



MAR 27 2013

Robert Castro
Diamond Food, Inc
1050 S Diamond Street
Stockton, CA 95201

**Re: Proposed Authority to Construct / Certificate of Conformity (Minor Mod)
District Facility # N-285
Project # N-1123520**

Dear Mr. Castro:

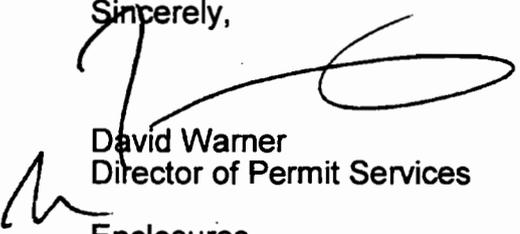
Enclosed for your review is the District's analysis of your application for Authority to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. This ATC is for the installation of a new nut roasting production line.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

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: Thom Maslowski, Permit Services

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
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Central Region (Main Office)
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MAR 27 2013

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Proposed Authority to Construct / Certificate of Conformity (Minor Mod)**
District Facility # N-285
Project # N-1123520

Dear Mr. Rios:

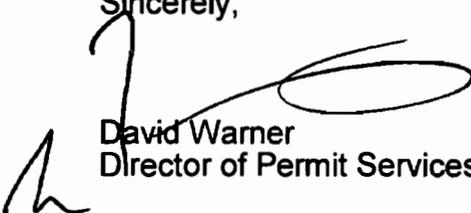
Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for Diamond Food, Inc, located at 1050 S Diamond Street in Stockton, CA, which has been issued a Title V permit. Diamond Food, Inc is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. This ATC is for the installation of a new nut roasting production line.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authority to Construct # N-285-119-0 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. 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.

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
New Gas-Fired Tortilla Chip Line

Facility Name: Diamond Foods, Inc
Mailing Address: 1050 S Diamond Street
Stockton, CA 95201
Location Address: 1050 S Diamond Street
Stockton, CA 95201
Contact Person: Robert Castro
Telephone: (209) 461-7329

Date: February 13, 2013
Engineer: Thom Maslowski
Lead Engineer: Joven Refuerzo

Application #(s): N-285-119-0
Project #: N-1123520
Deemed Complete: January 3, 2013

I. Proposal

Diamond Foods, Inc requests an Authority to Construct (ATC) permit for a nut roasting production line consisting of an oil fryer heated by a 0.45 MMBtu/hr indirect fire natural gas burner. The fryer will be served by a ventilation hood vented to an oil mist eliminator.

Per District Rule 2020 section 6.1.1, no Authority to Construct or Permit to Operation is required for;

Steam generators, steam superheaters, water boilers, water heaters, steam cleaners, and closed indirect heat transfer systems that have a maximum input heat rating of 5,000,000 Btu per hour (gross) or less and is equipped to be fired exclusively with natural gas.

As indicated, the burner serving the oil fryer is natural gas-fired with a heat input rating less than 5.0 MMBtu/hr. Therefore, it is permit exempt.

Diamond Foods, Inc received their Title V Permit on July 6, 2000. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Diamond Foods, Inc must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration ((6/16/2011)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4308	Boilers, Steam Generators and Process Heaters -0.075 MMBtu/hr to Less than 2.0 MMBtu/hr (5/19/11)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice
Public Resources Code 21000-21177:	California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387:	CEQA Guidelines

III. Project Location

The project is located 1050 S Diamond in Stockton, California. The District has verified that the equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

As part of the processing plant, DFI proposes to install a new nut oil roasting operation served by a Mastermatic Model HD-54 batch roaster with a 0.45 MMBtu/hr indirect natural gas-fired process heater.

The maximum operating schedule used for Potential to Emit calculations is 24 hr/day, 7 days/week, and 52 weeks/year.

V. Equipment Listing

ATC Equipment Description:

N-285-116-0: NUT OIL ROASTING OPERATION WITH A MASTERMATIC MODEL HD-54 BATCH ROASTER SERVED BY A OIL MIST ELIMINATOR AND A PERMIT EXEMPT OIL HEATER (NATURAL GAS FIRED, 5 MMBTU/HR OR LESS)

VI. Emission Control Technology Evaluation

For the fryer, particulate matter is the primary air pollutant of concern. PM₁₀ emissions are released when the moist nuts are introduced into hot oil. The rapid vaporization of the moisture in the chips results in the violent bubbling. Cooking oil droplets, and possibly oil vapors, become entrained in the water vapor stream. For the proposed fryer, these emissions will be collected by a hood and vented to an oil mist eliminator (OME). The applicant has submitted manufacturer's documentation for the proposed Heat and Control Inc. OME. The documentation includes source test data that indicates that the control efficiency of the proposed OME is 99.99 % for particulate emissions.

Volatile organic compounds (VOC) are also produced by the hot oil fryer, but they are not a significant percentage of total frying emissions because of the low vapor pressure of the cooking oils used. However, when the oil is entrained into the water vapor produced during the frying, the oil may break down into volatile products. Small amounts of VOC and combustion products may also be emitted from the ovens, but quantities are expected to be negligible.

VII. General Calculations

A. Assumptions

- The control efficiency of the OME is 95% for PM₁₀. (Conservative assumption based on manufacturer's data)
- The maximum daily nut throughput is 5.88 tons/day (Applicant's Proposal)
- The maximum annual fried onion throughput is 2,146.2 tons/yr (Applicant's Proposal)

B. Emission Factors

For PM₁₀, AP-42 table 9.13.3-2 lists an uncontrolled PM₁₀ emissions factors of 0.56 lb-PM₁₀/ton of chips for filterable PM₁₀ and 0.24 lb-PM₁₀/ton of chips for condensable PM₁₀. Therefore, the combined uncontrolled emissions factor is 0.80 lb-PM₁₀/ton of chips. Even though the AP-42 is established for torilla chips the nut roasting is an identical type of operation, therefore the same emission factor can be used. As indicated above the control efficiency of the OME serving the fryer is 95% for PM₁₀. The controlled PM₁₀ emissions factor is calculated as follows:

$$EF_{\text{controlled}} = EF_{\text{uncontrolled}} \times (1 - \text{control efficiency})$$

$$EF_{\text{controlled}} = 0.80 \text{ (lb-PM}_{10}\text{/ton of nuts)} \times (1 - 0.95)$$

$$EF_{\text{controlled}} = 0.04 \text{ (lb-PM}_{10}\text{/ton of nuts)}$$

For VOC, AP-42 table 9.13.3-3 lists uncontrolled VOC emissions factors of 0.085 lb-VOC/ton of chips. These emissions factors are summarized in the table below

Hot Oil Fryer Emission Factors (EF)		
Pollutant	Emission Factors (lb/ton fried onion)	Source
PM ₁₀	0.04	AP-42 (01/95) Table 9.13.3-2
VOC	0.085	AP-42 (01/95) Table 9.13.3-3

C. Calculations

1. Pre-Project Potential to Emit (PE1)

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

2. Post Project Potential to Emit (PE2)

For the Fryer:

Daily PE2			
Pollutant	EF2 (lb/ton)	Throughput (ton/day)	Daily PE2 (lb/day)
PM ₁₀	0.04	5.88	0.2
VOC	0.085	5.88	0.5

Annual PE2			
Pollutant	EF2 (lb/ton)	Throughput (ton/yr)	Annual PE2 (lb/yr)
PM ₁₀	0.04	2146.2	86
VOC	0.085	2146.2	182

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

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

The SSPE1 is calculated in Appendix E and presented in the following table.

SSPE1 (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	898	10	13,863	86	74,264

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

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

The SSPE2 is calculated in Appendix F and presented in the following table.

SSPE2 (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	898	10	13,949	86	74,446

5. Major Source Determination

Rule 2201 Major Source Determination:

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

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

Rule 2201 Major Source Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	898	10	13,863	86	74,264
SSPE2	898	10	13,949	86	74,446
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	Yes

This source is an existing Major Source for VOC emissions and will remain a Major Source for VOC.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Estimated Facility PE before Project Increase	0	37	0	0	7	7	15
PSD Major Source Thresholds	250	250	250	250	250	250	100,000
PSD Major Source ? (Y/N)	N	N	N	N	N	N	N

As shown above, the facility is not an existing major source for PSD for at least one pollutant. Therefore the facility is not an existing major source for PSD.

6. Baseline Emissions (BE)

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

Pursuant to District Rule 2201, BE = PE1 for:

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

otherwise,

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

Since this is a new emissions unit BE =0 for all pollutants.

7. SB 288 Major Modification

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

Since this facility is a major source for VOC, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB

288 Major Modification calculation is required. Any emissions increases of 0.5 lb/day or less round to zero for NSR purposes.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO _x	0	50,000	No
SO _x	0	80,000	No
PM ₁₀	0	30,000	No
VOC	0	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

Step 1

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project.

Calculated emission increases from new or modified emission units that are less than or equal to 0.5 lb/day are rounded to 0 (consistent with District Policy APR-1130, Increases Masimum Daily Permitted Emissions Less Than or Eqaul to 0.5 lb/day). New or modified emission units with emission increases that round to 0 shall not consitute a Federal Major Modification.

Therefore, this project does not consitute a Federal Major Modification.

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

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO₂ (as a primary pollutant)
- SO₂ (as a primary pollutant)
- CO
- PM

- PM10
- Greenhouse gases (GHG): CO₂, N₂O, CH₄, HFCs, PFCs, and SF₆

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

In the case the facility is new source, the second step of the PSD evaluation is to determine if this new facility will become a new PSD major Source as a result of the project and if so, to determine which pollutant will result in a PSD significant increase.

I. Potential to Emit for New or Modified Emission Units vs PSD Major Source Thresholds

As a screening tool, the project potential to emit from all new and modified units is compared to the PSD major source threshold, and if total project potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination: Potential to Emit (tons/year)							
	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀	CO _{2e}
Total PE from New and Modified Units	0	0	0	0	0	0	0
PSD Major Source threshold	250	250	250	250	250	250	100,000
New PSD Major Source?	N	N	N	N	N	N	N

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

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix A.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following*:

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

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

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

As discussed in Section I above, there are no new emissions units associated with this project with emissions exceeding 2.0 lb/day. Therefore BACT for new units with PE > 2 lb/day purposes is not triggered.

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

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

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

As discussed previously in Section I, this unit is not being modified as a result of this project. Therefore, BACT is not triggered for the modification of emissions units with an AIPE > 2 lb/day.

d. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does not constitute an SB 288 or Federal Major Modification. Therefore BACT is not triggered for any pollutant.

B. Offsets

1. Offset Applicability

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

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

Offset Determination (lb/year)					
	NO_x	SO_x	PM₁₀	CO	VOC
SSPE2	898	10	13,949	86	74,446
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	Yes

2. Quantity of Offsets Required

As seen above, the facility is an existing Major Source for VOC and the SSPE2 is greater than the offset thresholds; therefore offset calculations will be required for this project. However, District policy is to consider an IPE of less than 0.5 lb/day for each emission unit to be rounded to zero for the purposes of triggering NSR requirements and therefore offsets are not required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:

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

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

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

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

b. PE > 100 lb/day

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

c. Offset Threshold

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

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	898	898	20,000 lb/year	No
SO _x	10	10	54,750 lb/year	No
PM ₁₀	13,863	13,949	29,200 lb/year	No
CO	86	86	200,000 lb/year	No
VOC	74,264	74,446	20,000 lb/year	No

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

d. SSIPE > 20,000 lb/year

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

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	898	898	0	20,000 lb/year	No
SO _x	10	10	0	20,000 lb/year	No
PM ₁₀	13,949	13,863	86	20,000 lb/year	No
CO	86	86	0	20,000 lb/year	No
VOC	74,446	74,264	182	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

2. Public Notice Action

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

The DELs for the fryer are based on the controlled emissions factors and a daily throughput limit. Therefore, the following condition will be listed on the ATC to ensure compliance:

- Emissions rates from the hot oil roaster shall not exceed any of the following limits: 0.04 lb-PM10/ton roasted nuts or 0.085 lb-VOC/ton roasted nuts. [District Rule 2201]
- Roasted nut production shall not exceed either of the following limits: 5.88 ton/day or 2,146.2 ton/yr. [District Rule 2201]

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201. It also has been established as District Policy not to perform source tests on these units and relies on previous source tests. (Appendix G)

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

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

- The permittee shall maintain daily and annual records of roasted nut production. [District Rules 1070 and 2201]
- {3465} Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, 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.

As discussed above, the facility has applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment/minor modification application.

Rule 4101 Visible Emissions

District Rule 4101, Section 5.0, indicates that 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 dark or darker than Ringlemann 1 or equivalent to 20% opacity.

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

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

Therefore, compliance with District Rule 4101 requirements is expected.

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants, which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

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

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

California Health & Safety Code 41700 (Health Risk Assessment)

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

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (Appendix C), the total facility prioritization score including this project was less than or equal to one. Therefore, no future analysis is required to determine the impact from this project and compliance with the District’s Risk Management Policy is expected.

Rule 4201 Particulate Matter Concentration

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

F-Factor for NG:	8,578 dscf/MMBtu at 60 °F
PM ₁₀ Emission Factor:	0.0076 lb-PM ₁₀ /MMBtu
Percentage of PM as PM ₁₀ in Exhaust:	100%
Exhaust Oxygen (O ₂) Concentration:	3%
Excess Air Correction to F Factor =	$\frac{20.9}{(20.9 - 3)} = 1.17$

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

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

Therefore, compliance with District Rule 4201 requirements is expected and a permit condition will be listed on the permits as follows:

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

District Rule 4202 Particulate Matter Emission Rate

Per section 4.1, particulate matter (PM) emissions from any source operation shall not exceed the allowable hourly emission rate (E) as calculated using the following applicable formulas:

$$E = 3.59 P^{0.62} \text{ (when, } P = \text{ process weight rate } \leq 30 \text{ tons/hr)}$$

$$E = 17.31 P^{0.16} \text{ (when, } P = \text{ process weight rate } > 30 \text{ tons/hr)}$$

For the hot oil roaster, the daily process weight is 5.88 tons per day.

$$5.88 \text{ ton-roasted nuts/day} \div 24 \text{ hr/day} = 0.245 \text{ ton-roasted nuts/hr}$$

Assuming, in the worst case, 100% PM is PM₁₀, the maximum allowable PM hourly emission rate from hot oil fryer is calculated as follows:

$$E = 3.59 \times 0.245^{0.62} = 1.5 \text{ lb-PM/hr}$$

Using the PM₁₀ emission factor for the hot oil fryer, the maximum PM emissions from are expected to be:

$$\text{PM} = 0.04 \text{ lb-PM/ton-roasted nuts} \times 0.245 \text{ ton-roasted nuts/hr} = 0.001 \text{ lb-PM/hr}$$

$$\text{PM} = 0.001 \text{ lb-PM/hr} < E = 1.5 \text{ lb-PM/hr}$$

Therefore, compliance with this District Rule 4202 is expected for the hot oil roaster.

Rule 4308 Boilers, Steam Generators and Process Heaters -0.075 MMBtu/hr to Less than 2.0 MMBtu/hr (5/19/11)

The burner in this project indirectly heats the oil in this fryer, but the oil itself does not act as a process stream therefore the burner does not meet the applicability of this rule and is not subject to its requirements.

Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO₂, on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the emission factors presented in Section VII for natural gas, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = \frac{n RT}{P}$$

With:

N = moles SO₂

T (Standard Temperature) = 60°F = 520°R

P (Standard Pressure) = 14.7 psi

R (Universal Gas Constant) = $\frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}}$

$$\frac{0.00285 \text{ lb} - \text{SO}_x}{\text{MMBtu}} \times \frac{\text{MMBtu}}{8,578 \text{ dscf}} \times \frac{1 \text{ lb} \cdot \text{mol}}{64 \text{ lb}} \times \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}} \times \frac{520^\circ\text{R}}{14.7 \text{ psi}} \times \frac{1,000,000 \cdot \text{parts}}{\text{million}} = 1.97 \frac{\text{parts}}{\text{million}}$$

Since 1.97 ppmv is ≤ 2000 ppmv, this unit is expected to comply with Rule 4801.

California Health & Safety Code 42301.6 (School Notice)

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

California Environmental Quality Act (CEQA)

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

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

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus, the District is the Lead Agency for this project.

The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering

Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue Authority to Construct N-285-116-0 subject to the permit conditions on the attached draft Authority to Construct in Appendix D.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
N-285-116-0	3020-06	Miscellaneous	\$105.00

APPENDICES

- A: Quarterly Net Emissions Change
- B: GHG Calculations
- C: HRA Summary
- D: Draft ATC and Emissions Profile
- E: SSPE1
- F: SSPE2
- G: Source Test
- H: Compliance Certification

APPENDIX B
GHG Calculations

Green House Gas Emission Rate Evaluation

The District has evaluated potential greenhouse gas emissions from 1) internal combustion engines rated at 50 brake horsepower and 2) natural gas-fired boilers with a rated firing capacity of 5 MMBtu/hour.

Internal Combustion Engine

Basis and Assumptions

- The engine is a compression-ignited unit fueled with diesel in agricultural equipment service.
- The engine operates at full rated power.
- Specific fuel consumption is 220 g/kWh (typical for engine type).
- Density of diesel fuel is 7.0 lb/gallon.
- Higher Heating Value (HHV) of diesel is 138,700 Btu/gallon.
- Engine operates 8,760 hours per year.
- Emission factors and global warming potentials (GWP) for diesel fuel are taken from the California Climate Change Action Registry (CCAR), Version 3.1, January, 2009 (Appendix C, Tables C.1, C.3 and C.6) :

CO₂ 10.15 kg/gallon (22.3 lb/gallon)

CH₄ 1.44 g/gallon (0.006 lb/gal)

N₂O 0.26 g/gallon (0.001 lb/gal)

GWP for CH₄ = 23 lb-CO₂(eq) per lb-CH₄

GWP for N₂O = 296 lb-CO₂(eq) per lb-N₂O

Calculations

N-285-100-3

Diesel fuel consumption rate at full rated horsepower:

$$600 \text{ bhp} \times \frac{0.7456 \text{ kW}}{\text{hp}} \times \frac{220 \text{ g}}{\text{kWh}} \times \frac{1 \text{ lb}}{453.6 \text{ g}} + \frac{\text{gal}}{7 \text{ lb}} = 30.96 \text{ gal/hour}$$

Hourly Emissions

CO₂ Emissions = 30.96 gal/hr x 22.3 lb/gal = 690.4 lb-CO₂(eq)/hour

CH₄ Emissions = 30.96 gal/hr x 0.006 lb/gal x 23 lb-CO₂(eq) per lb-CH₄ = 4.3 lb-CO₂(eq)/hour

N₂O Emissions = 30.96 gal/hr x 0.001 lb/gal x 296 lb-CO₂(eq) per lb-N₂O = 9.2 lb-CO₂(eq)/hour

Total = 690.4 + 4.3 + 9.2 = 703.9 lb-CO₂(eq)/hour

Annual Emissions

703.9 lb-CO₂(eq)/hour x 30 hr/year ÷ 2,000 lb/ton = **11 tons-CO₂(eq)/year**

N-285-101-3

fuel consumption rate at full rated horsepower:

$$\frac{52 \text{ bhp}}{\text{bhp}} \times \frac{0.7456 \text{ kW}}{\text{hp}} \times \frac{220 \text{ g}}{\text{kWh}} \times \frac{1 \text{ lb}}{453.6 \text{ g}} + \frac{\text{gal}}{7 \text{ lb}} = 2.68 \text{ gal/hour}$$

Hourly Emissions

CO₂ Emissions = 2.68 gal/hr x 22.3 lb/gal = 59.8 lb-CO₂(eq)/hour

CH₄ Emissions = 2.68 gal/hr x 0.006 lb/gal x 23 lb-CO₂(eq) per lb-CH₄ = 0.4 lb-CO₂(eq)/hour

N₂O Emissions = 2.68 gal/hr x 0.001 lb/gal x 296 lb-CO₂(eq) per lb-N₂O = 0.8 lb-CO₂(eq)/hour

Total = 59.8 + 0.4 + 0.8 = 61.0 lb-CO₂(eq)/hour

Annual Emissions

61.0 lb-CO₂(eq)/hour x 20 hr/year ÷ 2,000 lb/ton = **1 tons-CO₂(eq)/year**

N-285-111-3

fuel consumption rate at full rated horsepower:

$$\frac{109 \text{ bhp}}{\text{bhp}} \times \frac{0.7456 \text{ kW}}{\text{hp}} \times \frac{220 \text{ g}}{\text{kWh}} \times \frac{1 \text{ lb}}{453.6 \text{ g}} + \frac{\text{gal}}{7 \text{ lb}} = 5.62 \text{ gal/hour}$$

Hourly Emissions

CO₂ Emissions = 5.62 gal/hr x 22.3 lb/gal = 125.3 lb-CO₂(eq)/hour

CH₄ Emissions = 5.62 gal/hr x 0.006 lb/gal x 23 lb-CO₂(eq) per lb-CH₄ = 0.8 lb-CO₂(eq)/hour

N₂O Emissions = 5.62 gal/hr x 0.001 lb/gal x 296 lb-CO₂(eq) per lb-N₂O = 1.7 lb-CO₂(eq)/hour

Total = 125.3 + 0.8 + 1.7 = 127.8 lb-CO₂(eq)/hour

Annual Emissions

127.8 lb-CO₂(eq)/hour x 50 hr/year ÷ 2,000 lb/ton = **3 tons-CO₂(eq)/year**

APPENDIX C

HRA Summary

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Thom Maslowski, AQE – Permit Services
 From: Ester Davila, SAQS – Technical Services
 Date: February 13, 2013
 Facility Name: Diamond Foods, Inc.
 Location: 1050 S. Diamond Street, Stockton
 Application #(s): N-285-116-0
 Project #: N-1123520

A. RMR SUMMARY

RMR Summary			
Categories	Nut Oil Roasting (Unit 116-0)	Project Totals	Facility Totals
Prioritization Score	0.1 ¹	NA ¹	>1.0
Acute Hazard Index	0.002	0.002	0.002
Chronic Hazard Index	0.0001	0.0001	0.0001
Maximum Individual Cancer Risk	2.21E-8	2.21E-8	2.14E-6
T-BACT Required?	No		
Special Permit Conditions?	No		

¹ Prioritization for this unit was <1; however, it has been determined that the facility prioritization scores total greater than 1.0. Further analysis was required.

Proposed Permit Conditions

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

Unit # 116-0

1. No special conditions are required.

B. RMR REPORT

I. Project Description

Technical Services received a request on February 1, 2013, to perform a Risk Management Review for the proposed installation of a new nut-oil roasting operation served by a Mastermatic model HD-54 batch roaster and a permit exempt oil heater (natural gas fired, 5 MMBtu/hr or less).

II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Since the total facility prioritization score was greater than one, a refined health risk assessment was required and performed. A District-developed spreadsheet based on CARB speciation profiles #s 3, 600, and 9003 along with the emissions supplied by the engineer. These emissions were input into the HEARTs database. The AERMOD model was used, with the parameters outlined below and the five year concatenated meteorological data for 2005-2009 from Stockton to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the Hot Spots Analysis and Reporting Program (HARP) risk assessment module to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Analysis Parameters Unit 116-0			
Source Type	Point	Location Type	Urban
Stack Height (m)	9.144	Closest Receptor (m)	130
Stack Diameter. (m)	0.305	Type of Receptor	Residence
Stack Exit Velocity (m/s)*	9.06	Max Hours per Year	8760
Stack Exit Temp. (°K)	588.71	Fuel Type	NG

*Stack fitted with fixed rain-cap. Used AERMOD non-default Options for Capped and Horizontal stack releases (BETA). Used flow rate of like units.

III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with this unit is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

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

Attachments:

- A. RMR Request from the Project Engineer
- B. Additional Information
- C. CARB Speciation Profiles & Spreadsheet
- D. Emissions Summary
- E. Prioritization Score
- F. HARP Risk Report
- G. Facility Summary

APPENDIX D

Draft ATC and Emission Profile

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-285-116-0

LEGAL OWNER OR OPERATOR: DIAMOND FOODS INCORPORATED
MAILING ADDRESS: P O BOX 1727
STOCKTON, CA 95201-1727

LOCATION: 1050 S DIAMOND ST
STOCKTON, CA 95205

EQUIPMENT DESCRIPTION:

NUT OIL ROASTING OPERATION WITH A MASTERMATIC MODEL HD-54 BATCH ROASTER SERVED BY A OIL MIST ELIMINATOR AND A PERMIT EXEMPT OIL HEATER (NATURAL GAS FIRED, 5 MMBTU/HR OR LESS)

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
7. The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director APCO

DRAFT

DAVID WARNER, Director of Permit Services
N-285-116-0 : Mar 5 2013 8:28AM - MASLOWST : Joint Inspection NOT Required

8. Emissions rates from the hot oil roaster shall not exceed any of the following limits: 0.04 lb-PM10/ton roasted nuts or 0.085 lb-VOC/ton roasted nuts. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Roasted nut production shall not exceed either of the following limits: 5.88 ton/day or 2,146.2 ton/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall maintain daily and annual records of roasted nut production. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
11. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201]

DRAFT

Permit #: N-285-116-0	Last Updated
Facility: DIAMOND FOODS INCORPORATED	02/13/2013 MASLOWST

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	86.0	0.0	182.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.2	0.0	0.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	21.0	0.0	45.0
Q2:	0.0	0.0	21.0	0.0	45.0
Q3:	0.0	0.0	22.0	0.0	46.0
Q4:	0.0	0.0	22.0	0.0	46.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

APPENDIX E

SSPE 1

SSPE1

SSPE1 (lb/yr)							
Permit No.	Equipment Description	NO _x	CO	VOC	PM ₁₀	SO _x	GHG
N-285-1-2 thru N-285-20-2 ¹	Bulk storage, atmospheric fumigation	0	0	See footnote 1	0	0	0
N-285-21-2	Walnut receiving pit	0	0	0	0	0	0
N-285-22-2	Walnut receiving system #1	0	0	0	0	0	0
N-285-23-2	Walnut receiving system #1	0	0	0	0	0	0
N-285-24-2	Walnut receiving pit #2	0	0	0	0	0	0
N-285-25-2	Walnut receiving pit #2	0	0	0	0	0	0
N-285-26-2	Walnut receiving system #3	0	0	0	0	0	0
N-285-27-2	Walnut receiving system #3	0	0	0	0	0	0
N-285-28-2	Walnut receiving system #4	0	0	0	0	0	0
N-285-29-2	Walnut receiving system #4	0	0	0	0	0	0
N-285-30-2	20.0 MMBtu/hr backup boiler-deleted	0	0	0	0	0	0
N-285-31-2	Oil mill equipment	0	0	0	0	0	0
N-285-32-2	Vacuum fumigation chamber	0	0		0	0	0
N-285-33-2	Vacuum fumigation chamber	0	0	0	0	0	0
N-285-34-1	4.5 MW cogeneration boiler-deleted	0	0	0	0	0	0
N-285-35-1	Walnut shell handling system - deleted	0	0	0	0	0	0
N-285-36-1	Deleted	0	0	0	0	0	0
N-285-37-2	Bulk storage trash separation	0	0	0	219	0	0
N-285-38-2	Deleted	0	0	0	0	0	0
N-285-39-0	Deleted	0	0	0	0	0	0
N-285-40-2	Small room operations	0	0	0	183	0	0
N-285-41-0	Deleted	0	0	0	0	0	0
N-285-42-2	Atmospheric fumigation chamber	0	0	18,250	0	0	0
N-285-43-2	Atmospheric fumigation chamber	0	0	18,250	0	0	0
N-285-44-2	Atmospheric fumigation chamber	0	0	18,250	0	0	0
N-285-45-4 ²	Propylene oxide fumigation chamber	0	0	See footnote 2	0	0	0
N-285-46-4	Propylene oxide fumigation chamber	0	0	See footnote 2	0	0	0
N-285-47-2	Bleach plant air separation system	0	0	0	0	0	0
N-285-48-3	Form & fill system	0	0	0	6,096	0	0

¹ The fumigant used in these chambers is Methyl bromide (CH₃Br), which is a VOC. Note, the facility is a Major Source for VOC emissions not including the emissions from these permit units.

² This operation emits only propylene oxide, which is a VOC. Note, the facility is a Major Source for VOC emissions not including the emissions from this permit unit.

N-285-49-2 thru N-285-66-2	Butler atmospheric fumigation chamber	0	0	See footnote 1	0	0	0
N-285-67-4	Bulk storage atmospheric fumigation, Track #5	0	0	0	0	0	0
N-285-68-2	Bulk storage atmospheric fumigation, Track #5	0	0	0	0	0	0
N-285-69-2 thru N-285-76-2	Bleach plant vacuum fumigation chamber	0	0	See footnote 1	0	0	0
N-285-77-2	Walnut destoning operation	0	0	0	0	0	0
N-285-78-1	Bank 7 air separation system-deleted	0	0	0	0	0	0
N-285-79-0	Deleted	0	0	0	0	0	0
N-285-80-2	Walnut separation system	0	0	0	0	0	0
Permit No.	Equipment Description	NO_x	CO	VOC	PM₁₀	SO_x	0
N-285-81-0	Deleted	0	0	0	0	0	0
N-285-82-1	Deleted	0	0	0	0	0	0
N-285-83-1	Deleted	0	0	0	0	0	0
N-285-84-1	Deleted	0	0	0	0	0	0
N-285-85-0	Deleted	0	0	0	0	0	0
N-285-86-5	Bank 6 chopping & sizing system	0	0	0	0	0	0
N-285-87-3	Bank 6 chopping & sizing system	0	0	0	0	0	0
N-285-88-3	Bank 6 chopping & sizing system	0	0	0	0	0	0
N-285-89-3	Cracking module #1	0	0	0	2,519	0	0
N-285-90-3	Cracking module #2	0	0	0	2,519	0	0
N-285-91-3	Cracking module #3	0	0	0	2,519	0	0
N-285-92-1	Deleted	0	0	0	0	0	0
N-285-93-2	Bleach destoner system	0	0	0	0	0	0
N-285-94-2	Bleach destoner system	0	0	0	0	0	0
N-285-95-2	Walnut meats packaging line	0	0	0	126	0	0
N-285-96-1	Deleted	0	0	0	0	0	0
N-285-97-5	Floatation dryer system	0	0	0	0	0	0
N-285-98-2	Can line infeed system	0	0	0	183	0	0
N-285-99-4	Bulk box line packaging system	0	0	0	292	0	0
N-285-100-1	600 bhp emergency diesel-fired engine	512	24	293	18	6	11
N-285-101-3	Deleted	0	0	0	0	0	0
N-285-102-1	52 bhp emergency LPG fired engine	320	60	20	8	4	1
N-285-103-3	5 Walnut meal sorting lines	0	0	0	0	0	0
N-285-104-3	2 Walnut meal sorting lines	0	0	0	0	0	0
N-285-105-1	Walnut meal canning line	0	0	0	0	0	0
N-285-106-4	Deleted	0	0	0	0	0	0
N-285-107-2	Specialty nut transfer system	0	0	0	3	0	0

N-285-108-0 ³	Nut packaging line #12	0	0	0	0	0	0
N-285-109-0 ³	Nut packaging lines #9, #10 & #11	0	0	0	0	0	0
N-285-110-0 ³	Nut packaging line #8	0	0	0	0	0	0
N-285-111-0	109 bhp emergency IC engine	66	2	1	1	0	3
N-285-112-0 ³	Snack packaging line	0	0	0	0	0	0
N-285-113-0	In-shell processing line	0	0	0	110	0	0
N-285-114-0	<i>ATC has been cancelled</i>	0	0	0	0	0	0
N-285-115-0	In-shell packaging line	0	0	0	110	0	0
	TOTALS:	898	86	74,264	13,863	10	15

Except as noted, emission data for the pre and post-project SSPE are based on calculations performed for project N-1060037 N-285-112-0.

³ ATC has been issued, but not implemented into a Permit to Operate.

APPENDIX F

SSPE 2

SSPE2

SSPE2 (lb/yr)							
Permit No.	Equipment Description	NO _x	CO	VOC	PM ₁₀	SO _x	GHG
N-285-1-2 thru N-285-20-2 ¹	Bulk storage, atmospheric fumigation	0	0	See footnote 1	0	0	0
N-285-21-2	Walnut receiving pit	0	0	0	0	0	0
N-285-22-2	Walnut receiving system #1	0	0	0	0	0	0
N-285-23-2	Walnut receiving system #1	0	0	0	0	0	0
N-285-24-2	Walnut receiving pit #2	0	0	0	0	0	0
N-285-25-2	Walnut receiving pit #2	0	0	0	0	0	0
N-285-26-2	Walnut receiving system #3	0	0	0	0	0	0
N-285-27-2	Walnut receiving system #3	0	0	0	0	0	0
N-285-28-2	Walnut receiving system #4	0	0	0	0	0	0
N-285-29-2	Walnut receiving system #4	0	0	0	0	0	0
N-285-30-2	20.0 MMBtu/hr backup boiler-deleted	0	0	0	0	0	0
N-285-31-2	Oil mill equipment	0	0	0	0	0	0
N-285-32-2	Vacuum fumigation chamber	0	0	0	0	0	0
N-285-33-2	Vacuum fumigation chamber	0	0	0	0	0	0
N-285-34-1	4.5 MW cogeneration boiler-deleted	0	0	0	0	0	0
N-285-35-1	Walnut shell handling system - deleted	0	0	0	0	0	0
N-285-36-1	Deleted	0	0	0	0	0	0
N-285-37-2	Bulk storage trash separation	0	0	0	219	0	0
N-285-38-2	Deleted	0	0	0	0	0	0
N-285-39-0	Deleted	0	0	0	0	0	0
N-285-40-2	Small room operations	0	0	0	183	0	0
N-285-41-0	Deleted	0	0	0	0	0	0
N-285-42-2	Atmospheric fumigation chamber	0	0	18,250	0	0	0
N-285-43-2	Atmospheric fumigation chamber	0	0	18,250	0	0	0
N-285-44-2	Atmospheric fumigation chamber	0	0	18,250	0	0	0
N-285-45-4 ²	Propylene oxide fumigation chamber	0	0	See footnote 2	0	0	0
N-285-46-4	Propylene oxide fumigation chamber	0	0	See footnote 2	0	0	0
N-285-47-2	Bleach plant air separation system	0	0	0	0	0	0
N-285-48-3	Form & fill system	0	0	0	6,096	0	0

¹ The fumigant used in these chambers is Methyl bromide (CH₃Br), which is a VOC. Note, the facility is a Major Source for VOC emissions not including the emissions from these permit units.

² This operation emits only propylene oxide, which is a VOC. Note, the facility is a Major Source for VOC emissions not including the emissions from this permit unit.

N-285-49-2 thru N-285-66-2	Butler atmospheric fumigation chamber	0	0	See footnote 1	0	0	0
N-285-67-4	Bulk storage atmospheric fumigation, Track #5	0	0	0	0	0	0
N-285-68-2	Bulk storage atmospheric fumigation, Track #5	0	0	0	0	0	0
N-285-69-2 thru N-285-76-2	Bleach plant vacuum fumigation chamber	0	0	See footnote 1	0	0	0
N-285-77-2	Walnut destoning operation	0	0	0	0	0	0
N-285-78-1	Bank 7 air separation system-deleted	0	0	0	0	0	0
N-285-79-0	Deleted	0	0	0	0	0	0
N-285-80-2	Walnut separation system	0	0	0	0	0	0
Permit No.	Equipment Description	NO_x	CO	VOC	PM₁₀	SO_x	0
N-285-81-0	Deleted	0	0	0	0	0	0
N-285-82-1	Deleted	0	0	0	0	0	0
N-285-83-1	Deleted	0	0	0	0	0	0
N-285-84-1	Deleted	0	0	0	0	0	0
N-285-85-0	Deleted	0	0	0	0	0	0
N-285-86-5	Bank 6 chopping & sizing system	0	0	0	0	0	0
N-285-87-3	Bank 6 chopping & sizing system	0	0	0	0	0	0
N-285-88-3	Bank 6 chopping & sizing system	0	0	0	0	0	0
N-285-89-3	Cracking module #1	0	0	0	2,519	0	0
N-285-90-3	Cracking module #2	0	0	0	2,519	0	0
N-285-91-3	Cracking module #3	0	0	0	2,519	0	0
N-285-92-1	Deleted	0	0	0	0	0	0
N-285-93-2	Bleach destoner system	0	0	0	0	0	0
N-285-94-2	Bleach destoner system	0	0	0	0	0	0
N-285-95-2	Walnut meats packaging line	0	0	0	126	0	0
N-285-96-1	Deleted	0	0	0	0	0	0
N-285-97-5	Floatation dryer system	0	0	0	0	0	0
N-285-98-2	Can line infeed system	0	0	0	183	0	0
N-285-99-4	Bulk box line packaging system	0	0	0	292	0	0
N-285-100-1	600 bhp emergency diesel-fired engine	512	24	293	18	6	11
N-285-101-3	Deleted	0	0	0	0	0	0
N-285-102-1	52 bhp emergency LPG fired engine	320	60	20	8	4	1
N-285-103-3	5 Walnut meal sorting lines	0	0	0	0	0	0
N-285-104-3	2 Walnut meal sorting lines	0	0	0	0	0	0
N-285-105-1	Walnut meal canning line	0	0	0	0	0	0
N-285-106-4	Deleted	0	0	0	0	0	0
N-285-107-2	Specialty nut transfer system	0	0	0	3	0	0

N-285-108-0 ³	Nut packaging line #12	0	0	0	0	0	0
N-285-109-0 ³	Nut packaging lines #9, #10 & #11	0	0	0	0	0	0
N-285-110-0 ³	Nut packaging line #8	0	0	0	0	0	0
N-285-111-0	109 bhp emergency IC engine	66	2	1	1	0	3
N-285-112-0 ³	Snack packaging line	0	0	0	0	0	0
N-285-113-0	In-shell processing line	0	0	0	110	0	0
N-285-114-0	<i>ATC has been cancelled</i>	0	0	0	0	0	0
N-285-115-0	In-shell packaging line	0	0	0	110	0	0
N-285-116-0	Nut roaster	0	0	182	86	0	0
TOTALS:		898	86	74,446	13,949	10	15

Except as noted, emission data for the pre and post-project SSPE are based on calculations performed for project N-1060037 N-285-112-0.

³ ATC has been issued, but not implemented into a Permit to Operate.

APPENDIX G

Source Test

OIL MIST ELIMINATOR

Oil Mist Removal Efficiency Test Results

Heat and Control Inc

21121 Cabot Blvd
Hayward CA
94545-1132 USA
Telephone 510-259-0500
800-227-5980
Facsimile 510-259-0600



INPUT DATA:

Temperature 250 deg.F
Pressure 15.3 Psig
Gas Density .0727 #/ft³
Viscosity .014 Centipoise
Liquid density 58.6 #/ft³
Gas Flow Rate 5043 acfm
Liq. Flow Rate 0

CALCULATED VALUE:

709.6701 deg.R
29.996 Psia
Density .0727 #/ft³
.014 centipoise
Density 58.6 #/ft³
84.05 ACPS
Mist Only

MIST-ELIMINATOR

System Factor, K .35

Optimum Velocity, Ft./sec	9.930704
Surface Area, Sq.Ft.	8.46365
Diameter, inches	39.3926
Existing/Selected size, in.	12 X 108
Velocity, Ft./sec	9.338889
Surface Area, Sq.Ft.	9
Operating K - Factor	.329142

SEPARATION EFFICIENCY

Wire Mesh Data:

Style
Pad thickness, in
Surface area, ft²/ft³

3BP/7CA
6
82.5

- Standard Efficiency
pod.
0.5" WIG DP at 250°F

Efficiency

Droplets
Size, micron

% Removed



2.00	79.29
3.00	96.96
5.00	99.69
7.00	99.99
10.00	99.99
20.00	99.99

APPENDIX H

Compliance Certification

San Joaquin Valley
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

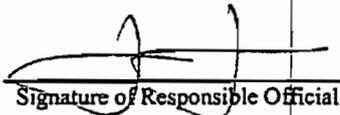
- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: Diamond Foods, Inc.	FACILITY ID: N-285
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:	
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 source identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the source 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

10/26/2012
Date

Fred Jacobus
Name of Responsible Official (please print)

Vice President of Operations
Title of Responsible Official (please print)

New Nut Oil-Roasting Operation