



OCT 14 2013

Mr. Martin Guthrie
Darling International
P O Box 1608
Turlock, CA 95381

**Re: Notice of Minor Title V Permit Modification
District Facility # N-2107
Project # 1132088**

Dear Mr. Guthrie:

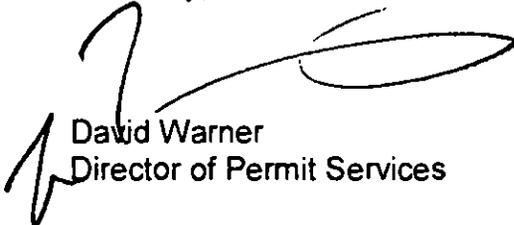
Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued Authorities to Construct (ATC's) N-2107-1-15 and '-13-5 into the Title V operating permit. These ATC's authorized the modifications of one 48.0 MMBtu/hr boiler and one 76.93 MMBtu/hr boiler to increase the ammonia slip limit on the selective catalytic reduction (SCR) systems serving each boiler from 5 ppmv to 10 ppmv @ 3% O₂.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued ATC's N-2107-1-15 and '-13-5, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

Enclosures

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

Seyad Sadradin
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 93309-9725
Tel: 661-392-5500 FAX: 661-392-5585

TITLE V APPLICATION REVIEW

Minor Modification
Project #: 1132088

Engineer: Dustin Brown
Date: October 11, 2013

Facility Number: N-2107
Facility Name: Darling International, Inc.
Mailing Address: P O Box 1608
Turlock, CA 95381

Contact Name: Martin Guthrie
Phone: (972) 281-4465

Responsible Official: William McMurtry
Title: VP of Environmental Affairs

I. PROPOSAL

Darling International is proposing a Title V minor permit modification to incorporate recently issued Authorities to Construct (ATC's) N-2107-1-15 and '-13-5 into their Title V operating permit. These ATC's authorized the modifications of one 75.0 MMBtu/hr and one 79.63 MMBtu/hr boiler to increase the maximum ammonia slip limit from the selective catalytic reduction (SCR) system serving each of these boilers from 5 ppmv to 10 ppmv @ 3% O₂.

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

II. FACILITY LOCATION

Darling International is located at 11946 Carpenter Road in Crows Landing, CA.

III. EQUIPMENT DESCRIPTION

N-2107-1-16: 48 MMBTU/HR NEBRASKA MODEL NS-C-53 NATURAL GAS, DENATURED YELLOW GREASE, OR YELLOW GREASE-FIRED BOILER WITH A TODD MODEL V651G LOW-NOX BURNER, A FLUE GAS RECIRCULATION SYSTEM (FGR), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

N-2107-13-6: 76.93 MMBTU/HR NEBRASKA MODEL NS-E-57 NATURAL GAS-FIRED BOILER EQUIPPED WITH A FLUE GAS RECIRCULATION (FGR) SYSTEM AND AMMONIA SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Darling International is proposing to modify their rendering plant by increasing the allowable ammonia slip limits from the SCR systems serving their two primary boilers from 5 ppmv to 10 ppmv @ 3% O₂. In order to guarantee that the boilers will be able to demonstrate ongoing compliance with the lower NO_x emission requirements required by District Rule 4320, more ammonia may be required to be injected in to the SCR systems. The result being potentially higher ammonia slip emissions. In addition, in order to comply with the more stringent NO_x emission limits required by District rules (e.g. 4320, 4703, 4354, etc.), typical District practice has been to allow similar units served by an SCR system to have ammonia slip limits up to 10 ppmvd @ 3% O₂.

The proposed changes only result in NH₃ emission increases. There will not be any increases in facility NO_x, CO, VOC, PM₁₀ or SO_x emissions as a result of these modifications.

Existing PTO Changes:

N-2107-1:

Existing PTO condition 12 was revised in accordance with the District Rule 4102 and the requested increase in ammonia slip limit. The revised condition has been included as condition 12 of the requirements for this revised permit.

N-2107-13:

Existing PTO condition 5 was revised in accordance with the District Rule 4102 and the requested increase in ammonia slip limit. The revised condition has been included as condition 5 of the requirements for this revised permit.

New PTO Conditions:

N-2107-1:

Condition 37 of the requirements for this revised permit was added to assure ongoing compliance with the sulfur content requirements of District Rule 4320 for the fuel(s) combusted in this boiler.

N-2107-13:

No new conditions were added to the revised permit as a result of this project.

ATC Condition Changes:

N-2107-1 and -13:

ATC condition 1 has been removed and not included in the requirements for these revised permits as Darling International has submitted the appropriate Title V applications to incorporate these ATC's in to their Title V operating permit.

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

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

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permits N-2107-1-16 and '-13-6
- B. Authorities to Construct N-2107-1-15 and '-13-5
- C. Application
- D. Previous Title V Operating Permits N-2107-1-14 and '-13-4

ATTACHMENT A

Proposed Modified Title V Operating Permits
N-2107-1-16 and '-13-6

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-2107-1-16

EXPIRATION DATE: 08/31/2016

EQUIPMENT DESCRIPTION:

48 MMBTU/HR NEBRASKA MODEL NS-C-53 NATURAL GAS, DENATURED YELLOW GREASE, OR YELLOW GREASE-FIRED BOILER WITH A TODD MODEL V651G LOW-NOX BURNER, A FLUE GAS RECIRCULATION SYSTEM (FGR), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The unit shall only be fired on PUC-regulated natural gas as the primary fuel and "liquid fuel" as a curtailment fuel. [District Rules 2201 and 4301, 5.2.1, and 40 CFR § 60.42c(d)] Federally Enforceable Through Title V Permit
3. For the purposes of this permit, "liquid fuel" means either yellow grease or yellow grease blended with no more than 1.0% No. 2 fuel oil, by volume. The sulfur content of No. 2 fuel oil blended with yellow grease shall not exceed 15 ppm. [District Rules 2201 and 4320, 5.4.2] Federally Enforceable Through Title V Permit
4. The unit shall be fired on "liquid fuel" only during natural gas curtailment for no more than 168 cumulative hours in a calendar year plus 48 hours per calendar year for equipment testing. [District Rules 2201 and 4320, 4.2.2] Federally Enforceable Through Title V Permit
5. The boiler shall be equipped with a non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The boiler shall be equipped with a non-resettable, totalizing liquid fuel flow meter to measure the amount of "liquid fuel" burned, in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The NOx emissions from this unit shall not exceed 43.5 pounds during any one day. The NOx emissions shall be determined utilizing the following equation: [(cubic feet of natural gas burned during non-start-up and non-shutdown periods) x (7.3E-06) + (cubic feet of natural gas burned during start-up and shutdown periods) x (3.6E-05) + (gallons of "liquid fuel" burned) x (6.79E-03)]. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown, emissions from natural gas combustion shall not exceed any of the following limits: 6 ppmv NOx @ 3% O2 or 0.0073 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 50 ppmv CO @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.1, 4306, 5.1 and 4320, 5.2] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods, emissions from natural gas combustion shall not exceed any of the following limits: 30 ppmv NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 50 ppmv CO @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 5.6] Federally Enforceable Through Title V Permit
10. When fired on "liquid fuel" during curtailment episodes, emissions from this boiler shall not exceed any of the following limits: 40 ppmv NOx @ 3% O2 or 0.052 lb-NOx/MMBtu, 0.0062 lb-SOx/MMBtu, 0.005 lb-PM10/MMBtu, 142 ppmv CO @ 3% O2 or 0.1049 lb-CO/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.1, 4306, 5.1 and 4320, 5.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: DARLING INTERNATIONAL, INC.

Location: 11946 CARPENTER RD, CROWS LANDING, CA 95318

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11. The total duration of startup and shutdown time shall not exceed any of the following limits: 2.0 hours startup per day, 2.0 hours shutdown per day, or 730 hours total startup and shutdown time per year. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 5.6] Federally Enforceable Through Title V Permit
12. The ammonia emission rate shall not exceed 10.0 ppmvd @ 3% O₂ over a 15 minute averaging period. [District Rule 4102]
13. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801 and Stanislaus County Rule 407] Federally Enforceable Through Title V Permit
14. Source testing to measure natural gas combustion NO_x, CO, and NH₃ emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4102, 4305, 6.3.1, 4306, 6.3.1 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320, 5.8.2] Federally Enforceable Through Title V Permit
16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5, 4306, 5.5 and 4320, 5.8.1] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
19. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
20. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
21. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1, 5.7.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1] Federally Enforceable Through Title V Permit
25. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the stack concentration of ammonia (NH₃) at least once during each month in which a source test is not performed. NH₃ monitoring shall be conducted utilizing "short term" tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within one day of restarting the unit unless monitoring has been performed within the last month. [District Rule 4102]
27. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320, 5.8.2] Federally Enforceable Through Title V Permit
28. The portable analyzer shall be calibrated as recommended by the manufacturer. All instrument calibration data shall be kept on file including the date of calibration. The calibration date shall not exceed 6 months prior to the date the stack concentrations are measured and recorded. [District Rule 4305] Federally Enforceable Through Title V Permit
29. Concentration measurements shall not be taken until the sample acquisition probe has been exposed to the stack gas for at least 150% of the response time. Measurements shall be taken in triplicate. [District Rule 4305] Federally Enforceable Through Title V Permit
30. If water vapor is not removed prior to measurement, the absolute humidity in the gas stream must be determined so that the gas concentrations may be reported on a dry basis. [District Rule 4305] Federally Enforceable Through Title V Permit
31. If water vapor creates an interference with the measurement of any component, then the water vapor must be removed from the gas stream prior to concentration measurements. [District Rule 4305] Federally Enforceable Through Title V Permit
32. The NO_x emission concentration, expressed in ppmv or lb/MMBtu during periods of natural gas curtailment shall be recorded. [District Rule 4320, 6.1.1] Federally Enforceable Through Title V Permit
33. If the unit is fired on "liquid fuel" for a period exceeding 48 cumulative hours in a calendar year, the permittee shall monitor and record the stack concentration of NO_x at least once during that year using an APCO approved portable NO_x analyzer. Monitoring for "liquid fuel" NO_x emissions shall not be required when the unit is operating on primary fuel, i.e. the unit need not be fired on "liquid fuel" solely to perform monitoring. [District Rule 4320, 4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

34. The "liquid fuel" NOx emission readings shall be taken with the unit operating either at conditions representative of normal operations. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4320, 5.8.4] Federally Enforceable Through Title V Permit
35. Daily and annual records of "liquid fuel" consumption consisting of the date, the amount of fuel combusted (in gallons), and the reason of combusting "liquid fuel" shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
36. Records of the daily NOx emissions from this unit shall be kept for any day that the "liquid fuel" is burned. [District Rule 2201] Federally Enforceable Through Title V Permit
37. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rule 4320] Federally Enforceable Through Title V Permit
38. Copies of all natural gas fuel invoices and test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
39. Daily and annual records of start-up and shutdown durations and number of occurrences of each shall be kept. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 6.1.4] Federally Enforceable Through Title V Permit
40. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit
41. The permittee shall monitor and record the cumulative annual hours of operation on "liquid fuel" during periods of natural gas curtailment and equipment testing. [District Rule 4320, 6.1.1] Federally Enforceable Through Title V Permit
42. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-2107-13-6

EXPIRATION DATE: 08/31/2016

EQUIPMENT DESCRIPTION:

76.93 MMBTU/HR NEBRASKA MODEL NS-E-57 NATURAL GAS-FIRED BOILER EQUIPPED WITH A FLUE GAS RECIRCULATION (FGR) SYSTEM AND AMMONIA SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 & 4320] Federally Enforceable Through Title V Permit
4. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NO_x @ 3% O₂ or 0.008 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 100 ppmvd CO @ 3% O₂ or 0.073 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. The ammonia emission rate shall not exceed 10 ppmvd @ 3% O₂ over a 15 minute averaging period. [District Rule 4102]
6. Source testing to measure NO_x, CO, and ammonia (NH₃) emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
9. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
10. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: DARLING INTERNATIONAL, INC.

Location: 11946 CARPENTER RD, CROWS LANDING, CA 95318

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13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
15. The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications or District-approved monitoring equipment. NH₃ monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
16. The ammonia (NH₃) flow rate range shall be established during required source tests. [40 CFR Part 64] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the ammonia (NH₃) flow rate at least once during each day. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
18. If the NO_x, CO or ammonia (NH₃) concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continues to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
19. All NO_x, CO, O₂ and ammonia (NH₃) emission readings and ammonia (NH₃) flow rate readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
20. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. Ammonia (NH₃) emission readings shall be conducted at the time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements and NH₃ flow rate, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 3% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
23. The permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit
24. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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

DRAFT

ATTACHMENT B

Authorities to Construct N-2107-1-15 and '-13-5



AUTHORITY TO CONSTRUCT

ISSUANCE DATE: 10/01/2013

PERMIT NO: N-2107-1-15

LEGAL OWNER OR OPERATOR: DARLING INTERNATIONAL, INC.
MAILING ADDRESS: PO BOX 1608
TURLOCK, CA 95381

LOCATION: 11946 CARPENTER RD
CROWS LANDING, CA 95313

EQUIPMENT DESCRIPTION:
MODIFICATION OF 48 MMBTU/HR NEBRASKA MODEL NS-C-53 NATURAL GAS, DENATURED YELLOW GREASE, OR YELLOW GREASE-FIRED BOILER WITH A TODD MODEL V851G LOW-NOX BURNER, A FLUE GAS RECIRCULATION SYSTEM (FGR), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM: INCREASE AMMONIA SLIP LIMIT FROM 5 PPMVD TO 10 PPMVD @ 3% O2

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-regulated natural gas as the primary fuel and "liquid fuel" as a curtailment fuel. [District Rules 2201 and 4301, 5.2.1, and 40 CFR § 60.42c(d)] Federally Enforceable Through Title V Permit
4. For the purposes of this permit, "liquid fuel" means either yellow grease or yellow grease blended with no more than 1.0% No. 2 fuel oil, by volume. The sulfur content of No. 2 fuel oil blended with yellow grease shall not exceed 15 ppm. [District Rules 2201 and 4320, 5.4.2] Federally Enforceable Through Title V Permit
5. The unit shall be fired on "liquid fuel" only during natural gas curtailment for no more than 168 cumulative hours in a calendar year plus 48 hours per calendar year for equipment testing. [District Rules 2201 and 4320, 4.2.2] Federally Enforceable Through Title V Permit
6. The boiler shall be equipped with a non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-8400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
10/1/13 11:15 AM 1 2013 10 03AM - BROWND Joint Inspection NOT Required

Conditions for N-2107-1-15 (continued)

7. The boiler shall be equipped with a non-resettable, totalizing liquid fuel flow meter to measure the amount of "liquid fuel" burned, in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The NO_x emissions from this unit shall not exceed 43.5 pounds during any one day. The NO_x emissions shall be determined utilizing the following equation: [(cubic feet of natural gas burned during non-start-up and non-shutdown periods) x (7.3E-06) + (cubic feet of natural gas burned during start-up and shutdown periods) x (3.6E-05) + (gallons of "liquid fuel" burned) x (6.79E-03)]. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown, emissions from natural gas combustion shall not exceed any of the following limits: 6 ppmv NO_x @ 3% O₂ or 0.0073 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 50 ppmv CO @ 3% O₂ or 0.037 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.1, 4306, 5.1 and 4320, 5.2] Federally Enforceable Through Title V Permit
10. During start-up and shutdown periods, emissions from natural gas combustion shall not exceed any of the following limits: 30 ppmv NO_x @ 3% O₂ or 0.036 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 50 ppmv CO @ 3% O₂ or 0.037 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 5.6] Federally Enforceable Through Title V Permit
11. When fired on "liquid fuel" during curtailment episodes, emissions from this boiler shall not exceed any of the following limits: 40 ppmv NO_x @ 3% O₂ or 0.052 lb-NO_x/MMBtu, 0.0062 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, 142 ppmv CO @ 3% O₂ or 0.1049 lb-CO/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.1, 4306, 5.1 and 4320, 5.4.2] Federally Enforceable Through Title V Permit
12. The total duration of startup and shutdown time shall not exceed any of the following limits: 2.0 hours startup per day, 2.0 hours shutdown per day, or 730 hours total startup and shutdown time per year. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 5.6] Federally Enforceable Through Title V Permit
13. The ammonia emission rate shall not exceed 10.0 ppmvd @ 3% O₂ over a 15 minute averaging period. [District Rule 4102]
14. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801 and Stanislaus County Rule 407] Federally Enforceable Through Title V Permit
15. Source testing to measure natural gas combustion NO_x, CO, and NH₃ emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4102, 4305, 6.3.1, 4306, 6.3.1 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320, 5.8.2] Federally Enforceable Through Title V Permit
17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5, 4306, 5.5 and 4320, 5.8.1] Federally Enforceable Through Title V Permit
18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
19. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
20. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
21. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

Conditions for N-2107-1-15 (continued)

22. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
24. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1, 5.7.2] Federally Enforceable Through Title V Permit
25. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1] Federally Enforceable Through Title V Permit
26. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1] Federally Enforceable Through Title V Permit
27. The permittee shall monitor and record the stack concentration of ammonia (NH₃) at least once during each month in which a source test is not performed. NH₃ monitoring shall be conducted utilizing "short term" tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within one day of restarting the unit unless monitoring has been performed within the last month. [District Rule 4102]
28. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320, 5.8.2] Federally Enforceable Through Title V Permit
29. The portable analyzer shall be calibrated as recommended by the manufacturer. All instrument calibration data shall be kept on file including the date of calibration. The calibration date shall not exceed 6 months prior to the date the stack concentrations are measured and recorded. [District Rule 4305] Federally Enforceable Through Title V Permit
30. Concentration measurements shall not be taken until the sample acquisition probe has been exposed to the stack gas for at least 150% of the response time. Measurements shall be taken in triplicate. [District Rule 4305] Federally Enforceable Through Title V Permit
31. If water vapor is not removed prior to measurement, the absolute humidity in the gas stream must be determined so that the gas concentrations may be reported on a dry basis. [District Rule 4305] Federally Enforceable Through Title V Permit
32. If water vapor creates an interference with the measurement of any component, then the water vapor must be removed from the gas stream prior to concentration measurements. [District Rule 4305] Federally Enforceable Through Title V Permit
33. The NO_x emission concentration, expressed in ppmv or lb/MMBtu during periods of natural gas curtailment shall be recorded. [District Rule 4320, 6.1.1] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

Conditions for N-2107-1-15 (continued)

34. If the unit is fired on "liquid fuel" for a period exceeding 48 cumulative hours in a calendar year, the permittee shall monitor and record the stack concentration of NO_x at least once during that year using an APCO approved portable NO_x analyzer. Monitoring for "liquid fuel" NO_x emissions shall not be required when the unit is operating on primary fuel, i.e. the unit need not be fired on "liquid fuel" solely to perform monitoring. [District Rule 4320, 4.2] Federally Enforceable Through Title V Permit
35. The "liquid fuel" NO_x emission readings shall be taken with the unit operating either at conditions representative of normal operations. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4320, 5.8.4] Federally Enforceable Through Title V Permit
36. Daily and annual records of "liquid fuel" consumption consisting of the date, the amount of fuel combusted (in gallons), and the reason of combusting "liquid fuel" shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
37. Records of the daily NO_x emissions from this unit shall be kept for any day that the "liquid fuel" is burned. [District Rule 2201] Federally Enforceable Through Title V Permit
38. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rule 4320] Federally Enforceable Through Title V Permit
39. Copies of all natural gas fuel invoices and test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
40. Daily and annual records of start-up and shutdown durations and number of occurrences of each shall be kept. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 6.1.4] Federally Enforceable Through Title V Permit
41. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit
42. The permittee shall monitor and record the cumulative annual hours of operation on "liquid fuel" during periods of natural gas curtailment and equipment testing. [District Rule 4320, 6.1.1] Federally Enforceable Through Title V Permit
43. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

ISSUANCE DATE: 10/01/2013

PERMIT NO: N-2107-13-5

LEGAL OWNER OR OPERATOR: DARLING INTERNATIONAL, INC.
MAILING ADDRESS: PO BOX 1608
TURLOCK, CA 95381

LOCATION: 11946 CARPENTER RD
CROWS LANDING, CA 95313

EQUIPMENT DESCRIPTION:
MODIFICATION OF 76.93 MMBTU/HR NEBRASKA MODEL NS-E-57 NATURAL GAS-FIRED BOILER EQUIPPED WITH A FLUE GAS RECIRCULATION (FGR) SYSTEM AND AMMONIA SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM. INCREASE AMMONIA SLIP LIMIT FROM 5 PPMVD TO 10 PPMVD @ 3% O2

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 & 4320] Federally Enforceable Through Title V Permit
5. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 100 ppmvd CO @ 3% O2 or 0.073 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. The ammonia emission rate shall not exceed 10 ppmvd @ 3% O2 over a 15 minute averaging period. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO


DAVID WARNER, Director of Permit Services
N-2107-13-5 Oct 1 2013 10:03AM - BROWARD Jobs Inspection NOT Required

Conditions for N-2107-13-5 (continued)

7. Source testing to measure NO_x, CO, and ammonia (NH₃) emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
10. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
14. 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 44305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications or District-approved monitoring equipment. NH₃ monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
17. The ammonia (NH₃) flow rate range shall be established during required source tests. [40 CFR Part 64] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the ammonia (NH₃) flow rate at least once during each day. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
19. If the NO_x, CO or ammonia (NH₃) concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continues to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

Conditions for N-2107-13-5 (continued)

20. All NO_x, CO, O₂ and ammonia (NH₃) emission readings and ammonia (NH₃) flow rate readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
21. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Ammonia (NH₃) emission readings shall be conducted at the time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements and NH₃ flow rate, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 3% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
24. The permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit
25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

ATTACHMENT C

Application

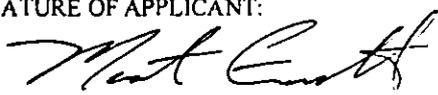
RECEIVED
JUN 06 2013

San Joaquin Valley Air Pollution Control District
www.valleyair.org

Permit Application For:

Permits Services
SJVAPCD

[] ADMINISTRATIVE AMENDMENT [x] MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Darling International Inc.	
2. MAILING ADDRESS: STREET/P.O. BOX: <u>P.O. Box 1608</u> CITY: <u>Turlock</u> STATE: <u>CA</u> 9-DIGIT ZIP CODE: <u>95381</u>	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: <u>11946 Carpenter Rd</u> CITY: <u>Crows Landing</u> _____ 1/4 SECTION _____ TOWNSHIP _____ RANGE _____	INSTALLATION DATE:
4. GENERAL NATURE OF BUSINESS: Food Industry By-Products Recycling	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) Permitted unit N-2107-13-4. Request modification to increase ammonia slip from 5 PPMVD to 10 PPMVD. Basis for change is lower NOx limits.	
6. TYPE OR PRINT NAME OF APPLICANT: <u>Martin Guthrie</u>	TITLE OF APPLICANT: <u>Manager Environmental Affairs</u>
7. SIGNATURE OF APPLICANT: 	DATE: <u>5/30/13</u> PHONE: (972) 281-4465 FAX: () EMAIL: <u>mguthrie@darlingii.com</u>

For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <u>N-1132088</u> FACILITY ID: <u>N-2107</u>

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME:	FACILITY ID: N -2107
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Darling International Inc.	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

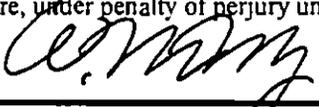
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.

- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true



Signature of Responsible Official

5/31/13

Date

William R. McMurtry

Name of Responsible Official (please print)

VP of Environmental Affairs

Title of Responsible Official (please print)

Dustin Brown

From: Martin Guthrie <MGuthrie@darlingii.com>
Sent: Monday, June 24, 2013 9:22 AM
To: Dustin Brown
Subject: RE: Darling Turlock Title V Minor Modification

Hello Dustin,

I concur. Please modify the scope of the application to include unit N-2107-1-14.

Best regards,
Martin

From: Dustin Brown [<mailto:Dustin.Brown@valleyair.org>]
Sent: Thursday, June 20, 2013 10:48 AM
To: Martin Guthrie
Subject: Darling Turlock Title V Minor Modification

Martin,

The District has received the ATC applications for these two boiler modifications at Darling International in Turlock. Thank you for getting those submitted so quickly.

One other note, along with an ATC application being required for these changes, Darling International needs to submit a Title V minor modification application for each of these units in order to get the changes incorporated in to the facility Title V permit. On June 6, 2013, Darling International submitted a Title V minor modification application for the requested change to unit N-2107-13-4 only (reference project N-1132088). I would like to amend that application and project to incorporate a Title V minor modification for unit N-2107-1-14 as well. Can you please respond to this email with your concurrence/non-concurrence that it is ok to modify the scope of the application that was already submitted to include unit N-2107-1-14 in the existing Title V minor modification project. If Darling does not concur, the District will need a second Title V minor modification application to be submitted for the proposed modification to unit N-2107-1-14. Let me know if you have any questions or need additional information. Thanks!

Dustin Brown
San Joaquin Valley APCD
1990 E. Gettysburg Avenue
Fresno, CA 93726
(559) 230-5932


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ATTACHMENT D

Previous Title V Operating Permits
N-2107-1-14 and '-13-4

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-2107-1-14

EXPIRATION DATE: 08/31/2016

EQUIPMENT DESCRIPTION:

48 MMBTU/HR NEBRASKA MODEL NS-C-53 NATURAL GAS, DENATURED YELLOW GREASE, OR YELLOW GREASE-FIRED BOILER WITH A TODD MODEL V651G LOW-NOX BURNER, A FLUE GAS RECIRCULATION SYSTEM (FGR), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The unit shall only be fired on PUC-regulated natural gas as the primary fuel and "liquid fuel" as a curtailment fuel. [District Rules 2201 and 4301, 5.2.1, and 40 CFR § 60.42c(d)] Federally Enforceable Through Title V Permit
3. For the purposes of this permit, "liquid fuel" means either yellow grease or yellow grease blended with no more than 1.0% No. 2 fuel oil, by volume. The sulfur content of No. 2 fuel oil blended with yellow grease shall not exceed 15 ppm. [District Rules 2201 and 4320, 5.4.2] Federally Enforceable Through Title V Permit
4. The unit shall be fired on "liquid fuel" only during natural gas curtailment for no more than 168 cumulative hours in a calendar year plus 48 hours per calendar year for equipment testing. [District Rules 2201 and 4320, 4.2.2] Federally Enforceable Through Title V Permit
5. The boiler shall be equipped with a non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The boiler shall be equipped with a non-resettable, totalizing liquid fuel flow meter to measure the amount of "liquid fuel" burned, in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The NO_x emissions from this unit shall not exceed 43.5 pounds during any one day. The NO_x emissions shall be determined utilizing the following equation: [(cubic feet of natural gas burned during non-start-up and non-shutdown periods) x (7.3E-06) + (cubic feet of natural gas burned during start-up and shutdown periods) x (3.6E-05) + (gallons of "liquid fuel" burned) x (6.79E-03)]. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown, emissions from natural gas combustion shall not exceed any of the following limits: 6 ppmv NO_x @ 3% O₂ or 0.0073 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 50 ppmv CO @ 3% O₂ or 0.037 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.1, 4306, 5.1 and 4320, 5.2] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods, emissions from natural gas combustion shall not exceed any of the following limits: 30 ppmv NO_x @ 3% O₂ or 0.036 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 50 ppmv CO @ 3% O₂ or 0.037 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 5.6] Federally Enforceable Through Title V Permit
10. When fired on "liquid fuel" during curtailment episodes, emissions from this boiler shall not exceed any of the following limits: 40 ppmv NO_x @ 3% O₂ or 0.052 lb-NO_x/MMBtu, 0.0062 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, 142 ppmv CO @ 3% O₂ or 0.1049 lb-CO/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201, 4305, 5.1, 4306, 5.1 and 4320, 5.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The total duration of startup and shutdown time shall not exceed any of the following limits: 2.0 hours startup per day, 2.0 hours shutdown per day, or 730 hours total startup and shutdown time per year. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 5.6] Federally Enforceable Through Title V Permit
12. The ammonia emission rate shall not exceed 5.0 ppmvd @ 3% O₂ over a 15 minute averaging period. [District Rule 4102]
13. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801 and Stanislaus County Rule 407] Federally Enforceable Through Title V Permit
14. Source testing to measure natural gas combustion NO_x, CO, and NH₃ emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4102, 4305, 6.3.1, 4306, 6.3.1 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320, 5.8.2] Federally Enforceable Through Title V Permit
16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5, 4306, 5.5 and 4320, 5.8.1] Federally Enforceable Through Title V Permit
17. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
18. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
19. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 6.2, 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
20. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1, 5.7.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1] Federally Enforceable Through Title V Permit
25. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7.1] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the stack concentration of ammonia (NH₃) at least once during each month in which a source test is not performed. NH₃ monitoring shall be conducted utilizing "short term" tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within one day of restarting the unit unless monitoring has been performed within the last month. [District Rule 4102]
27. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320, 5.8.2] Federally Enforceable Through Title V Permit
28. The portable analyzer shall be calibrated as recommended by the manufacturer. All instrument calibration data shall be kept on file including the date of calibration. The calibration date shall not exceed 6 months prior to the date the stack concentrations are measured and recorded. [District Rule 4305] Federally Enforceable Through Title V Permit
29. Concentration measurements shall not be taken until the sample acquisition probe has been exposed to the stack gas for at least 150% of the response time. Measurements shall be taken in triplicate. [District Rule 4305] Federally Enforceable Through Title V Permit
30. If water vapor is not removed prior to measurement, the absolute humidity in the gas stream must be determined so that the gas concentrations may be reported on a dry basis. [District Rule 4305] Federally Enforceable Through Title V Permit
31. If water vapor creates an interference with the measurement of any component, then the water vapor must be removed from the gas stream prior to concentration measurements. [District Rule 4305] Federally Enforceable Through Title V Permit
32. The NO_x emission concentration, expressed in ppmv or lb/MMBtu during periods of natural gas curtailment shall be recorded. [District Rule 4320, 6.1.1] Federally Enforceable Through Title V Permit
33. If the unit is fired on "liquid fuel" for a period exceeding 48 cumulative hours in a calendar year, the permittee shall monitor and record the stack concentration of NO_x at least once during that year using an APCO approved portable NO_x analyzer. Monitoring for "liquid fuel" NO_x emissions shall not be required when the unit is operating on primary fuel, i.e. the unit need not be fired on "liquid fuel" solely to perform monitoring. [District Rule 4320, 4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

34. The "liquid fuel" NO_x emission readings shall be taken with the unit operating either at conditions representative of normal operations. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4320, 5.8.4] Federally Enforceable Through Title V Permit
35. Daily and annual records of "liquid fuel" consumption consisting of the date, the amount of fuel combusted (in gallons), and the reason of combusting "liquid fuel" shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
36. Records of the daily NO_x emissions from this unit shall be kept for any day that the "liquid fuel" is burned. [District Rule 2201] Federally Enforceable Through Title V Permit
37. Copies of all natural gas fuel invoices and test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
38. Daily and annual records of start-up and shutdown durations and number of occurrences of each shall be kept. [District Rules 2201, 4305, 5.5.6, 4306, 5.3 and 4320, 6.1.4] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit
40. The permittee shall monitor and record the cumulative annual hours of operation on "liquid fuel" during periods of natural gas curtailment and equipment testing. [District Rule 4320, 6.1.1] Federally Enforceable Through Title V Permit
41. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-2107-13-4

EXPIRATION DATE: 08/31/2016

EQUIPMENT DESCRIPTION:

76.93 MMBTU/HR NEBRASKA MODEL NS-E-57 NATURAL GAS-FIRED BOILER EQUIPPED WITH A FLUE GAS RECIRCULATION (FGR) SYSTEM AND AMMONIA SELECTIVE CATALYTIC REDUCTION (SCR).

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 & 4320] Federally Enforceable Through Title V Permit
4. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOX @ 3% O2 or 0.008 lb-NOX/MMBtu, 0.00285 lb-SOX/MMBtu, 0.0076 lb-PM10/MMBtu, 100 ppmvd CO @ 3% O2 or 0.073 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. The ammonia emission rate shall not exceed 5 ppmvd @ 3% O2 over a 15 minute averaging period. [District Rule 4102]
6. The permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit
7. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4405, 4306, and 4320] Federally Enforceable Through Title V Permit
8. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
10. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Source testing to measure NO_x, CO, and ammonia (NH₃) emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
14. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
15. 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 44305, 4306, and 4320] Federally Enforceable Through Title V Permit
16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications or District-approved monitoring equipment. NH₃ monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306, and 4320 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
18. The ammonia (NH₃) flow rate range shall be established during required source tests. [40 CFR Part 60]
19. The permittee shall monitor and record the ammonia (NH₃) flow rate at least once during each day. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [40 CFR Part 60] Federally Enforceable Through Title V Permit
20. If the NO_x, CO or ammonia (NH₃) concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continues to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
21. All NO_x, CO, O₂ and ammonia (NH₃) emission readings and ammonia (NH₃) flow rate readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
22. Ammonia (NH₃) emission readings shall be conducted at the time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements and NH₃ flow rate, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 3% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306, and 4320 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
24. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320 and 40 CFR Part 60] Federally Enforceable Through Title V Permit

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