VOC emissions from the shared RTO exhaust shall be conducted at least once every 24 months. [District Rule 2201] Federally Enforceable Through Title V Permit

20. During the initial source testing, the permittee shall establish minimum solution circulation rate (gallons per minute (gpm)) for each scrubber, minimum solution conductivity (micro mhos/cm) for the packed-bed wet scrubbers, and differential pressure range (inches of water column) across each scrubber. The established parameters shall be administratively included in the Permit to Operate. The permittee must maintain each scrubber at or above the established minimum solution circulation rate (gpm) and solution conductivity (micro mhos/cm), and operate the scrubbers within established differential pressure (inches of water column), at all times when equipment under permit N-2107-9 and/or N-2107-14 operates. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Each packed-bed wet scrubber shall be equipped with an operational solution conductivity analyzer that monitors and records the conductivity of scrubber solution. The instruments shall be maintained in good working condition at all times when equipment under permit N-2107-9 and/or N-2107-14 operates. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Each scrubber shall be equipped with an operational differential pressure gauge to indicate the pressure difference across the scrubber in inches of water column. The gauge shall be maintained in good working condition at all times when equipment under permit N-2107-9 and/or N-2107-14 operates. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Each scrubber shall be equipped with an operational flow meter to measure solution circulation rate (gpm). The instruments shall be maintained in good working condition at all times when equipment under permit N-2107-9 and/or N-2107-14 operates. [District Rule 2201] Federally Enforceable Through Title V Permit

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

25. The shared RTO shall be operated with a combustion chamber temperature of no less than 1400 degrees F and the retention time shall be no less than one second. A continuous temperature monitoring and recording device shall be used and kept in good working order. [District Rules 2201 and 4104] Federally Enforceable Through Title V Permit

26. The shared RTO shall be heated to proper operating temperature prior to any contaminated process air entering the oxidizer. [District Rules 2201 and 4104] Federally Enforceable Through Title V Permit

27. The shared RTO shall continue to operate after the shut-down of the rendering processes until all contaminated process air is incinerated. [District Rules 2201 and 4104] Federally Enforceable Through Title V Permit

28. The owner or operator shall keep a record of the shared RTO combustion chamber temperature readings collected from the data recorder on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit

29. The owner or operator shall keep a daily record of the combined quantity of raw material processed by units N-2107-9 and N-2107-14. [District Rule 2201] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain records of the following items on a daily basis: (a) Scrubber solution conductivity (micro mhos/cm) for each packed-bed wet scrubber; (b) Scrubber solution flow rate (gpm) for each scrubber; and (c) Differential pressure (inches of water column) across the packing (packed bed scrubber) or throat (venturi scrubber) of the scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

31. Facility-wide PM10 emissions shall not exceed 29,200 lbs per year. Operator shall maintain copies of all natural gas fuel invoices, and records of hours of operation of the shared RTO in order to show compliance with this emissions limit. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

32. All records shall be retained for a minimum of five years, and shall be made readily available for District inspection upon request. [District Rules 1070, 2201, and 2520, 9.4.2] Federally Enforceable Through Title V Permit

33. Prior to operating equipment under this Authority to Construct permits N-2107-9-19 and '-14-2, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 805 lb, 2nd quarter - 805 lb, 3rd quarter - 806 lb, and fourth quarter - 806 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
34. ERC Certificate Numbers C-1298-2 and S-4346-2 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
AUTHORITY TO CONSTRUCT

PERMIT NO: N-2107-15-2

LEGAL OWNER OR OPERATOR: DARLING INGREDIENTS INC
MAILING ADDRESS: P O BOX 1608
                TURLOCK, CA 95381

LOCATION: 11946 CARPENTER RD
            CROWS LANDING, CA 95313

EQUIPMENT DESCRIPTION:
MODIFICATION OF 48 MMBTU/HR BABCOCK & WILCOX MODEL FMO-40 NATURAL GAS, DENATURED YELLOW GREASE, OR YELLOW GREASE-FIRED BOILER WITH A TODD MODEL V4851GO LOW-NOX BURNER, A FLUE GAS RECIRCULATION SYSTEM (FGR), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM: RE-ESTABLISH PM10 EMISSION FACTOR FROM 0.0076 LB/MMBTU TO 0.0029 LB/MMBTU, AND TO ELIMINATE THE USE OF LIQUID FUEL DURING NATURAL GAS FUEL CURTAILMENT

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

4. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320; and 40 CFR 60.42c(d)] Federally Enforceable Through Title V Permit

5. The boiler shall be equipped with a non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit. [District Rule 2201 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

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Brian Clements, Director of Permit Services
6. Except during start-up and shutdown, emissions from natural gas combustion shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.0073 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.003 lb-PM10/MMBtu, 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

7. During start-up and shutdown periods, emissions from natural gas combustion shall not exceed any of the following limits: 30 ppmvd NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.003 lb-PM10/MMBtu, 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

8. The total duration of startup and shutdown time shall not exceed any of the following limits: 2.0 hours startup per day, 2.0 hours shutdown per day, or 730 hours total startup and shutdown time per year. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

9. The ammonia (NH3) emission rate shall not exceed 10.0 ppmvd @ 3% O2 over a 15 minute averaging period. [District Rule 4102]

10. Source testing to measure natural gas combustion NOx, CO, and NH3 emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

11. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

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

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

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

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

19. Fuel sulfur content shall be determined using EPA Method 11 or EPA Method 15 or District, CARB and EPA approved alternative methods. [District Rule 4320] Federally Enforceable Through Title V Permit

20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NOx, CO, NH3 and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

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

24. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

25. Ammonia emissions readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rule 4102]

26. Daily and annual records of start-up and shutdown durations and number of occurrences of each shall be kept. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

28. The permittee shall record and maintain records of the amount of fuel combusted during each calendar month. The record shall be updated on at least a monthly basis. [40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit

29. 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; and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

30. No later than May 1, 2022, the operator shall submit an emission control plan (ECP) that contains the following information: Permit to Operate number, fuel type and higher heating value (HHV) of the fuel, annual fuel consumption (expressed in Btu/yr), current emission level, including method used to determine emission level, NOx limit to be satisfied pursuant to section 5.2 Table 2 or emission fee payment to be made pursuant to section 5.3 and plan of actions, including a schedule of increments of progress, which will be taken to satisfy the requirements of Section 5.0 and the compliance schedule in Section 7.0 of District Rule 4320 (12/17/2020). [District Rule 4320]