

December 29, 2020

Mark Ferguson
Diamond Pet Food Processors of Ripon
942 S Stockton Ave
Ripon, CA 95366

RE: Notice of Final Action - Authority to Construct
Facility Number: N-8234
Project Number: N-1191493

Dear Mr. Ferguson:

The Air Pollution Control Officer has issued the Authority to Construct permits to Diamond Pet Food Processors of Ripon for an Authority to Construct to revise NOx, CO and PM10 emission limits and heat input ratings for each regenerative thermal oxidizer (RTO), as well as, to install a Continuous Emissions Rate Monitoring System (CERMS) to monitor and records NOx emissions at the discharge stack of each RTO for the existing pet food manufacturing operations, at 942 S Stockton Ave, Ripon, California. Enclosed are the Authority to Construct permits 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 Authority to Construct permits was posted on November 24, 2020. The District's analysis of the proposal was also sent to CARB on November 25, 2020. 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.

Samir Sheikh
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

Mr. Mark Ferguson
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Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Nick Peirce at (209) 557-6400.

Sincerely,

A handwritten signature in blue ink, reading "Arnaud Marjollet". The signature is fluid and cursive, with the first name "Arnaud" and last name "Marjollet" clearly distinguishable.

Arnaud Marjollet
Director of Permit Services

AM:JK

Enclosures

cc: Courtney Graham, CARB (w/ enclosure) via email

Facility # N-8234
DIAMOND PET FOOD PROCESSORS OF RIPON
942 S STOCKTON AVE
RIPON, CA 95366

AUTHORITY TO CONSTRUCT (ATC)

QUICK START GUIDE

1. **Pay Invoice:** Please pay enclosed invoice before due date.
2. **Fully Understand ATC:** Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
3. **Follow ATC:** You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.
4. **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.
5. **Source Test:** Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source_testing.htm for source testing resources.
6. **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.

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.**

Samir Sheikh
Executive Director/Air Pollution Control Officer

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AUTHORITY TO CONSTRUCT

PERMIT NO: N-8234-4-12

ISSUANCE DATE: 12/29/2020

LEGAL OWNER OR OPERATOR: DIAMOND PET FOOD PROCESSORS OF RIPON

MAILING ADDRESS: 942 S STOCKTON AVE
RIPON, CA 95366

LOCATION: 942 S STOCKTON AVE
RIPON, CA 95366

EQUIPMENT DESCRIPTION:

MODIFICATION OF PET FOOD PROCESSING LINE #1: INSTALL THREE DURR SYSTEMS, INC. ECOPURE RL-60 REGENERATIVE THERMAL OXIDIZERS (RTO) AND ASSOCIATED DUCT WORK TO TREAT LADEN AIR DISCHARGE FROM WET CYCLONE, DRYER & DRYER-COOLER, AND VERTICAL COOLER STACKS UNDER PERMITS N-8234-4, '-5 AND '-6, REMOVE COLD PLASMA INJECTION SYSTEMS AND ODORANT INJECTION SYSTEMS, AND MAKE CHANGES TO THE EXISTING REQUIREMENTS TO MATCH "AS-BUILT" PLANT CONFIGURATION, REVISE THE NOX, CO AND PM10 EMISSIONS LIMITS, REVISE THE HEAT INPUT RATE FOR EACH RTO, AND INSTALL A CONTINUOUS EMISSIONS RATE MONITORING SYSTEM (CERMS) TO MONITOR AND RECORD NOX EMISSIONS RATE AT THE EXHAUST STACK OF EACH RTO

CONDITIONS

1. Authority to Construct N-8234-4-10 shall be cancelled upon implementation of this Authority to Construct permit. [District Rule 2201]
2. Within 12 months from the date of the issuance of this permit, the permittee shall either submit an application to comply with Rule 2520 (Federally Mandated Operating Permits) or shall comply with District Rule 2530 (Federally Enforceable Potential to Emit). If the facility chooses the option to comply with District Rule 2530, the facility shall notify the District by submitting a request to include the District Rule 2530 conditions on their permits to operate prior to the 12-month deadline. [District Rule 2520]
3. Prior to operating equipment under this Authority to Construct N-8234-4-12, N-8234-5-12 and N-8234-6-12, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 5,008 lb, 2nd quarter - 5,008 lb, 3rd quarter - 5,008 lb, and fourth quarter - 5,009 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]

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

Arnaud Marjollet, Director of Permit Services

N-8234-4-12 : Dec 29 2020 9:09AM -- KAHLOJ : Joint Inspection NOT Required

4. ERC Certificate Number N-1525-2 (or a certificate split from this certificate) 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]
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. Particulate matter, at the exhaust of each dust collector system (baghouse, cartridge dust collector, cyclone etc.), shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
7. All exhaust stacks under this permit 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]
8. 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. Material Dispensing, Kibble Manufacturing, and Conveying Systems: The material from the extruder surge bin is dispensed into an extruder bin from where the material is transferred into an EXTRU-TECH 24X144 steam-conditioner system. The material is extruded to form kibbles. The kibbles are pneumatically conveyed using HEPA filtered air into a dryer receiving chamber using HORIZON SYSTEMS HT-68 high volume cyclone. The owner or operator shall install and maintain a duct work to discharge exhaust from the wet cyclone (Horizon HT-68) into the duct connected to the RTO. [District Rules 2201 and 4201]
10. Dryer System: The system consists of an EXTRU-TECH 1053-2P-AF11, 10 MMBtu/hr (total) direct-fired natural gas fired dryer with five drying sections, each section is equipped with an ECLIPSE WINNOX WX0200 burner with a maximum heat input rate of 2.0 MMBtu/hr. The dryer exhaust is vented to a MAC HE60 high efficiency cyclone. The owner or operator shall install and maintain a duct work to discharge exhaust from the dryer cyclone (MAC HE60) into the duct connected to the RTO. [District Rules 2201 and 4102]
11. Cooler and Conveying System: The system consists of three cooler sections, all vented to a MAC high efficiency cyclone, a discharge conveyor for the transfer of dried kibbles into a hopper. The material from the hopper is pneumatically conveyed to an enclosed shaker screener. The owner or operator shall install and maintain a duct work to re-circulate the exhaust from the dryer cooler cyclone (MAC) into the Dryer System. [District Rules 2201 and 4102]
12. Fines Collection and Conveying System: This system collects fines from two locations in the dryer, the dryer cyclone discharge, and the cooler cyclone discharge, and vents these fines to a HORIZON SYSTEMS 28S WRDL8 baghouse. This baghouse is vented indoors. [District Rule 2201]
13. Screening and Conveying System. The system consists of an enclosed shaker screener, an enclosed surge bin, and an enclosed weigh belt. The fines (rejects) are dropped to the dumpsters. [District Rule 2201]
14. Coating and Conveying System: The system consists of a hopper where material from a weight belt is sprayed with chicken fat and canola oil (or other similar ingredients) and a coating reel where dry dog/cat digest and probiotics (or other similar ingredients) are sprinkled to be absorbed into the kibbles. The kibbles are then conveyed pneumatically to a vertical cooler system using a filter receiver system with a static sock filter. [District Rule 2201]
15. Vertical Cooler and Conveying System: A vertical cooler vented to a MAC HE52 high efficiency cyclone. The dried material falls on a vibratory pan on sliding rails. The material (accepts) from the vibratory pan drops into a hopper from where the dried kibbles are pneumatically conveyed to the finished product bins. Each bin shall be vented to a static sock filter. The fines (rejects) from MAC HE52 cyclone discharge and vibratory pan are conveyed to a barrel. The owner or operator shall install and maintain a duct work to discharge exhaust from the vertical cooler cyclone (MAC HE 52) into the duct connected to the RTO. [District Rules 2201 and 4102]
16. The owner or operator shall install, operate and maintain three identical Durr Systems, Inc.'s Ecopure RL-60 regenerative thermal oxidizers (RTO) each equipped with 7.7 MMBtu/hr burner, associated duct work and control equipment, to abate pet food odors and reduce VOC emissions from all pet food manufacturing lines discharge stacks (wet cyclone (Horizon HT-68), dryer cyclone (MAC HE60) and vertical cooler cyclone (MAC HE52)). [District Rules 2201 and 4102]
17. Each RTO shall be equipped with non-resettable fuel flow meter(s) to measure natural gas fuel flow into each RTO. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

18. Each RTO's combustion chamber temperature shall be maintained at or above 1650 degrees Fahrenheit whenever odor abatement is occurring in the specific RTO. [District Rule 2201]
19. Each RTO's chamber shall be permanently equipped with temperature measurement devices to determine the average combustion chamber temperature. The combustion temperature shall be continuously monitored and recorded at least every 15-minutes whenever odor abatement is occurring in the specific RTO. The recorded temperature data shall be averaged over a 30-consecutive-minute block to demonstrate compliance with the established RTO combustion chamber temperature. Upon detecting any excursion, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2201]
20. Visible emissions, at the exhaust of each dust collector system (baghouse, cartridge dust collector, cyclone etc.) shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
21. The dryer and RTO(s) shall only be fired on PUC-quality natural gas. [District Rule 2201]
22. PM10 emissions from the operations (not including natural gas combustion in the RTO) covered under this permit shall not exceed 0.0306 pounds per ton of finished material produced. This emission limit includes process emissions, as well as, emissions from the natural gas combustion in the dryer. [District Rule 2201]
23. The post control VOC emissions from the operations (not including natural gas combustion in the RTO) covered under this permit shall not exceed 0.005 pounds per ton of finished material produced. This emission limit includes process emissions, as well as, emissions from the natural gas combustion in the dryer. [District Rule 2201]
24. No more than 36 tons of fresh meat, excluding moisture, shall be injected into the steam-conditioner in any one day. [District Rule 2201]
25. The amount of finished product produced under this line shall not exceed 780 tons in any one day. [District Rule 2201]
26. The combined amount of finished product produced through all pet food manufacturing lines (N-8234-4, '-5 and '-6) shall not exceed 780 tons in any one day. [District Rule 2201]
27. Emissions from the dryer shall not exceed any of the following limits: 2.1 ppmvd NOx @ 19% O2 (0.024 lb-NOx/MMBtu), 16.5 ppmvd CO @ 19% O2 (0.112 lb-CO/MMBtu) and 0.00285 lb-SOx/MMBtu. [District Rules 2201 and 4309]
28. The RTO(s) shall reduce the VOC emissions (not including VOC emissions from natural gas combustion in the RTO) from pet food manufacturing operations by at least 95% (by weight). [District Rule 2201]
29. The total NOx emissions from the three RTO unit system and three dryers combined shall not exceed any of the following limits: 8.343 lb/hr and 200.4 lb/day and 33,639 lb/yr (12-month rolling basis). Compliance with these mass emission rates shall be demonstrated using NOx (ppmvd) and exhaust gas flow rate (Q, dry standard cubic feet per minute, dscfm) data recorded by the CERMS, according to the following equation: Emissions (lb/hr) = (NOx ppmvd x 46 lb/lb-mol x 60 min/hr x Q (dscfm)) ÷ (379.5 dscf/lb-mol x 1000,000). Daily emissions for each RTO shall be calculated by summing the hourly emissions for the respective calendar day. Hourly or daily emissions data shall be used to calculate monthly emissions. Monthly data shall be used to calculate rolling 12-month totals. [District Rule 2201]
30. Emissions due to natural gas combustion in each RTO shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 0.88 lb-CO/MMBtu and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
31. Heat input rate to each RTO shall not exceed any of the following limits: 184.8 MMBtu/day and 67,082 MMBtu/year (12-month rolling total). [District Rule 2201]
32. Combined total heat input rate to all three RTOs shall not exceed 156,816 MMBtu/year (12-month rolling total). [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ of the dryer (at the exhaust stack of the MAC HE60 cyclone, upstream of the duct collecting discharge from other process streams), 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]
34. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4309]
35. If either the dryer NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 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 performing the notification and testing required by this condition. [District Rule 4309]
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 (or no correction if measured above 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. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
38. 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]
39. 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 Rules 2201 and 4309]
40. 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 2201 and 4309]
41. Source testing to determine NO_x and CO emissions from the dryer at the exhaust stack of the MAC HE60 cyclone by obtaining samples upstream of the duct collecting discharge from other process streams shall be conducted at least once every 24 months. [District Rule 4309]
42. All dryer test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309]
43. Source testing to measure steady state NO_x emissions at the exhaust of each RTO system shall be conducted within 60 days of initial startup under this permit and at least once every 24 months thereafter. All RTOs shall be operated and tested simultaneously while treating exhaust stream from the pet food manufacturing lines. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
44. 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 2201 and 4309]

CONDITIONS CONTINUE ON NEXT PAGE

45. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 2201 and 4309]
46. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 2201 and 4309]
47. Stack gas velocity or volumetric flow rate shall be determined using EPA Methods 2, 2A, or 2D. [District Rule 2201]
48. For VOC source testing, one RTO system inlet and outlet may be sampled to determine compliance with various emission limits (i.e., VOC control efficiency, VOC emission limit) in this permit. The testing results may be substituted for the other RTO systems instead of sampling each RTO system. Failure to comply with any emission limit in this permit shall constitute violation of permits N-8234-4, '-5 and '-6. [District Rule 2201]
49. Source testing shall be conducted during an operating configuration representative of normal operations by selecting pet food recipe(s) that can be made continuously throughout the testing without any process interruptions or delays. Each pet food manufacturing line must be operated at or above 90% of the maximum hourly process rate of the chosen recipe. The pet food recipe chosen shall include at least 3% (by weight) of fresh meat. If multiple pet food lines are operated during the test, the operator must utilize the average production rate (tons of finished product produced) to demonstrate compliance with VOC emission limits (pounds per ton of finished product produced). [District Rule 2201 and 4102]
50. Source testing to determine compliance with process VOC emission limit (0.005 lb/ton of finished product produced) and VOC control efficiency (95% by weight) of the RTO 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 thirty-six 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 Rule 2201]
51. The process VOC emissions shall be calculated as follows: $\text{VOC (lb/hr)} = \text{VOC}_{\text{inlet of the RTO (lb/hr)}} - \text{VOC}_{\text{outlet of the RTO (lb/hr)}}$. $\text{VOC}_{\text{outlet of the RTO (lb/hr)}} = \text{VOC}_{\text{measured at the outlet of RTO (lb/hr)}} - \text{VOC}_{\text{natural gas combustion in the RTO (lb/hr)}}$. The resulting emissions shall be translated into lb/ton basis using the actual average hourly pet food production rate(s). Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
52. A presurvey must be done prior to source testing to determine VOC compound analytes present in the effluent streams from wet cyclone, dryer cyclone, and vertical cooler cyclone using the methodology described in EPA Method 18, Section 16. The presurvey shall be used to develop the appropriate sampling approach to ensure efficient collection of all VOCs present in the effluent and to develop a specific list of target compounds to be quantified during the subsequent total VOC source testing. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, or 308. EPA Methods 25 or 25A can be used to determine the total VOCs only if the analyzer is calibrated with appropriate compound as determined during the presurvey, and the total carbon mass is scaled to the mole fraction of an appropriate compound, with the balance being scaled to the relative mole fraction of other the identified compounds. The Method 25 or 25A scaling factor shall be reported in the source test report and may be listed in the Permit to Operate for future testing (if any) required by the District. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. Upon approval from District's Compliance Division, data collected during previous presurveys of various effluent streams may be used to identify VOC compound analytes present in various effluent streams. [District Rule 2201]
53. The District may, at its discretion, require NO_x, CO, VOC and PM₁₀ source testing and odor panel testing at any time should conditions at the facility surrounding areas warrants such testing. [District Rules 2201 and 4201]
54. During each source test, the owner or operator shall keep track of all parameters that are used in demonstrating compliance with the limits in this permit, including, but not limited to: (1) date, (2) identification of pet food lines that are operated, (3) name of each recipe being produced, (4) amount of fresh meat injection rate, excluding moisture, into the steam-conditioner, (5) actual processing rate of finished product produced, tons/hour, (6) maximum hourly processing rate, tons/hour, for each recipe being produced, (7) RTO chamber temperature data (degrees Fahrenheit), (8) actual amount of fuel combusted in the dryer(s), (9) actual amount of fuel combusted in the RTO, and (10) CERMS data. [District Rules 2201 and 4102]
55. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

56. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Rate Monitoring System (CERMS) which continuously measures and records the exhaust gas NO_x concentrations and exhaust flow rate, at the exhaust stack of each RTO system. CERMS shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CERMS passes the relative accuracy requirement specified herein during startups and shutdowns periods. If relative accuracy of CERMS cannot be demonstrated during startup or shutdown periods, CERMS results during startup and shutdown events shall be replaced with startup emission rates obtained during the previous NO_x source testing conducted on January 24, 2019. [District Rules 1080 and 2201]
57. The CERMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rules 1080 and 2201]
58. The CERMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 for CEMS and Part 60, Appendix B Performance Specification 6 (PS6), or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rules 1080 and 2201]
59. In accordance with 40 CFR Part 60, Appendix F, NO_x monitor must be audited at least once each calendar quarter, by conducting cylinder gas audits (CGA) or relative accuracy audits (RAA). CGA or RAA may be conducted three of four calendar quarters, but no more than three calendar quarters in succession. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rules 1080 and 2201]
60. The owner/operator shall perform a RATA for NO_x (as specified in 40 CFR Part 60, Appendix F) and flow rate sensor at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CERMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F for CEMS equipment. [District Rules 1080 and 2201]
61. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rules 1080 and 2201]
62. The CERMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rules 1080 and 2201]
63. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CERMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080]
64. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CERMS data polling software system and shall make CERMS data available to the District's automated polling system on a daily basis. [District Rule 1080]
65. Upon notice by the District that the facility's CERMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CERMS data is sent to the District by a District-approved alternative method. [District Rule 1080]
66. The permittee shall maintain the following records for CERMS equipment: (1) Date, time and duration of any malfunction; (2) Date of performance testing; (3) Date of evaluations, calibrations, checks, and adjustments; and (4) Date and time period for which CERMS was inoperative. [District Rule 1080]

CONDITIONS CONTINUE ON NEXT PAGE

67. The owner or operator shall maintain records of NOx emissions and submit a written report each calendar quarter to the District containing the following information for each operating day: (1) Calendar date; (2) The average hourly NOx emission rate (expressed as NO2, lb/hr) measured at the exhaust of each RTO; (3) The total average hourly NOx emission rate (expressed as NO2, lb/hr) for all three RTOs using average hourly NOx emission rate at the exhaust of each RTO (item 2); (4) The total daily NOx emission rates (lb/day) calculated at the end of each operating day from the measured total average hourly NOx emission rates; (5) The total monthly NOx emission rate (lb/month) calculated at the end of each month using total daily NOx emissions rate; (6) The total annual NOx emission rate (lb/year, on a rolling 12-month basis) calculated at the end of each month using total monthly NOx emission rate; (7) Identification of the operating days when the calculated total hourly average NOx emission rates are in excess of the permitted NOx emissions, with the reasons for such excess emissions as well as a description of corrective actions taken; (8) Identification of the operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; (9) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding such data; (10) Identification of each parameter used in calculations; (11) Identification of the times when the pollutant concentration exceeded full span of the CERMS; (12) Description of any modifications to the CERMS that could affect the ability of the CERMS to comply with Performance Specification 6; (13) Results of daily CERMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of Part 60; and (14) A negative declaration when no excess emissions occurred. The report is due on the 30th day following the end of the calendar quarter. [District Rules 1080 and 2201]
68. The owner or operator may submit electronic quarterly reports in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the District. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this permit was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the District to obtain their agreement to submit reports in this alternative format. [District Rule 1080 and 2201]
69. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]
70. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081]
71. The owner or operator shall notify the District of any breakdown condition (as defined in section 3.1 of District Rule 1100) as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]
72. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100]
73. The owner or operator shall maintain daily records of the following items: (1) date, (2) name of the pet food recipe being produced, (3) RTO temperature monitoring data, (4) fresh meat injection rate, excluding moisture, into the steam conditioner (tons/day), (5) the combined amount of finished product produced by all pet food manufacturing lines (N-8234-4, '-5 and '-6, tons/day), (6) amount of finished product produced by this line (tons/day); the combined amount of finished product produced by all pet food manufacturing lines (N-8234-4, '-5 and '-6, tons/day) may be used to demonstrate compliance with the amount of finished product produced by this line (tons/day), (7) heat input rate to each RTO, in MMBtu/day and in MMBtu/year on a rolling 12 consecutive month period, (8) combined total heat input rate to all three RTOs in MMBtu/year on a rolling 12 consecutive month period, (9) combined process and combustion NOx emissions at the exhaust of each RTO (including the contribution of dryer NOx emissions) in lb/day and lb/year on a rolling 12 consecutive month period, and (10) combined process and combustion NOx emissions at the exhaust of all three RTOs (including the contribution of NOx emissions from dryers) in lb/year on a rolling 12 consecutive month period. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

74. Each RTO system (i.e., RTO, duct work, sensors, and other equipment) shall be installed, operated, and maintained per the manufacturer's (vendor) recommendations. A copy of manufacturer's recommendations shall be kept on site at all times. [District Rule 2201]
75. The owner or operator shall maintain all records of maintenance for each RTO system including date, RTO identification, reason for the maintenance, description of the maintenance activity, name of the individual performing the inspection and company affiliation. [District Rules 2201 and 4102]
76. All records shall be maintained and retained on-site for minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4309]



AUTHORITY TO CONSTRUCT

PERMIT NO: N-8234-5-12

ISSUANCE DATE: 12/29/2020

LEGAL OWNER OR OPERATOR: DIAMOND PET FOOD PROCESSORS OF RIPON

MAILING ADDRESS: 942 S STOCKTON AVE
RIPON, CA 95366

LOCATION: 942 S STOCKTON AVE
RIPON, CA 95366

EQUIPMENT DESCRIPTION:

MODIFICATION OF PET FOOD PROCESSING LINE #2: INSTALL THREE DURR SYSTEMS, INC. ECOPURE RL-60 REGENERATIVE THERMAL OXIDIZERS (RTO) AND ASSOCIATED DUCT WORK TO TREAT LADEN AIR DISCHARGE FROM WET CYCLONE, DRYER & DRYER-COOLER, AND VERTICAL COOLER STACKS UNDER PERMITS N-8234-4, '-5 AND '-6, REMOVE COLD PLASMA INJECTION SYSTEMS AND ODORANT INJECTION SYSTEMS, AND MAKE CHANGES TO THE EXISTING REQUIREMENTS TO MATCH "AS-BUILT" PLANT CONFIGURATION, REVISE THE NOX, CO AND PM10 EMISSIONS LIMIT, REVISE THE HEAT INPUT RATE FOR EACH RTO, AND INSTALL A CONTINUOUS EMISSIONS RATE MONITORING SYSTEM (CERMS) TO MONITOR AND RECORD NOX EMISSIONS RATE AT THE EXHAUST STACK OF EACH RTO

CONDITIONS

1. Authority to Construct N-8234-5-10 shall be cancelled upon implementation of this Authority to Construct permit. [District Rule 2201]
2. Within 12 months from the date of the issuance of this permit, the permittee shall either submit an application to comply with Rule 2520 (Federally Mandated Operating Permits) or shall comply with District Rule 2530 (Federally Enforceable Potential to Emit). If the facility chooses the option to comply with District Rule 2530, the facility shall notify the District by submitting a request to include the District Rule 2530 conditions on their permits to operate prior to the 12-month deadline. [District Rule 2520]
3. Prior to operating equipment under this Authority to Construct N-8234-4-12, N-8234-5-12 and N-8234-6-12, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 5,008 lb, 2nd quarter - 5,008 lb, 3rd quarter - 5,008 lb, and fourth quarter - 5,009 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]

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

Arnaud Marjollet, Director of Permit Services

N-8234-5-12 : Dec 29 2020 9:09AM -- KAHLOJ : Joint Inspection NOT Required

4. ERC Certificate Number N-1525-2 (or a certificate split from this certificate) 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]
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. Particulate matter, at the exhaust of each dust collector system (baghouse, cartridge dust collector, cyclone etc.), shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
7. All exhaust stacks under this permit 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]
8. 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. Material Dispensing, Kibble Manufacturing, and Conveying Systems: The material from the extruder surge bin is dispensed into an extruder bin from where the material is transferred into an EXTRU-TECH 24X144 steam-conditioner system. The material is extruded to form kibbles. The kibbles are pneumatically conveyed using HEPA filtered air into a dryer receiving chamber using HORIZON SYSTEMS HT-68 high volume cyclone. The owner or operator shall install and maintain a duct work to discharge exhaust from the wet cyclone (Horizon HT-68) into the duct connected to the RTO. [District Rules 2201 and 4201]
10. Dryer System: The system consists of an EXTRU-TECH 1053-2P-AF11, 10 MMBtu/hr (total) direct-fired natural gas fired dryer with five drying sections, each section is equipped with an ECLIPSE WINNOX WX0200 burner with a maximum heat input rate of 2.0 MMBtu/hr. The dryer exhaust is vented to a MAC HE60 high efficiency cyclone. The owner or operator shall install and maintain a duct work to discharge exhaust from the dryer cyclone (MAC HE60) into the duct connected to the RTO. [District Rules 2201 and 4102]
11. Cooler and Conveying System: The system consists of three cooler sections, all vented to a MAC high efficiency cyclone, a discharge conveyor for the transfer of dried kibbles into a hopper. The material from the hopper is pneumatically conveyed to an enclosed shaker screener. The owner or operator shall install and maintain a duct work to re-circulate the exhaust from the dryer cooler cyclone (MAC) into the Dryer System. [District Rules 2201 and 4102]
12. Fines Collection and Conveying System: This system collects fines from two locations in the dryer, the dryer cyclone discharge, and the cooler cyclone discharge, and vents these fines to a HORIZON SYSTEMS 28S WRDL8 baghouse. This baghouse is vented indoors. [District Rule 2201]
13. Screening and Conveying System. The system consists of an enclosed shaker screener, an enclosed surge bin, and an enclosed weigh belt. The fines (rejects) are dropped to the dumpsters. [District Rule 2201]
14. Coating and Conveying System: The system consists of a hopper where material from a weight belt is sprayed with chicken fat and canola oil (or other similar ingredients) and a coating reel where dry dog/cat digest and probiotics (or other similar ingredients) are sprinkled to be absorbed into the kibbles. The kibbles are then conveyed pneumatically to a vertical cooler system using a filter receiver system with a static sock filter. [District Rule 2201]
15. Vertical Cooler and Conveying System: A vertical cooler vented to a MAC HE52 high efficiency cyclone. The dried material falls on a vibratory pan on sliding rails. The material (accepts) from the vibratory pan drops into a hopper from where the dried kibbles are pneumatically conveyed to the finished product bins. Each bin shall be vented to a static sock filter. The fines (rejects) from MAC HE52 cyclone discharge and vibratory pan are conveyed to a barrel. The owner or operator shall install and maintain a duct work to discharge exhaust from the vertical cooler cyclone (MAC HE 52) into the duct connected to the RTO. [District Rules 2201 and 4102]
16. The owner or operator shall install, operate and maintain three identical Durr Systems, Inc.'s Ecopure RL-60 regenerative thermal oxidizers (RTO) each equipped with 7.7 MMBtu/hr burner, associated duct work and control equipment, to abate pet food odors and reduce VOC emissions from all pet food manufacturing lines discharge stacks (wet cyclone (Horizon HT-68), dryer cyclone (MAC HE60) and vertical cooler cyclone (MAC HE52)). [District Rules 2201 and 4102]
17. Each RTO shall be equipped with non-resettable fuel flow meter(s) to measure natural gas fuel flow into each RTO. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

18. Each RTO's combustion chamber temperature shall be maintained at or above 1650 degrees Fahrenheit whenever odor abatement is occurring in the specific RTO. [District Rule 2201]
19. Each RTO's chamber shall be permanently equipped with temperature measurement devices to determine the average combustion chamber temperature. The combustion temperature shall be continuously monitored and recorded at least every 15-minutes whenever odor abatement is occurring in the specific RTO. The recorded temperature data shall be averaged over a 30-consecutive-minute block to demonstrate compliance with the established RTO combustion chamber temperature. Upon detecting any excursion, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2201]
20. Visible emissions, at the exhaust of each dust collector system (baghouse, cartridge dust collector, cyclone etc.) shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
21. The dryer and RTO(s) shall only be fired on PUC-quality natural gas. [District Rule 2201]
22. PM10 emissions from the operations (not including natural gas combustion in the RTO) covered under this permit shall not exceed 0.0306 pounds per ton of finished material produced. This emission limit includes process emissions, as well as, emissions from the natural gas combustion in the dryer. [District Rule 2201]
23. The post control VOC emissions from the operations (not including natural gas combustion in the RTO) covered under this permit shall not exceed 0.005 pounds per ton of finished material produced. This emission limit includes process emissions, as well as, emissions from the natural gas combustion in the dryer. [District Rule 2201]
24. No more than 36 tons of fresh meat, excluding moisture, shall be injected into the steam-conditioner in any one day. [District Rule 2201]
25. The amount of finished product produced under this line shall not exceed 780 tons in any one day. [District Rule 2201]
26. The combined amount of finished product produced through all pet food manufacturing lines (N-8234-4, '-5 and '-6) shall not exceed 780 tons in any one day. [District Rule 2201]
27. Emissions from the dryer shall not exceed any of the following limits: 2.1 ppmvd NOx @ 19% O2 (0.024 lb-NOx/MMBtu), 16.5 ppmvd CO @ 19% O2 (0.112 lb-CO/MMBtu) and 0.00285 lb-SOx/MMBtu. [District Rules 2201 and 4309]
28. The RTO(s) shall reduce the VOC emissions (not including VOC emissions from natural gas combustion in the RTO) from pet food manufacturing operations by at least 95% (by weight). [District Rule 2201]
29. The total NOx emissions from the three RTO unit system and three dryers combined shall not exceed any of the following limits: 8.343 lb/hr and 200.4 lb/day and 33,639 lb/yr (12-month rolling basis). Compliance with these mass emission rates shall be demonstrated using NOx (ppmvd) and exhaust gas flow rate (Q, dry standard cubic feet per minute, dscfm) data recorded by the CERMS, according to the following equation: $\text{Emissions (lb/hr)} = (\text{NOx ppmvd} \times 46 \text{ lb/lb-mol} \times 60 \text{ min/hr} \times Q \text{ (dscfm)}) \div (379.5 \text{ dscf/lb-mol} \times 1000,000)$. Daily emissions for each RTO shall be calculated by summing the hourly emissions for the respective calendar day. Hourly or daily emissions data shall be used to calculate monthly emissions. Monthly data shall be used to calculate rolling 12-month totals. [District Rule 2201]
30. Emissions due to natural gas combustion in each RTO shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 0.88 lb-CO/MMBtu and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
31. Heat input rate to each RTO shall not exceed any of the following limits: 184.8 MMBtu/day and 67,082 MMBtu/year (12-month rolling total). [District Rule 2201]
32. Combined total heat input rate to all three RTOs shall not exceed 156,816 MMBtu/year (12-month rolling total). [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ of the dryer (at the exhaust stack of the MAC HE60 cyclone, upstream of the duct collecting discharge from other process streams), 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]
34. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4309]
35. If either the dryer NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 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 performing the notification and testing required by this condition. [District Rule 4309]
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 (or no correction if measured above 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. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
38. 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]
39. 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 Rules 2201 and 4309]
40. 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 2201 and 4309]
41. Source testing to determine NO_x and CO emissions from the dryer at the exhaust stack of the MAC HE60 cyclone by obtaining samples upstream of the duct collecting discharge from other process streams shall be conducted at least once every 24 months. [District Rule 4309]
42. All dryer test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309]
43. Source testing to measure steady state NO_x emissions at the exhaust of each RTO system shall be conducted within 60 days of initial startup under this permit and at least once every 24 months thereafter. All RTOs shall be operated and tested simultaneously while treating exhaust stream from the pet food manufacturing lines. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
44. 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 2201 and 4309]

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45. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 2201 and 4309]
46. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 2201 and 4309]
47. Stack gas velocity or volumetric flow rate shall be determined using EPA Methods 2, 2A, or 2D. [District Rule 2201]
48. For VOC source testing, one RTO system inlet and outlet may be sampled to determine compliance with various emission limits (i.e., VOC control efficiency, VOC emission limit) in this permit. The testing results may be substituted for the other RTO systems instead of sampling each RTO system. Failure to comply with any emission limit in this permit shall constitute violation of permits N-8234-4, '-5 and '-6. [District Rule 2201]
49. Source testing shall be conducted during an operating configuration representative of normal operations by selecting pet food recipe(s) that can be made continuously throughout the testing without any process interruptions or delays. Each pet food manufacturing line must be operated at or above 90% of the maximum hourly process rate of the chosen recipe. The pet food recipe chosen shall include at least 3% (by weight) of fresh meat. If multiple pet food lines are operated during the test, the operator must utilize the average production rate (tons of finished product produced) to demonstrate compliance with VOC emission limits (pounds per ton of finished product produced). [District Rule 2201 and 4102]
50. Source testing to determine compliance with process VOC emission limit (0.005 lb/ton of finished product produced) and VOC control efficiency (95% by weight) of the RTO 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 thirty-six 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 Rule 2201]
51. The process VOC emissions shall be calculated as follows: $\text{VOC (lb/hr)} = \text{VOC}_{\text{inlet of the RTO (lb/hr)}} - \text{VOC}_{\text{outlet of the RTO (lb/hr)}}$. $\text{VOC}_{\text{outlet of the RTO (lb/hr)}} = \text{VOC}_{\text{measured at the outlet of RTO (lb/hr)}} - \text{VOC}_{\text{natural gas combustion in the RTO (lb/hr)}}$. The resulting emissions shall be translated into lb/ton basis using the actual average hourly pet food production rate(s). Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
52. A presurvey must be done prior to source testing to determine VOC compound analytes present in the effluent streams from wet cyclone, dryer cyclone, and vertical cooler cyclone using the methodology described in EPA Method 18, Section 16. The presurvey shall be used to develop the appropriate sampling approach to ensure efficient collection of all VOCs present in the effluent and to develop a specific list of target compounds to be quantified during the subsequent total VOC source testing. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, or 308. EPA Methods 25 or 25A can be used to determine the total VOCs only if the analyzer is calibrated with appropriate compound as determined during the presurvey, and the total carbon mass is scaled to the mole fraction of an appropriate compound, with the balance being scaled to the relative mole fraction of other the identified compounds. The Method 25 or 25A scaling factor shall be reported in the source test report and may be listed in the Permit to Operate for future testing (if any) required by the District. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. Upon approval from District's Compliance Division, data collected during previous presurveys of various effluent streams may be used to identify VOC compound analytes present in various effluent streams. [District Rule 2201]
53. The District may, at its discretion, require NO_x, CO, VOC and PM₁₀ source testing and odor panel testing at any time should conditions at the facility surrounding areas warrants such testing. [District Rules 2201 and 4201]
54. During each source test, the owner or operator shall keep track of all parameters that are used in demonstrating compliance with the limits in this permit, including, but not limited to: (1) date, (2) identification of pet food lines that are operated, (3) name of each recipe being produced, (4) amount of fresh meat injection rate, excluding moisture, into the steam-conditioner, (5) actual processing rate of finished product produced, tons/hour, (6) maximum hourly processing rate, tons/hour, for each recipe being produced, (7) RTO chamber temperature data (degrees Fahrenheit), (8) actual amount of fuel combusted in the dryer(s), (9) actual amount of fuel combusted in the RTO, and (10) CERMS data. [District Rules 2201 and 4102]
55. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

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56. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Rate Monitoring System (CERMS) which continuously measures and records the exhaust gas NO_x concentrations and exhaust flow rate, at the exhaust stack of each RTO system. CERMS shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CERMS passes the relative accuracy requirement specified herein during startups and shutdowns periods. If relative accuracy of CERMS cannot be demonstrated during startup or shutdown periods, CERMS results during startup and shutdown events shall be replaced with startup emission rates obtained during the previous NO_x source testing conducted on January 24, 2019. [District Rules 1080 and 2201]
57. The CERMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rules 1080 and 2201]
58. The CERMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 for CEMS and Part 60, Appendix B Performance Specification 6 (PS6), or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rules 1080 and 2201]
59. In accordance with 40 CFR Part 60, Appendix F, NO_x monitor must be audited at least once each calendar quarter, by conducting cylinder gas audits (CGA) or relative accuracy audits (RAA). CGA or RAA may be conducted three of four calendar quarters, but no more than three calendar quarters in succession. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rules 1080 and 2201]
60. The owner/operator shall perform a RATA for NO_x (as specified in 40 CFR Part 60, Appendix F) and flow rate sensor at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CERMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F for CEMS equipment. [District Rules 1080 and 2201]
61. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rules 1080 and 2201]
62. The CERMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rules 1080 and 2201]
63. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CERMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080]
64. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CERMS data polling software system and shall make CERMS data available to the District's automated polling system on a daily basis. [District Rule 1080]
65. Upon notice by the District that the facility's CERMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CERMS data is sent to the District by a District-approved alternative method. [District Rule 1080]
66. The permittee shall maintain the following records for CERMS equipment: (1) Date, time and duration of any malfunction; (2) Date of performance testing; (3) Date of evaluations, calibrations, checks, and adjustments; and (4) Date and time period for which CERMS was inoperative. [District Rule 1080]

CONDITIONS CONTINUE ON NEXT PAGE

67. The owner or operator shall maintain records of NOx emissions and submit a written report each calendar quarter to the District containing the following information for each operating day: (1) Calendar date; (2) The average hourly NOx emission rate (expressed as NO2, lb/hr) measured at the exhaust of each RTO; (3) The total average hourly NOx emission rate (expressed as NO2, lb/hr) for all three RTOs using average hourly NOx emission rate at the exhaust of each RTO (item 2); (4) The total daily NOx emission rates (lb/day) calculated at the end of each operating day from the measured total average hourly NOx emission rates; (5) The total monthly NOx emission rate (lb/month) calculated at the end of each month using total daily NOx emissions rate; (6) The total annual NOx emission rate (lb/year, on a rolling 12-month basis) calculated at the end of each month using total monthly NOx emission rate; (7) Identification of the operating days when the calculated total hourly average NOx emission rates are in excess of the permitted NOx emissions, with the reasons for such excess emissions as well as a description of corrective actions taken; (8) Identification of the operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; (9) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding such data; (10) Identification of each parameter used in calculations; (11) Identification of the times when the pollutant concentration exceeded full span of the CERMS; (12) Description of any modifications to the CERMS that could affect the ability of the CERMS to comply with Performance Specification 6; (13) Results of daily CERMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of Part 60; and (14) A negative declaration when no excess emissions occurred. The report is due on the 30th day following the end of the calendar quarter. [District Rules 1080 and 2201]
68. The owner or operator may submit electronic quarterly reports in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the District. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this permit was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the District to obtain their agreement to submit reports in this alternative format. [District Rule 1080 and 2201]
69. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]
70. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081]
71. The owner or operator shall notify the District of any breakdown condition (as defined in section 3.1 of District Rule 1100) as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]
72. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100]
73. The owner or operator shall maintain daily records of the following items: (1) date, (2) name of the pet food recipe being produced, (3) RTO temperature monitoring data, (4) fresh meat injection rate, excluding moisture, into the steam conditioner (tons/day), (5) the combined amount of finished product produced by all pet food manufacturing lines (N-8234-4, '-5 and '-6, tons/day), (6) amount of finished product produced by this line (tons/day); the combined amount of finished product produced by all pet food manufacturing lines (N-8234-4, '-5 and '-6, tons/day) may be used to demonstrate compliance with the amount of finished product produced by this line (tons/day), (7) heat input rate to each RTO, in MMBtu/day and in MMBtu/year on a rolling 12 consecutive month period, (8) combined total heat input rate to all three RTOs in MMBtu/year on a rolling 12 consecutive month period, (9) combined process and combustion NOx emissions at the exhaust of each RTO (including the contribution of dryer NOx emissions) in lb/day and lb/year on a rolling 12 consecutive month period, and (10) combined process and combustion NOx emissions at the exhaust of all three RTOs (including the contribution of NOx emissions from dryers) in lb/year on a rolling 12 consecutive month period. [District Rule 2201]

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74. Each RTO system (i.e., RTO, duct work, sensors, and other equipment) shall be installed, operated, and maintained per the manufacturer's (vendor) recommendations. A copy of manufacturer's recommendations shall be kept on site at all times. [District Rule 2201]
75. The owner or operator shall maintain all records of maintenance for each RTO system including date, RTO identification, reason for the maintenance, description of the maintenance activity, name of the individual performing the inspection and company affiliation. [District Rules 2201 and 4102]
76. All records shall be maintained and retained on-site for minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4309]



AUTHORITY TO CONSTRUCT

PERMIT NO: N-8234-6-12

ISSUANCE DATE: 12/29/2020

LEGAL OWNER OR OPERATOR: DIAMOND PET FOOD PROCESSORS OF RIPON

MAILING ADDRESS: 942 S STOCKTON AVE
RIPON, CA 95366

LOCATION: 942 S STOCKTON AVE
RIPON, CA 95366

EQUIPMENT DESCRIPTION:

MODIFICATION OF PET FOOD PROCESSING LINE #3: INSTALL THREE DURR SYSTEMS, INC. ECOPURE RL-60 REGENERATIVE THERMAL OXIDIZERS (RTO) AND ASSOCIATED DUCT WORK TO TREAT LADEN AIR DISCHARGE FROM WET CYCLONE, DRYER & DRYER-COOLER, AND VERTICAL COOLER STACKS UNDER PERMITS N-8234-4, '-5 AND '-6, REMOVE COLD PLASMA INJECTION SYSTEMS AND ODORANT INJECTION SYSTEMS, AND MAKE CHANGES TO THE EXISTING REQUIREMENTS TO MATCH "AS-BUILT" PLANT CONFIGURATION, REVISE THE NOX, CO AND PM10 EMISSIONS LIMIT, REVISE THE HEAT INPUT RATE FOR EACH RTO, AND INSTALL A CONTINUOUS EMISSIONS RATE MONITORING SYSTEM (CERMS) TO MONITOR AND RECORD NOX EMISSIONS RATE AT THE EXHAUST STACK OF EACH RTO

CONDITIONS

1. Authority to Construct N-8234-6-10 shall be cancelled upon implementation of this Authority to Construct permit. [District Rule 2201]
2. Within 12 months from the date of the issuance of this permit, the permittee shall either submit an application to comply with Rule 2520 (Federally Mandated Operating Permits) or shall comply with District Rule 2530 (Federally Enforceable Potential to Emit). If the facility chooses the option to comply with District Rule 2530, the facility shall notify the District by submitting a request to include the District Rule 2530 conditions on their permits to operate prior to the 12-month deadline. [District Rule 2520]
3. Prior to operating equipment under this Authority to Construct N-8234-4-12, N-8234-5-12 and N-8234-6-12, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 5,008 lb, 2nd quarter - 5,008 lb, 3rd quarter - 5,008 lb, and fourth quarter - 5,009 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]

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

Arnaud Marjollet, Director of Permit Services

N-8234-6-12 : Dec 29 2020 9:09AM -- KAHLOJ : Joint Inspection NOT Required

4. ERC Certificate Number N-1525-2 (or a certificate split from this certificate) 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]
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. Particulate matter, at the exhaust of each dust collector system (baghouse, cartridge dust collector, cyclone etc.), shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
7. All exhaust stacks under this permit 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]
8. 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. Material Dispensing, Kibble Manufacturing, and Conveying Systems: The material from the extruder surge bin is dispensed into an extruder bin from where the material is transferred into an EXTRU-TECH 24X144 steam-conditioner system. The material is extruded to form kibbles. The kibbles are pneumatically conveyed using HEPA filtered air into a dryer receiving chamber using HORIZON SYSTEMS HT-68 high volume cyclone. The owner or operator shall install and maintain a duct work to discharge exhaust from the wet cyclone (Horizon HT-68) into the duct connected to the RTO. [District Rules 2201 and 4201]
10. Dryer System: The system consists of an EXTRU-TECH 1053-2P-AF11, 10 MMBtu/hr (total) direct-fired natural gas fired dryer with five drying sections, each section is equipped with an ECLIPSE WINNOX WX0200 burner with a maximum heat input rate of 2.0 MMBtu/hr. The dryer exhaust is vented to a MAC HE60 high efficiency cyclone. The owner or operator shall install and maintain a duct work to discharge exhaust from the dryer cyclone (MAC HE60) into the duct connected to the RTO. [District Rules 2201 and 4102]
11. Cooler and Conveying System: The system consists of three cooler sections, all vented to a MAC high efficiency cyclone, a discharge conveyor for the transfer of dried kibbles into a hopper. The material from the hopper is pneumatically conveyed to an enclosed shaker screener. The owner or operator shall install and maintain a duct work to re-circulate the exhaust from the dryer cooler cyclone (MAC) into the Dryer System. [District Rules 2201 and 4102]
12. Fines Collection and Conveying System: This system collects fines from two locations in the dryer, the dryer cyclone discharge, and the cooler cyclone discharge, and vents these fines to a HORIZON SYSTEMS 28S WRDL8 baghouse. This baghouse is vented indoors. [District Rule 2201]
13. Screening and Conveying System. The system consists of an enclosed shaker screener, an enclosed surge bin, and an enclosed weigh belt. The fines (rejects) are dropped to the dumpsters. [District Rule 2201]
14. Coating and Conveying System: The system consists of a hopper where material from a weight belt is sprayed with chicken fat and canola oil (or other similar ingredients) and a coating reel where dry dog/cat digest and probiotics (or other similar ingredients) are sprinkled to be absorbed into the kibbles. The kibbles are then conveyed pneumatically to a vertical cooler system using a filter receiver system with a static sock filter. [District Rule 2201]
15. Vertical Cooler and Conveying System: A vertical cooler vented to a MAC HE52 high efficiency cyclone. The dried material falls on a vibratory pan on sliding rails. The material (accepts) from the vibratory pan drops into a hopper from where the dried kibbles are pneumatically conveyed to the finished product bins. Each bin shall be vented to a static sock filter. The fines (rejects) from MAC HE52 cyclone discharge and vibratory pan are conveyed to a barrel. The owner or operator shall install and maintain a duct work to discharge exhaust from the vertical cooler cyclone (MAC HE 52) into the duct connected to the RTO. [District Rules 2201 and 4102]
16. The owner or operator shall install, operate and maintain three identical Durr Systems, Inc.'s Ecopure RL-60 regenerative thermal oxidizers (RTO) each equipped with 7.7 MMBtu/hr burner, associated duct work and control equipment, to abate pet food odors and reduce VOC emissions from all pet food manufacturing lines discharge stacks (wet cyclone (Horizon HT-68), dryer cyclone (MAC HE60) and vertical cooler cyclone (MAC HE52)). [District Rules 2201 and 4102]
17. Each RTO shall be equipped with non-resettable fuel flow meter(s) to measure natural gas fuel flow into each RTO. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

18. Each RTO's combustion chamber temperature shall be maintained at or above 1650 degrees Fahrenheit whenever odor abatement is occurring in the specific RTO. [District Rule 2201]
19. Each RTO's chamber shall be permanently equipped with temperature measurement devices to determine the average combustion chamber temperature. The combustion temperature shall be continuously monitored and recorded at least every 15-minutes whenever odor abatement is occurring in the specific RTO. The recorded temperature data shall be averaged over a 30-consecutive-minute block to demonstrate compliance with the established RTO combustion chamber temperature. Upon detecting any excursion, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2201]
20. Visible emissions, at the exhaust of each dust collector system (baghouse, cartridge dust collector, cyclone etc.) shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
21. The dryer and RTO(s) shall only be fired on PUC-quality natural gas. [District Rule 2201]
22. PM10 emissions from the operations (not including natural gas combustion in the RTO) covered under this permit shall not exceed 0.0306 pounds per ton of finished material produced. This emission limit includes process emissions, as well as, emissions from the natural gas combustion in the dryer. [District Rule 2201]
23. The post control VOC emissions from the operations (not including natural gas combustion in the RTO) covered under this permit shall not exceed 0.005 pounds per ton of finished material produced. This emission limit includes process emissions, as well as, emissions from the natural gas combustion in the dryer. [District Rule 2201]
24. No more than 36 tons of fresh meat, excluding moisture, shall be injected into the steam-conditioner in any one day. [District Rule 2201]
25. The amount of finished product produced under this line shall not exceed 780 tons in any one day. [District Rule 2201]
26. The combined amount of finished product produced through all pet food manufacturing lines (N-8234-4, '-5 and '-6) shall not exceed 780 tons in any one day. [District Rule 2201]
27. Emissions from the dryer shall not exceed any of the following limits: 2.1 ppmvd NOx @ 19% O2 (0.024 lb-NOx/MMBtu), 16.5 ppmvd CO @ 19% O2 (0.112 lb-CO/MMBtu) and 0.00285 lb-SOx/MMBtu. [District Rules 2201 and 4309]
28. The RTO(s) shall reduce the VOC emissions (not including VOC emissions from natural gas combustion in the RTO) from pet food manufacturing operations by at least 95% (by weight). [District Rule 2201]
29. The total NOx emissions from the three RTO unit system and three dryers combined shall not exceed any of the following limits: 8.343 lb/hr and 200.4 lb/day and 33,639 lb/yr (12-month rolling basis). Compliance with these mass emission rates shall be demonstrated using NOx (ppmvd) and exhaust gas flow rate (Q, dry standard cubic feet per minute, dscfm) data recorded by the CERMS, according to the following equation: Emissions (lb/hr) = (NOx ppmvd x 46 lb/lb-mol x 60 min/hr x Q (dscfm)) ÷ (379.5 dscf/lb-mol x 1000,000). Daily emissions for each RTO shall be calculated by summing the hourly emissions for the respective calendar day. Hourly or daily emissions data shall be used to calculate monthly emissions. Monthly data shall be used to calculate rolling 12-month totals. [District Rule 2201]
30. Emissions due to natural gas combustion in each RTO shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 0.88 lb-CO/MMBtu and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
31. Heat input rate to each RTO shall not exceed any of the following limits: 184.8 MMBtu/day and 67,082 MMBtu/year (12-month rolling total). [District Rule 2201]
32. Combined total heat input rate to all three RTOs shall not exceed 156,816 MMBtu/year (12-month rolling total). [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ of the dryer (at the exhaust stack of the MAC HE60 cyclone, upstream of the duct collecting discharge from other process streams), 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]
34. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4309]
35. If either the dryer NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 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 performing the notification and testing required by this condition. [District Rule 4309]
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 (or no correction if measured above 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. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
38. 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]
39. 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 Rules 2201 and 4309]
40. 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 2201 and 4309]
41. Source testing to determine NO_x and CO emissions from the dryer at the exhaust stack of the MAC HE60 cyclone by obtaining samples upstream of the duct collecting discharge from other process streams shall be conducted at least once every 24 months. [District Rule 4309]
42. All dryer test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309]
43. Source testing to measure steady state NO_x emissions at the exhaust of each RTO system shall be conducted within 60 days of initial startup under this permit and at least once every 24 months thereafter. All RTOs shall be operated and tested simultaneously while treating exhaust stream from the pet food manufacturing lines. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
44. 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 2201 and 4309]

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45. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 2201 and 4309]
46. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 2201 and 4309]
47. Stack gas velocity or volumetric flow rate shall be determined using EPA Methods 2, 2A, or 2D. [District Rule 2201]
48. For VOC source testing, one RTO system inlet and outlet may be sampled to determine compliance with various emission limits (i.e., VOC control efficiency, VOC emission limit) in this permit. The testing results may be substituted for the other RTO systems instead of sampling each RTO system. Failure to comply with any emission limit in this permit shall constitute violation of permits N-8234-4, '-5 and '-6. [District Rule 2201]
49. Source testing shall be conducted during an operating configuration representative of normal operations by selecting pet food recipe(s) that can be made continuously throughout the testing without any process interruptions or delays. Each pet food manufacturing line must be operated at or above 90% of the maximum hourly process rate of the chosen recipe. The pet food recipe chosen shall include at least 3% (by weight) of fresh meat. If multiple pet food lines are operated during the test, the operator must utilize the average production rate (tons of finished product produced) to demonstrate compliance with VOC emission limits (pounds per ton of finished product produced). [District Rule 2201 and 4102]
50. Source testing to determine compliance with process VOC emission limit (0.005 lb/ton of finished product produced) and VOC control efficiency (95% by weight) of the RTO 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 thirty-six 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 Rule 2201]
51. The process VOC emissions shall be calculated as follows: $\text{VOC (lb/hr)} = \text{VOC}_{\text{inlet of the RTO (lb/hr)}} - \text{VOC}_{\text{outlet of the RTO (lb/hr)}}$. $\text{VOC}_{\text{outlet of the RTO (lb/hr)}} = \text{VOC}_{\text{measured at the outlet of RTO (lb/hr)}} - \text{VOC}_{\text{natural gas combustion in the RTO (lb/hr)}}$. The resulting emissions shall be translated into lb/ton basis using the actual average hourly pet food production rate(s). Should the permittee decide to use a different test methodology, the methodology must be approved by the District. [District Rule 2201]
52. A presurvey must be done prior to source testing to determine VOC compound analytes present in the effluent streams from wet cyclone, dryer cyclone, and vertical cooler cyclone using the methodology described in EPA Method 18, Section 16. The presurvey shall be used to develop the appropriate sampling approach to ensure efficient collection of all VOCs present in the effluent and to develop a specific list of target compounds to be quantified during the subsequent total VOC source testing. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, or 308. EPA Methods 25 or 25A can be used to determine the total VOCs only if the analyzer is calibrated with appropriate compound as determined during the presurvey, and the total carbon mass is scaled to the mole fraction of an appropriate compound, with the balance being scaled to the relative mole fraction of other the identified compounds. The Method 25 or 25A scaling factor shall be reported in the source test report and may be listed in the Permit to Operate for future testing (if any) required by the District. Should the permittee decide to use a different test methodology, the methodology must be approved by the District. Upon approval from District's Compliance Division, data collected during previous presurveys of various effluent streams may be used to identify VOC compound analytes present in various effluent streams. [District Rule 2201]
53. The District may, at its discretion, require NO_x, CO, VOC and PM₁₀ source testing and odor panel testing at any time should conditions at the facility surrounding areas warrants such testing. [District Rules 2201 and 4201]
54. During each source test, the owner or operator shall keep track of all parameters that are used in demonstrating compliance with the limits in this permit, including, but not limited to: (1) date, (2) identification of pet food lines that are operated, (3) name of each recipe being produced, (4) amount of fresh meat injection rate, excluding moisture, into the steam-conditioner, (5) actual processing rate of finished product produced, tons/hour, (6) maximum hourly processing rate, tons/hour, for each recipe being produced, (7) RTO chamber temperature data (degrees Fahrenheit), (8) actual amount of fuel combusted in the dryer(s), (9) actual amount of fuel combusted in the RTO, and (10) CERMS data. [District Rules 2201 and 4102]
55. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

56. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Rate Monitoring System (CERMS) which continuously measures and records the exhaust gas NO_x concentrations and exhaust flow rate, at the exhaust stack of each RTO system. CERMS shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CERMS passes the relative accuracy requirement specified herein during startups and shutdowns periods. If relative accuracy of CERMS cannot be demonstrated during startup or shutdown periods, CERMS results during startup and shutdown events shall be replaced with startup emission rates obtained during the previous NO_x source testing conducted on January 24, 2019. [District Rules 1080 and 2201]
57. The CERMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rules 1080 and 2201]
58. The CERMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 for CEMS and Part 60, Appendix B Performance Specification 6 (PS6), or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rules 1080 and 2201]
59. In accordance with 40 CFR Part 60, Appendix F, NO_x monitor must be audited at least once each calendar quarter, by conducting cylinder gas audits (CGA) or relative accuracy audits (RAA). CGA or RAA may be conducted three of four calendar quarters, but no more than three calendar quarters in succession. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rules 1080 and 2201]
60. The owner/operator shall perform a RATA for NO_x (as specified in 40 CFR Part 60, Appendix F) and flow rate sensor at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CERMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F for CEMS equipment. [District Rules 1080 and 2201]
61. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rules 1080 and 2201]
62. The CERMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rules 1080 and 2201]
63. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CERMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080]
64. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CERMS data polling software system and shall make CERMS data available to the District's automated polling system on a daily basis. [District Rule 1080]
65. Upon notice by the District that the facility's CERMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CERMS data is sent to the District by a District-approved alternative method. [District Rule 1080]
66. The permittee shall maintain the following records for CERMS equipment: (1) Date, time and duration of any malfunction; (2) Date of performance testing; (3) Date of evaluations, calibrations, checks, and adjustments; and (4) Date and time period for which CERMS was inoperative. [District Rule 1080]

CONDITIONS CONTINUE ON NEXT PAGE

67. The owner or operator shall maintain records of NOx emissions and submit a written report each calendar quarter to the District containing the following information for each operating day: (1) Calendar date; (2) The average hourly NOx emission rate (expressed as NO2, lb/hr) measured at the exhaust of each RTO; (3) The total average hourly NOx emission rate (expressed as NO2, lb/hr) for all three RTOs using average hourly NOx emission rate at the exhaust of each RTO (item 2); (4) The total daily NOx emission rates (lb/day) calculated at the end of each operating day from the measured total average hourly NOx emission rates; (5) The total monthly NOx emission rate (lb/month) calculated at the end of each month using total daily NOx emissions rate; (6) The total annual NOx emission rate (lb/year, on a rolling 12-month basis) calculated at the end of each month using total monthly NOx emission rate; (7) Identification of the operating days when the calculated total hourly average NOx emission rates are in excess of the permitted NOx emissions, with the reasons for such excess emissions as well as a description of corrective actions taken; (8) Identification of the operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; (9) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding such data; (10) Identification of each parameter used in calculations; (11) Identification of the times when the pollutant concentration exceeded full span of the CERMS; (12) Description of any modifications to the CERMS that could affect the ability of the CERMS to comply with Performance Specification 6; (13) Results of daily CERMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of Part 60; and (14) A negative declaration when no excess emissions occurred. The report is due on the 30th day following the end of the calendar quarter. [District Rules 1080 and 2201]
68. The owner or operator may submit electronic quarterly reports in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the District. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this permit was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the District to obtain their agreement to submit reports in this alternative format. [District Rule 1080 and 2201]
69. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]
70. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081]
71. The owner or operator shall notify the District of any breakdown condition (as defined in section 3.1 of District Rule 1100) as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]
72. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100]
73. The owner or operator shall maintain daily records of the following items: (1) date, (2) name of the pet food recipe being produced, (3) RTO temperature monitoring data, (4) fresh meat injection rate, excluding moisture, into the steam conditioner (tons/day), (5) the combined amount of finished product produced by all pet food manufacturing lines (N-8234-4, '-5 and '-6, tons/day), (6) amount of finished product produced by this line (tons/day); the combined amount of finished product produced by all pet food manufacturing lines (N-8234-4, '-5 and '-6, tons/day) may be used to demonstrate compliance with the amount of finished product produced by this line (tons/day), (7) heat input rate to each RTO, in MMBtu/day and in MMBtu/year on a rolling 12 consecutive month period, (8) combined total heat input rate to all three RTOs in MMBtu/year on a rolling 12 consecutive month period, (9) combined process and combustion NOx emissions at the exhaust of each RTO (including the contribution of dryer NOx emissions) in lb/day and lb/year on a rolling 12 consecutive month period, and (10) combined process and combustion NOx emissions at the exhaust of all three RTOs (including the contribution of NOx emissions from dryers) in lb/year on a rolling 12 consecutive month period. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

74. Each RTO system (i.e., RTO, duct work, sensors, and other equipment) shall be installed, operated, and maintained per the manufacturer's (vendor) recommendations. A copy of manufacturer's recommendations shall be kept on site at all times. [District Rule 2201]
75. The owner or operator shall maintain all records of maintenance for each RTO system including date, RTO identification, reason for the maintenance, description of the maintenance activity, name of the individual performing the inspection and company affiliation. [District Rules 2201 and 4102]
76. All records shall be maintained and retained on-site for minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4309]