DEC 13 2011

Brenda Moppins  
Frito-Lay, Inc  
600 Garner Road  
Modesto, CA 95357

Re: Notice of Preliminary Decision - Authority to Construct  
Project Number: N-1103895

Dear Mr. Moppins:

Enclosed for your review and comment is the District's analysis of Frito-Lay, Inc's permit application to increase heat input rate of the tortilla chip ovens under permit N-1919-1 and to increase tortilla chip production for permits N-1919-1 and N-1919-2, at 600 Garner Road, Modesto, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jagmeet Kahlon of Permit Services at (209) 557-6452.

Sincerely,

David Warner  
Director of Permit Services

DW: JK/st  
Enclosures
DEC 13 2011

Mike Tollstrup, Chief  
Project Assessment Branch  
Stationary Source Division  
California Air Resources Board  
PO Box 2815  
Sacramento, CA 95812-2815

Re: Notice of Preliminary Decision - Authority to Construct  
Project Number: N-1103895

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Frito-Lay, Inc's permit application to increase heat input rate of the tortilla chip ovens under permit N-1919-1 and to increase tortilla chip production for permits N-1919-1 and N-1919-2, at 600 Garner Road, Modesto, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

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Sincerely,

David Warner  
Director of Permit Services

DW: JK/st  
Enclosures

Seyed Sadredin  
Executive Director/Air Pollution Control Officer

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

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

Southern Region  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5595

www.valleyair.org www.healthyairliving.com
DEC 13 2011

Gerardo C. Rios (AIR 3)
Chief, Permits Office
Air Division
U.S. E.P.A. - Region IX
75 Hawthorne Street
San Francisco, CA 94105

Re: Notice of Preliminary Decision - Authority to Construct
Project Number: N-1103895

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Frito-Lay, Inc's permit application to increase heat input rate of the tortilla chip ovens under permit N-1919-1 and to increase tortilla chip production for permits N-1919-1 and N-1919-2, at 600 Garner Road, Modesto, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jagmeet Kahlon of Permit Services at (209) 557-6452.

Sincerely,

David Warner
Director of Permit Services

DW: JK/st

Enclosures
NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED ISSUANCE OF
AUTHORITY TO CONSTRUCT PERMITS

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Authority to Construct permits to Frito-Lay, Inc to increase heat input rate of the tortilla chip ovens under permit N-1919-1 and to increase tortilla chip production for permits N-1919-1 and N-1919-2, at 600 Garner Road, Modesto, California.

The analysis of the regulatory basis for this proposed action, Project #N-1103895, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CA 95356.
San Joaquin Valley Air Pollution Control District
Authority to Construct
Application Review

Facility Name: Frito-Lay, Inc
Mailing Address: 600 Garner Rd
Modesto, CA 95357
Date: December 9, 2011
Engineer: Jagmeet Kahlon
Lead Engineer: Nick Peirce

Contact Person: Brenda Moppins
Telephone: (209) 544-5411
Application #(#s): N-1919-1-6, ‘-2-7
Project #: N-1103895
Deemed Complete: November 15, 2011

I. Proposal

N-1919-1-6: Tortilla Chip Line #3
Frito-Lay, Inc has proposed to increase heat input rate of each tortilla chip oven from 1.9 MMBtu/hr to 3.2 MMBtu/hr and tortilla chip production of this line.

N-1919-2-7: Tortilla Chip Line #4
Frito-Lay, Inc has proposed to increase tortilla chip production of this line.

Frito-Lay, Inc is a Major Source for NOx. They have submitted an application to obtain a Federally Mandated Title V permit, which is being processed under a separate project. This project triggers a public notice under Rule 2201 since the project triggered a Federal Major Modification. Therefore, the project will be published in the local newspaper Modesto Bee for public review and comment. The public comment period will last 30-days from the date of publication.

II. Applicable Rules

Rule 1030 Confidential Information (12/17/92)
Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 4101 Visible Emissions (02/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4201 Particulate Matter Concentration (12/17/92)
Rule 4202 Particulate Matter Emission Rate (12/17/92)
Rule 4301 Fuel Burning Equipment (12/17/92)
Rule 4309 Dryers, Dehydrators, and Ovens (12/15/05)
Rule 4801 Sulfur Compounds (12/17/92)
California Health and Safety Code 41700 (Public Nuisance)
California Health and Safety Code 42301.6 (School Notice)
III. Project Location

This facility is located at 600 Garner Rd, Modesto, California. There is no K-12 school within 1,000 feet of this address. Therefore, school notice, under California Health and Safety Code 42301.6, is not required for this project.

IV. Process Description

Frito Lay is in the business of snack food manufacturing. The process description below is representative of each snack chip manufacturing operation (process description is from project N-1030234).

From a steam-heated "pre-cooker", moist corn meal (called "masa") is pumped to a "sheeter", which spreads the masa to the desired thickness and then cuts the desired chip shapes. From the sheeter, the moist chips are conveyed through natural gas-fired baking ovens (direct-fired), which remove some of the moisture and brown both surfaces of the chips. From the baking ovens, the chips are conveyed to a steam-heated cooker (called a "fryer"), which contains a boiling vegetable oil bath. In the cooker, the chips are submerged in boiling vegetable oil to further cook the chips and remove most of the moisture. From the cooker, the chips are conveyed through an ambient air cooler for conditioning. The ambient air cooler is used to further reduce the chips' moisture to desired levels for product quality. The chips are then conveyed to a mechanical seasoner, which applies various seasonings and flavorings, and then to the packaging department. The tortilla chip line #3 conveys product through an ambient air cooler prior to the packaging department. The tortilla chip line #4 transfers product directly from the seasoners to the packaging department.

NO\textsubscript{x}, VOC, CO, PM\textsubscript{10} and SO\textsubscript{x} emissions are generated from the combustion of natural gas and LPG fuel in the tortilla chip ovens. VOC and PM\textsubscript{10} emissions are generated from the fryers.

V. Equipment Listing

Pre-Project Equipment Description:

<table>
<thead>
<tr>
<th>Permit</th>
<th>Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1933-1-5</td>
<td>LINE #3 (TORTILLA CHIP) CONSISTING OF TWO PERMIT EXEMPT PRE-COOKERS (STEAM-HEATED), TWO 1.9 MMBTU/HR OVENS (DIRECT-FIRED), ONE COOKER (STEAM-HEATED), ONE MECHANICAL SEASONER, AND A HEAT &amp; CONTROL AMBIENT AIR COOLER SERVED BY A HIGH VELOCITY AIR FILTER</td>
</tr>
</tbody>
</table>
Continue...

<table>
<thead>
<tr>
<th>Permit</th>
<th>Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1933-2-6</td>
<td>LINE #4 (TORTILLA CHIP) CONSISTING OF TWO STEAM-HEATED PRE-COOKER, TWO 5.48 MMBTU/HR CASA HERRERA MODEL MACH IV XWXL OVENS (DIRECT-FIRED, INDUCED DRAFT), ONE STEAM-HEATED COOKER AND A MECHANICAL SEASONER</td>
</tr>
</tbody>
</table>

Post-Project Equipment Description:

<table>
<thead>
<tr>
<th>Permit</th>
<th>Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1933-1-6</td>
<td>LINE #3 (TORTILLA CHIP) CONSISTING OF TWO PERMIT EXEMPT PRE-COOKERS (STEAM-HEATED), TWO 3.2 MMBTU/HR (EACH) OVENS (DIRECT-FIRED), ONE COOKER (STEAM-HEATED), ONE MECHANICAL SEASONER, AND A HEAT &amp; CONTROL AMBIENT AIR COOLER SERVED BY A HIGH VELOCITY AIR FILTER</td>
</tr>
<tr>
<td>N-1933-2-7</td>
<td>LINE #4 (TORTILLA CHIP) CONSISTING OF TWO STEAM-HEATED PRE-COOKER, TWO 5.48 MMBTU/HR (EACH) CASA HERRERA MODEL MACH IV XWXL OVENS (DIRECT-FIRED, INDUCED DRAFT), ONE STEAM-HEATED COOKER AND A MECHANICAL SEASONER</td>
</tr>
</tbody>
</table>

VI. Emission Control Technology Evaluation

Frito-Lay is not proposing any changes to the existing emission control techniques. Therefore, no further discussion is necessary.

VII. General Calculations

A. Assumptions
   - Heating value of LPG is 90,500 Btu/gal (AP-42, Appendix A, page A-6 (same as propane)).
   - Combustion emission factors listed in permits N-19191-1-4 and N-1919-2-4 remains same after the proposed modifications.
   - Other assumptions will be stated as they are made during this evaluation.
B. Emission Factors

1. Pre-Project Emission Factors (EF1)

N-1919-1-5: Tortilla Chip Line #3
Natural Gas/LPG Combustion in Ovens:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>$\text{EF}_{\text{NG}}$ lb/MMBtu</th>
<th>$\text{EF}_{\text{LPG}}$ lb/MMBtu</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO$_x$</td>
<td>0.1</td>
<td>0.155</td>
<td></td>
</tr>
<tr>
<td>SO$_x$</td>
<td>0.0029</td>
<td>0.005</td>
<td>PTO N-1919-1-5</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.012</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>0.47</td>
<td>0.470</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>0.0053</td>
<td>0.005</td>
<td></td>
</tr>
</tbody>
</table>

Fryer:
The emission factors can be used to determine the production rate, which is deemed confidential. Therefore, these factors are not listed in this document. Please refer to the confidential application review.

Ambient Air Cooler:
The emission factors can be used to determine the production rate, which is deemed confidential. Therefore, these factors are not listed in this document. Please refer to the confidential application review.

N-1919-2-6: Tortilla Chip Line #4
Natural Gas/LPG Combustion in Ovens:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>$\text{EF}_{\text{NG}}$ lb/MMBtu</th>
<th>$\text{EF}_{\text{LPG}}$ lb/MMBtu</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO$_x$</td>
<td>0.1</td>
<td>0.155</td>
<td></td>
</tr>
<tr>
<td>SO$_x$</td>
<td>0.0029</td>
<td>0.005</td>
<td>PTO N-1919-2-6</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.012</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>0.47</td>
<td>0.470</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>0.0053</td>
<td>0.005</td>
<td></td>
</tr>
</tbody>
</table>

Fryer:
The emission factors can be used to determine the production rate, which is deemed confidential. Therefore, these factors are not listed in this document. Please refer to the confidential application review.

---

$^1$LPG combustion emission factors are listed in terms of lb/1,000 gal in the permit to operate N-1919-1-5. These emission factors are converted in lb/MMBtu as follows: $(\text{EF lb/1,000 gal})(\text{gal}/90,500 \text{ Btu})(10^6 \text{ Btu/MMBtu})$
2. Post-Project Emission Factors (EF2)

Frito-Lay is not proposing any changes to the emission factors. Therefore, EF2 will stay same as EF1 for each emission unit.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

   **N-1919-1-5: Tortilla Chip Line #3**

Natural Gas/LPG Combustion in Ovens:

NO\textsubscript{x} and SO\textsubscript{x} emissions would be maximum should the facility first use LPG fuel for 384 hr/yr and then uses natural gas fuel for the remaining 8,376 hr/yr (8,760 hr/yr − 384 hr/yr). Thus, the potential emissions for these pollutants will be calculated using the following equations:

\[
\begin{align*}
\text{PE1 (lb/day/oven)} &= (\text{EF}_{\text{LPG}} \text{ lb/MMBtu})(1.9 \text{ MMBtu/hr})(24 \text{ hr/day}) \\
\text{PE1 (lb/day)} &= \text{PE1 (lb/day/oven)}(2 \text{ ovens}) \\
\text{PE1 (lb/yr)} &= (\text{EF}_{\text{LPG}} \text{ lb/MMBtu})(1.9 \text{ MMBtu/hr})(2 \text{ ovens})(384 \text{ hr/yr}) + \\
&\quad(\text{EF}_{\text{NG}} \text{ lb/MMBtu})(1.9 \text{ MMBtu/hr})(2 \text{ ovens})(8,760 - 384 \text{ hr/yr})
\end{align*}
\]

PM\textsubscript{10}, VOC and CO emissions would be maximum should the facility use natural gas fuel during a given year. Thus, the potential emissions for these pollutants will be calculated using the following equations:

\[
\begin{align*}
\text{PE1 (lb/day/oven)} &= (\text{EF}_{\text{NG}} \text{ lb/MMBtu})(1.9 \text{ MMBtu/hr})(24 \text{ hr/day}) \\
\text{PE1 (lb/day)} &= \text{PE1 (lb/day/oven)}(2 \text{ ovens}) \\
\text{PE1 (lb/yr)} &= (\text{EF}_{\text{NG}} \text{ lb/MMBtu})(1.9 \text{ MMBtu/hr})(2 \text{ ovens})(8,760 \text{ hr/yr})
\end{align*}
\]

The potential emissions from fuel combustion are summarized in the following table:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF\textsubscript{NG} lb/MMBtu</th>
<th>EF\textsubscript{LPG} lb/MMBtu</th>
<th>PE1 lb/day/oven</th>
<th>PE1 lb/day</th>
<th>PE1 lb/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{x}</td>
<td>0.1</td>
<td>0.155</td>
<td>7.1</td>
<td>14.2</td>
<td>3,409</td>
</tr>
<tr>
<td>SO\textsubscript{x}</td>
<td>0.0029</td>
<td>0.005</td>
<td>0.2</td>
<td>0.4</td>
<td>100</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>0.012</td>
<td>0.004</td>
<td>0.5</td>
<td>1.0</td>
<td>399</td>
</tr>
<tr>
<td>CO</td>
<td>0.47</td>
<td>0.470</td>
<td>21.4</td>
<td>42.8</td>
<td>15,645</td>
</tr>
<tr>
<td>VOC</td>
<td>0.0053</td>
<td>0.005</td>
<td>0.2</td>
<td>0.4</td>
<td>176</td>
</tr>
</tbody>
</table>

Fryer:
Per PTO N-1919-1-5,

\[
\begin{align*}
\text{PE1} &= 7.0 \text{ lb}-\text{PM}_{10}/\text{day} (2,555 \text{ lb}-\text{PM}_{10}/\text{yr}) \\
&= 3.1 \text{ lb}-\text{VOC}/\text{day} (1,132 \text{ lb}-\text{VOC}/\text{yr})
\end{align*}
\]
Ambient Air Cooler:
Per PTO N-1919-1-5,

\[ PE_1 = 4.7 \text{ lb-PM}_{10}/\text{day} \ (1,716 \text{ lb-PM}_{10}/\text{yr}) \]

Summary:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Natural Gas/LPG Combustion in Ovens</th>
<th>Fryer</th>
<th>Ambient Air Cooler</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE1 lb/day</td>
<td>PE1 lb/yr</td>
<td>PE1 lb/day</td>
<td>PE1 lb/yr</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>14.2</td>
<td>3,409</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>SO\textsubscript{x}</td>
<td>0.4</td>
<td>100</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>1.0</td>
<td>399</td>
<td>7.0</td>
<td>2,555</td>
</tr>
<tr>
<td>CO</td>
<td>42.8</td>
<td>15,645</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>VOC</td>
<td>0.4</td>
<td>176</td>
<td>3.1</td>
<td>1,132</td>
</tr>
</tbody>
</table>

N-1919-2-6: Tortilla Chip Line #4
Natural Gas/LPG Combustion in Ovens:
NO\textsubscript{x} and SO\textsubscript{x} emissions would be maximum should the facility first use LPG fuel for 384 hr/yr and then uses natural gas fuel for the remaining 8,376 hr/yr (8,760 hr/yr - 384 hr/yr). Thus, the potential emissions for these pollutants will be calculated using the following equations:

\[
\begin{align*}
PE_1 \text{ (lb/day/oven)} & = (EF_{\text{LPG lb/MBtu}})(5.48 \text{ MMBtu/hr})(24 \text{ hr/day}) \\
PE_1 \text{ (lb/day)} & = PE_1 \text{ (lb/day/oven)}(2 \text{ ovens}) \\
PE_1 \text{ (lb/yr)} & = (EF_{\text{LPG lb/MMBtu}})(5.48 \text{ MMBtu/hr})(2 \text{ ovens})(384 \text{ hr/yr}) + \\
& + (EF_{\text{NG lb/MMBtu}})(5.2 \text{ MMBtu/hr})(2 \text{ ovens})(8,760 - 384 \text{ hr/yr}) \\
\end{align*}
\]

PM\textsubscript{10}, VOC and CO emissions would be maximum should the facility use natural gas fuel during a given year. Thus, the potential emissions for these pollutants will be calculated using the following equations:

\[
\begin{align*}
PE_1 \text{ (lb/day/oven)} & = (EF_{\text{NG lb/MMBtu}})(5.48 \text{ MMBtu/hr})(24 \text{ hr/day}) \\
PE_1 \text{ (lb/day)} & = PE_1 \text{ (lb/day/oven)}(2 \text{ ovens}) \\
PE_1 \text{ (lb/yr)} & = (EF_{\text{NG lb/MMBtu}})(5.48 \text{ MMBtu/hr})(2 \text{ ovens})(8,760 \text{ hr/yr}) \\
\end{align*}
\]
The potential emissions from gaseous fuel combustion are summarized in the following table:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>$EF_{NG}$ lb/MMBtu</th>
<th>$EF_{LPG}$ lb/MMBtu</th>
<th>PE1 lb/day/oven</th>
<th>PE1 lb/day</th>
<th>PE1 lb/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO$_x$</td>
<td>0.1</td>
<td>0.155</td>
<td>20.4</td>
<td>40.8</td>
<td>9,832</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>0.0029</td>
<td>0.005</td>
<td>0.7</td>
<td>1.4</td>
<td>287</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.012</td>
<td>0.004</td>
<td>1.6</td>
<td>3.2</td>
<td>1,152</td>
</tr>
<tr>
<td>CO</td>
<td>0.47</td>
<td>0.470</td>
<td>61.8</td>
<td>123.6</td>
<td>45,125</td>
</tr>
<tr>
<td>VOC</td>
<td>0.0053</td>
<td>0.005</td>
<td>0.7</td>
<td>1.4</td>
<td>509</td>
</tr>
</tbody>
</table>

Fryer:
*Per PTO N-1919-2-5,*

PE1 = 7.0 lb-PM$_{10}$/day (2,555 lb-PM$_{10}$/yr)
= 3.0 lb-VOC/day (1,095 lb-VOC/yr)

Summary:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Natural Gas/LPG Combustion in Ovens</th>
<th>Fryer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE1 lb/day</td>
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<td>--</td>
</tr>
<tr>
<td>VOC</td>
<td>1.4</td>
<td>509</td>
<td>3.0</td>
</tr>
</tbody>
</table>

2. Post Project Potential to Emit (PE2)

N-1919-1-6: Tortilla Chip Line #3
Natural Gas/LPG Combustion in Ovens:
NO$_x$ and SO$_x$ emissions would be maximum should the facility first use LPG fuel for 384 hr/yr and then uses natural gas fuel for the remaining 8,376 hr/yr (8,760 hr/yr – 384 hr/yr). Thus, the potential emissions for these pollutants will be calculated using the following equations:

PE2 (lb/day/oven) = ($EF_{LPG}$ lb/MMBtu)(3.2 MMBtu/hr)(24 hr/day)
PE2 (lb/day) = PE2 (lb/day/oven)(2 ovens)
PE2 (lb/yr) = ($EF_{LPG}$ lb/MMBtu)(3.2 MMBtu/hr)(2 ovens)(384 hr/yr) + ($EF_{NG}$ lb/MMBtu)(3.2 MMBtu/hr)(2 ovens)(8,760 - 384 hr/yr)
PM\textsubscript{10}, VOC and CO emissions would be maximum should the facility use natural gas fuel throughout a given year. Thus, the potential emissions for these pollutants will be calculated using the following equations:

\[
\begin{align*}
\text{PE2 (lb/day/oven)} &= (\text{EF}_{\text{NG}} \text{ lb/MMBtu})(3.2 \text{ MMBtu/hr})(24 \text{ hr/day}) \\
\text{PE2 (lb/day)} &= \text{PE2 (lb/day/oven)}(2 \text{ ovens}) \\
\text{PE2 (lb/yr)} &= (\text{EF}_{\text{NG}} \text{ lb/MMBtu})(3.2 \text{ MMBtu/hr})(2 \text{ ovens})(8,760 \text{ hr/yr})
\end{align*}
\]

The potential emissions from gaseous fuel combustion are summarized in the following table:

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<thead>
<tr>
<th>Pollutant</th>
<th>(\text{EF}_{\text{NG}}) lb/MMBtu</th>
<th>(\text{EF}_{\text{LPG}}) lb/MMBtu</th>
<th>PE2 lb/day/oven</th>
<th>PE2 lb/day</th>
<th>PE2 lb/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{x}</td>
<td>0.1</td>
<td>0.155</td>
<td>11.9</td>
<td>23.8</td>
<td>5,742</td>
</tr>
<tr>
<td>SO\textsubscript{x}</td>
<td>0.0029</td>
<td>0.005</td>
<td>0.4</td>
<td>0.8</td>
<td>168</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>0.012</td>
<td>0.004</td>
<td>0.9</td>
<td>1.8</td>
<td>673</td>
</tr>
<tr>
<td>CO</td>
<td>0.47</td>
<td>0.470</td>
<td>36.1</td>
<td>72.2</td>
<td>26,350</td>
</tr>
<tr>
<td>VOC</td>
<td>0.0053</td>
<td>0.005</td>
<td>0.4</td>
<td>0.8</td>
<td>297</td>
</tr>
</tbody>
</table>

Fryer:
Please refer to the confidential document for detailed calculations.

\[
\begin{align*}
\text{PE2} &= 7.7 \text{ lb-PM}_{10}/\text{day} \times (2,811 \text{ lb-PM}_{10}/\text{yr}) \\
&= 3.3 \text{ lb-VOC/day} \times (1,205 \text{ lb-VOC/yr})
\end{align*}
\]

Ambient Air Cooler:
Please refer to the confidential document for detailed calculations.

\[
\begin{align*}
\text{PE2} &= 5.0 \text{ lb-PM}_{10}/\text{day} \times (1,825 \text{ lb-PM}_{10}/\text{yr})
\end{align*}
\]

Summary:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Natural Gas/LPG Combustion in Ovens</th>
<th>Fryer</th>
<th>Ambient Air Cooler</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE2 lb/day</td>
<td>PE2 lb/yr</td>
<td>PE2 lb/day</td>
<td>PE2 lb/yr</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>23.8</td>
<td>5,742</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>SO\textsubscript{x}</td>
<td>0.8</td>
<td>168</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>1.8</td>
<td>673</td>
<td>7.7</td>
<td>2,811</td>
</tr>
<tr>
<td>CO</td>
<td>72.2</td>
<td>26,350</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>VOC</td>
<td>0.8</td>
<td>297</td>
<td>3.3</td>
<td>1,205</td>
</tr>
</tbody>
</table>

N-1919-2-6: Tortilla Chip Line #4
Natural Gas/LPG Combustion in Ovens:
The applicant is not proposing any changes to the ovens; therefore, PE2 will be same as PE1 from the combustion of natural gas/LPG fuels.
Fryer:
Please refer to the confidential document for detailed calculations.
PE2 = 7.4 lb-PM10/day (2,701 lb-PM10/yr)
     = 3.2 lb-VOC/day (1,168 lb-VOC/yr)

Summary:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Natural Gas/LPG Combustion in Ovens</th>
<th>Fryer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE2 lb/day</td>
<td>PE2 lb/yr</td>
<td>PE2 lb/day</td>
</tr>
<tr>
<td>NOx</td>
<td>40.8</td>
<td>9,832</td>
<td>--</td>
</tr>
<tr>
<td>SOx</td>
<td>1.4</td>
<td>287</td>
<td>--</td>
</tr>
<tr>
<td>PM10</td>
<td>3.2</td>
<td>1,152</td>
<td>7.4</td>
</tr>
<tr>
<td>CO</td>
<td>123.6</td>
<td>45,125</td>
<td>--</td>
</tr>
<tr>
<td>VOC</td>
<td>1.4</td>
<td>509</td>
<td>3.2</td>
</tr>
</tbody>
</table>

3. Quarterly Emissions Changes (QECs)

QEC will be calculated as follows:

\[ QEC = \frac{(PE2 - PE1)}{4} \]

N-1919-1-6: Tortilla Chip Line #3

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Q1 (lb)</th>
<th>Q2 (lb)</th>
<th>Q3 (lb)</th>
<th>Q4 (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>583</td>
<td>583</td>
<td>583</td>
<td>584</td>
</tr>
<tr>
<td>SOx</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>PM10</td>
<td>159</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>CO</td>
<td>2,676</td>
<td>2,676</td>
<td>2,676</td>
<td>2,677</td>
</tr>
<tr>
<td>VOC</td>
<td>48</td>
<td>48</td>
<td>49</td>
<td>49</td>
</tr>
</tbody>
</table>

N-1919-2-7: Tortilla Chip Line #4

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Q1 (lb)</th>
<th>Q2 (lb)</th>
<th>Q3 (lb)</th>
<th>Q4 (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SOx</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PM10</td>
<td>36</td>
<td>36</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>CO</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VOC</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>19</td>
</tr>
</tbody>
</table>

4. Adjusted Increase in Permitted Emissions (AIPE)

AIPE is used to determine if BACT is required for emission units that are being modified. AIPE is calculated using the equations mentioned in Section 4.3 and 4.4 of Rule 2201.
AIPE = PE2 - \left( \frac{EF2}{EF1} \right) (PE1)

N-1919-1-6: Tortilla Chip Line #3
Natural Gas/LPG Combustion in Ovens:
EF1 is same as EF2. Thus, AIPE is equal to the difference of PE2 and PE1.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/day/oven)</th>
<th>PE1 (lb/day/oven)</th>
<th>AIPE (lb/day/oven)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>11.9</td>
<td>7.1</td>
<td>4.8</td>
</tr>
<tr>
<td>SOx</td>
<td>0.4</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>PM_{10}</td>
<td>0.9</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>CO</td>
<td>36.1</td>
<td>21.4</td>
<td>14.7</td>
</tr>
<tr>
<td>VOC</td>
<td>0.4</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Fryer:
EF1 is same as EF2. Thus, AIPE is equal to the difference of PE2 and PE1.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/day)</th>
<th>PE1 (lb/day)</th>
<th>AIPE (lb/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM_{10}</td>
<td>7.7</td>
<td>7.0</td>
<td>0.7</td>
</tr>
<tr>
<td>VOC</td>
<td>3.3</td>
<td>3.1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Ambient Air Cooler:
EF1 is same as EF2. Thus, AIPE is equal to the difference of PE2 and PE1.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/day)</th>
<th>PE1 (lb/day)</th>
<th>AIPE (lb/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM_{10}</td>
<td>5.0</td>
<td>4.7</td>
<td>0.3</td>
</tr>
</tbody>
</table>

N-1919-2-7: Tortilla Chip Line #4
Natural Gas/LPG Combustion in Ovens:
EF1 is same as EF2. Thus, AIPE is equal to the difference of PE2 and PE1.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/day/oven)</th>
<th>PE1 (lb/day/oven)</th>
<th>AIPE (lb/day/oven)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>20.4</td>
<td>20.4</td>
<td>0.0</td>
</tr>
<tr>
<td>SOx</td>
<td>0.7</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td>PM_{10}</td>
<td>1.6</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>CO</td>
<td>61.8</td>
<td>61.8</td>
<td>0.0</td>
</tr>
<tr>
<td>VOC</td>
<td>0.7</td>
<td>0.7</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Fryer:
EF1 is same as EF2. Thus, AIPE is equal to the difference of PE2 and PE1.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 lb/day</th>
<th>PE1 lb/day</th>
<th>AIPE lb/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>7.4</td>
<td>7.0</td>
<td>0.4</td>
</tr>
<tr>
<td>VOC</td>
<td>3.2</td>
<td>3.0</td>
<td>0.2</td>
</tr>
</tbody>
</table>

D. Facility Emissions

1. 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 emission units with valid ATCs or PTOs at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) 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 potential emissions are determined from the existing PTOs.

<table>
<thead>
<tr>
<th>SSPE1 (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit #</td>
</tr>
<tr>
<td>N-1919-1-5</td>
</tr>
<tr>
<td>N-1919-2-6</td>
</tr>
<tr>
<td>N-1919-3-7</td>
</tr>
<tr>
<td>N-1919-4-5</td>
</tr>
<tr>
<td>N-1919-5-0</td>
</tr>
<tr>
<td>N-1919-6-8</td>
</tr>
<tr>
<td>N-1919-7-5</td>
</tr>
<tr>
<td>N-1919-8-5</td>
</tr>
<tr>
<td>N-1919-11-2</td>
</tr>
<tr>
<td>N-1919-12-1</td>
</tr>
<tr>
<td>N-1919-13-2</td>
</tr>
<tr>
<td>N-1919-14-1</td>
</tr>
<tr>
<td>N-1919-16-1</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Major Source</td>
</tr>
<tr>
<td>Major Source</td>
</tr>
</tbody>
</table>

2. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) 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.

<table>
<thead>
<tr>
<th>Permit #</th>
<th>NOx</th>
<th>SOx</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1919-1-6</td>
<td>5,742</td>
<td>168</td>
<td>5,309</td>
<td>26,350</td>
<td>1,502</td>
</tr>
<tr>
<td>N-1919-2-7</td>
<td>9,832</td>
<td>287</td>
<td>3,853</td>
<td>45,125</td>
<td>1,677</td>
</tr>
<tr>
<td>N-1919-3-7</td>
<td>0</td>
<td>0</td>
<td>16,571</td>
<td>0</td>
<td>621</td>
</tr>
<tr>
<td>N-1919-4-5</td>
<td>0</td>
<td>0</td>
<td>3,249</td>
<td>0</td>
<td>292</td>
</tr>
<tr>
<td>N-1919-5-0</td>
<td>0</td>
<td>0</td>
<td>2,701</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N-1919-6-8</td>
<td>3,572</td>
<td>1,261</td>
<td>1,371</td>
<td>32,736</td>
<td>2,787</td>
</tr>
<tr>
<td>N-1919-7-5</td>
<td>0</td>
<td>0</td>
<td>3,614</td>
<td>0</td>
<td>1,606</td>
</tr>
<tr>
<td>N-1919-8-5</td>
<td>0</td>
<td>0</td>
<td>3,139</td>
<td>0</td>
<td>1,497</td>
</tr>
<tr>
<td>N-1919-11-2</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N-1919-12-1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N-1919-13-2</td>
<td>0</td>
<td>0</td>
<td>183</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N-1919-14-1</td>
<td>0</td>
<td>0</td>
<td>73</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N-1919-16-1</td>
<td>4,314</td>
<td>1,397</td>
<td>3,329</td>
<td>32,412</td>
<td>2,409</td>
</tr>
<tr>
<td>Total</td>
<td>23,460</td>
<td>3,113</td>
<td>43,409</td>
<td>136,623</td>
<td>12,391</td>
</tr>
<tr>
<td>Offset</td>
<td>20,000</td>
<td>54,750</td>
<td>29,200</td>
<td>200,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Thresholds</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Offsets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triggered?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Source</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thresholds</td>
<td>20,000</td>
<td>54,750</td>
<td>140,000</td>
<td>200,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Major Source</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Source</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Stationary Source Increase in Potential Emissions (SSIPE)

SSIPE is the difference of SSPE2 and SSPE1.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE2 lb/yr</th>
<th>SSPE1 lb/yr</th>
<th>SSPE E lb/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>23,460</td>
<td>21,127</td>
<td>2,333</td>
</tr>
<tr>
<td>SOx</td>
<td>3,113</td>
<td>3,045</td>
<td>68</td>
</tr>
<tr>
<td>PM10</td>
<td>43,409</td>
<td>42,624</td>
<td>785</td>
</tr>
<tr>
<td>CO</td>
<td>136,623</td>
<td>125,918</td>
<td>10,705</td>
</tr>
<tr>
<td>VOC</td>
<td>12,391</td>
<td>12,124</td>
<td>267</td>
</tr>
</tbody>
</table>
4. **SB-288 Major Modification**

The purpose of Major Modification calculations is to determine the following:

A. If Best Available Control Technology (BACT) is triggered for a new or modified emission unit that results in a Major Modification (District Rule 2201, Section 4.1.3); and

B. If a public notification is triggered (District Rule 2201, Section 5.4.1).

C. If a Federal Major Modification is triggered (District Rule 2201, Section 3.17)

Per section VII.D.2 of this document, this facility is a Major Source for NOx. To determine whether a Major Modification can be triggered, the Net Emissions Increase (NEI) is calculated, and is compared with the Major Modification threshold limit, which is 50,000 lb/year for NOx.

\[ \text{NEI} = \sum (\text{PE}2 - \text{HE}) \]

The NEI would be highest if HE is set equal to zero. Thus,

\[ \text{NEI}^2 = \sum \text{PE}2 \]
\[ = \text{PE}2_{N-1919-1-6} \]
\[ = 5,742 \text{ lb-NOx/yr} \]

Since NEI is less than 50,000 lb/year, the proposed project will not trigger an SB-288 Major Modification.

5. **Federal Major Modification**

District Rule 2201, Section 3.17 states that Federal Major Modifications are the same as "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA. SB 288 Major Modifications are not Federal Major Modifications if they meet the criteria of the "Less-Than-Significant Emissions Increase" exclusion.

A Less-Than-Significant Emissions Increase exclusion is for an emissions increase for the project, or a Net Emissions Increase for the project (as defined in 40 CFR 51.165 (a)(2)(ii)(B) through (D), and (F)), that is not significant for a given regulated NSR pollutant, and therefore is not a Federal Major Modification for that pollutant.

\[ ^2 \text{The ovens under permit N-1919-2 are not being modified. Therefore, NOx emissions from this permit are not included in the NEI calculations.} \]
To determine the post-project projected actual emissions from existing units, the provisions of 40 CFR 51.165 (a)(1)(xxviii) shall be used.
To determine the pre-project baseline actual emissions, the provisions of 40 CFR 51.165 (a)(1)(xxxv)(A) through (D) shall be used.
If the project is determined not to be a Federal Major Modification pursuant to the provisions of 40 CFR 51.165 (a)(2)(ii)(B), but there is a reasonable possibility that the project may result in a significant emissions increase, the owner or operator shall comply with all of the provisions of 40 CFR 51.165 (a)(6) and (a)(7).
Emissions increases calculated pursuant to this section are significant if they exceed the significance thresholds specified in the table below.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Threshold (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>0</td>
</tr>
<tr>
<td>NOx</td>
<td>0</td>
</tr>
<tr>
<td>PM10</td>
<td>30,000</td>
</tr>
<tr>
<td>SO2</td>
<td>80,000</td>
</tr>
</tbody>
</table>

The Net Emissions Increases (NEIs) for purposes of determination of a "Less-Than-Significant Emissions Increase" exclusion will be calculated below to determine if this project qualifies for such an exclusion.

**Net Emission Decrease for Existing Units (NEIE)**

Per 40 CFR 51.165 (a)(1)(xxviii) and 40 CFR 51.165 (a)(2)(ii)(C) for all existing units,

\[
\text{NEIE} = \text{PAE} - \text{BAE} - \text{unused baseline capacity}
\]

Where,

\( \text{BAE} = \text{Baseline Actual Emissions} \) which are the actual emissions created by the project during the baseline period. The BAE are calculated pursuant to 40 CFR 51.165 (a)(1)(xxxv)(A) through (D).

\( \text{PAE} = \text{Projected Actual Emissions} \) which are the post-project projected actual emissions of the existing units in this project pursuant to 40 CFR 51.165 (a)(1)(xxviii).

Pursuant to 40 CFR 51.165 (a)(1)(B)(xxvii)(4), the units' Potential to Emit (PE) is used as the Projected Actual Emissions (PAE):

\( \text{PAE} = \text{PE2} = 5,742 \text{ lb-NOx/year} \)

Pursuant to 40 CFR 51.165 (a)(1)(B)(xxvii)(3), the unused baseline capacity is that portion of the units' emissions following the project that the existing units could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (a)(1)(xxxv) of this
section and that are also unrelated to the particular project, including any increased utilization due to product demand growth. The fuel use in the baseline period is taken from emissions inventory report, which is deemed confidential. Therefore, unused baseline calculations not shown here. Please refer to the confidential document.

\[ \text{NEI}_E = 2,333 \text{ lb-NO}_x/\text{yr} \]

\( \text{NEI} \) is greater than zero pounds per year threshold. Therefore, the proposed project is a Federal Major Modification for \( \text{NO}_x \) emissions.

VIII. Compliance

Rule 1030    Confidential Information

Frito-Lay, Inc has proposed to keep the production rate of each tortilla chip production line in a confidential file. Therefore, this non-confidential document is prepared for public review and comment.

Rule 2201    New and Modified Stationary Source Review Rule

1. Best Available Control Technology (BACT)

For this project, BACT would trigger if the AIPE exceeds 2.0 pounds per day or if the project triggers an SB-288 or Federal Major Modification for any pollutant.

N-1919-1-6: Tortilla Chip Line #3
Natural Gas/LPG Combustion in Ovens:
Per section VII.C.4 of this document, AIPE for \( \text{NO}_x \) and CO exceeds 2.0 pounds per day. However, facility's total CO emissions are less than 200,000 pounds per year. Thus, BACT is triggered for \( \text{NO}_x \) emissions from each oven on AIPE basis.

This project also triggers Federal Major Modification for \( \text{NO}_x \). Thus, BACT analysis is required for each \( \text{NO}_x \) emitting unit involved in this project.

BACT Guideline 1.6.2 for tortilla chip ovens requires the use of natural gas with an optional LPG as backup fuel to reduce \( \text{NO}_x \) emissions. Frito-Lay is using natural gas in these ovens. Therefore, BACT requirements are satisfied.

Please refer to the Top-Down BACT Analysis in Appendix II of this document.

Fryer:
Per section VII.C.4 of this document, AIPE for VCC and PM$_{10}$ is not greater than 2.0 pounds per day. Thus, BACT is not triggered for VOC or PM$_{10}$ emissions on AIPE basis.
Furthermore, this project is not a Major Modification for VOC or PM\textsubscript{10} emissions. Thus, BACT is not triggered for VOC or PM\textsubscript{10} emissions and no further discussion is necessary.

Ambient Air Cooler:
Per section VII.C.3 of this document, AIFE for PM\textsubscript{10} is not greater than 2.0 pounds per day. Thus, BACT is not triggered for PM\textsubscript{10} emissions on AIFE basis.

Furthermore, this project is not a Major Modification for PM\textsubscript{10} emissions. Thus, BACT is not triggered for PM\textsubscript{10} emissions and no further discussion is necessary.

N-1919-2-6: Tortilla Chip Line #4
Natural Gas/LPG Combustion in Ovens:
Per section VII.C.4 of this document, AIFE for NO\textsubscript{x} and CO is not greater than 2.0 pounds per day. However, this project is a Federal Major Modification for NO\textsubscript{x} emissions. Thus, BACT is triggered for NO\textsubscript{x} emissions.

BACT Guideline 1.6.2 for tortilla chip ovens requires the use of natural gas with an optional LPG as backup fuel to reduce NO\textsubscript{x} emissions. Frito-Lay is using natural gas in these ovens. Therefore, BACT requirements are satisfied.

Please refer to the Top-Down BACT Analysis in Appendix I of this document.

Fryer:
Per section VII.C.3 of this document, AIFE for VOC and PM\textsubscript{10} is not greater than 2.0 pounds per day. Thus, BACT is not triggered for VOC or PM\textsubscript{10} emissions on AIFE basis.

Furthermore, this project is not a Major Modification for VOC or PM\textsubscript{10} emissions. Thus, BACT is not triggered for VOC or PM\textsubscript{10} emissions and no further discussion is necessary.

2. Offsets

Per section VII.D.2 of this document, facility's total NO\textsubscript{x} and PM\textsubscript{10} emissions are above the offset threshold. Therefore, offset calculations are required for this project.

Section 4.7.1 states that for pollutants with SSPE1 greater than the emission offset threshold levels, emission offsets shall be provided for all increases in Stationary Source emissions, calculated as the differences of post-project Potential to Emit (PE2) and the Baseline Emissions (BE) of all new and modified emissions units, plus all increases in Cargo Carrier emissions. Thus,

\[ EOQ = \sum(PE2 - BE) + ICCE, \text{ where} \]
PE2 = Post-Project Potential to Emit
BE = Baseline Emissions
ICCE = Increase in Cargo Carrier emissions

There is no increase in Cargo Carrier emissions from this project. Thus,

\[ \text{EOQ} = \sum (\text{PE2} - \text{BE}) \]

\[ \text{NO}_x \]

The ovens under permit N-1919-1 are Clean Emission Units (Section 3.13.2 of Rule 2201). Therefore, BE is set equal to PE1 for these units.

\[ \text{EOQ}^3 = \text{PE2}_{N-1919-1-6} - \text{PE1}_{N-1919-1-5} \]
\[ = 5,742 \text{ lb-NO}_x/\text{yr} - 3,409 \text{ lb-NO}_x/\text{yr} \]
\[ = 2,333 \text{ lb-NO}_x/\text{yr} \left( \frac{583.25 \text{ lb/qtr}}{} \right) \]

Frito-Lay has identified ERC S-3425-2 to offset NO\textsubscript{x} emissions increase from the project. The following table shows that this certificate has sufficient credits to mitigate the NO\textsubscript{x} emissions increase.

<table>
<thead>
<tr>
<th>Category</th>
<th>Q1 (lb)</th>
<th>Q2 (lb)</th>
<th>Q3 (lb)</th>
<th>Q4 (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC S-3425-2 total amount</td>
<td>1,162</td>
<td>1,317</td>
<td>1,057</td>
<td>929</td>
</tr>
<tr>
<td>EOQ</td>
<td>583</td>
<td>583</td>
<td>583</td>
<td>584</td>
</tr>
<tr>
<td>EOQ using offset ratio of 1.5:1 for Federal Major Mods</td>
<td>875</td>
<td>875</td>
<td>875</td>
<td>876</td>
</tr>
<tr>
<td>ERC reserved for other projects</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total amount left in ERC S-3425-2</td>
<td>287</td>
<td>442</td>
<td>182</td>
<td>53</td>
</tr>
</tbody>
</table>

\[ \text{PM}_{10} \]

Pursuant to section 3.8 of Rule 2201, BE is set equal to PE1 since this facility is not a Major Source for PM\textsubscript{10} emissions. Thus,

\[ \text{EOQ}^4 = \text{PE2}_{N-1919-1-6} - \text{PE1}_{N-1919-1-5} \]
\[ = 5,309 \text{ lb-PM}_{10}/\text{yr} - 4,670 \text{ lb-PM}_{10}/\text{yr} \]
\[ = 639 \text{ lb-PM}_{10}/\text{yr} \left( \frac{159.75 \text{ lb/qtr}}{} \right) \]

Frito-Lay has identified ERC C-1070-4 to offset PM\textsubscript{10} emissions increase from the project. The following table shows that this certificate has sufficient credits to mitigate the PM\textsubscript{10} emissions increase.

---

3 The natural gas/LPG fuel fired ovens under permit N-1919-2 are not being modified. Therefore, NO\textsubscript{x} emissions from this permit will not be included in the above calculations.

4 PM\textsubscript{10} emissions increase from the permit unit N-1919-2 is 0.4 pounds per day. The District policy (APR-1130 (4/28/09)) is to consider an increase in permitted emissions of less than or equal to 0.5 lb/day to be rounded to zero for the purposes of triggering NSR requirements; therefore this permit unit is not included in the above calculations.
<table>
<thead>
<tr>
<th>Category</th>
<th>Q1 (lb)</th>
<th>Q2 (lb)</th>
<th>Q3 (lb)</th>
<th>Q4 (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC C-1070-4 total amount</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1.658</td>
</tr>
<tr>
<td>ERC distributed among quarter 1, 2, 3 (per section 4.13.7(^{2}) of Rule 2201)</td>
<td>239</td>
<td>240</td>
<td>240</td>
<td>939</td>
</tr>
<tr>
<td>EQO</td>
<td>159</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>Using offset ratio of 1.5:1 since the reduction occurred at more than 15 miles from the Frito-Lay’s Modesto plant</td>
<td>239</td>
<td>240</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>ERC reserved for other projects</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Credits left in ERC C-1070-4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>699</td>
</tr>
</tbody>
</table>

3. Public Notification

District Rule 2201, section 5.4, requires a public notification for the affected pollutants from the following types of projects:

- New Major Sources
- Major Modifications (SB -288, Federal)
- New emission units with a PE>100 lb/day of any one pollutant
- Modifications with SSPE1 below an Offset threshold and SSPE2 above an Offset threshold on a pollutant-by-pollutant basis
- New stationary sources with SSPE2 exceeding Offset thresholds
- Any permitting action with a SSIPE exceeding 20,000 lb/yr for any one pollutant

Per section VII.D.5 of this document, this project is a Federal Major Modification. Therefore, public notice is required for this project.

4. Daily Emission Limits

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.17 to restrict a unit’s maximum daily emissions. The following DELs will be included in the permits:

**N-1919-1-6: Tortilla Chip Line #3**

Natural Gas/LPG Combustion in Ovens:

- Emissions from natural gas combustion in each oven shall not exceed any of the following emission limits: 0.1 lb-NO\(_x\)/MMBtu, 0.0029 lb-SO\(_x\)/MMBtu, 0.012 lb-PM\(_{10}\)/MMBtu, 0.47 lb-CO/MMBtu, and 0.0053 lb-VOC/MMBtu. [District Rule 2201]

\(^{2}\)Section 4.13.7 states that the actual emission reductions (AER) for PM that occurred from October through March, inclusive, may be used to offset increases in PM during any period of the year.
• Emissions from LPG fuel combustion in each oven shall not exceed any of the following emission limits: 14 lb-NO\textsubscript{x}/1,000 gal, 0.45 lb-SO\textsubscript{x}/1,000 gal, 0.40 lb-PM\textsubscript{10}/1,000 gal, 42.535 lb-CO/1,000 gal, and 0.47 lb-VOC/1,000 gal. [District Rule 2201]

Fryer:
• PM\textsubscript{10} emissions from the fryer shall not exceed 7.7 pounds in any one day. [District Rule 2201]

• VOC emissions from the fryer shall not exceed 3.3 pounds in any one day. [District Rule 2201]

Ambient Air Cooler:
• PM\textsubscript{10} emissions from the ambient air cooler shall not exceed 5.0 pounds in any one day. [District Rule 2201]

N-1919-2-6: Tortilla Chip Line #4
Natural Gas/LPG Combustion in Ovens:
• Emissions from natural gas combustion in each oven shall not exceed any of the following emission limits: 0.1 lb-NO\textsubscript{x}/MMBtu, 0.0029 lb-SO\textsubscript{x}/MMBtu, 0.012 lb-PM\textsubscript{10}/MMBtu, 0.47 lb-CO/MMBtu, and 0.0053 lb-VOC/MMBtu. [District Rule 2201]

• Emissions from LPG fuel combustion in each oven shall not exceed any of the following emission limits: 14 lb-NO\textsubscript{x}/1,000 gal, 0.45 lb-SO\textsubscript{x}/1,000 gal, 0.40 lb-PM\textsubscript{10}/1,000 gal, 42.535 lb-CO/1,000 gal, and 0.47 lb-VOC/1,000 gal. [District Rule 2201]

Fryer:
• PM\textsubscript{10} emissions from the fryer shall not exceed 7.4 pounds in any one day. [District Rule 2201]

• VOC emissions from the fryer shall not exceed 3.2 pounds in any one day. [District Rule 2201]

5. Compliance Assurance

Source Testing
Frito-Lay is not proposing any changes to the existing emission factors for natural gas/LPG fired ovens, fryers or ambient air cooler. Therefore, source testing is not required.

Monitoring
No monitoring is required.
Recordkeeping
Frito-Lay is required to maintain records sufficient to demonstrate compliance with each daily emission limit. These records shall contain calculated emission quantity as well as each process variable used in the respective calculations. All records shall be retained on-site for a minimum of five years, and shall be made available for District inspection upon request.

Reporting
Reporting is not required.

6. Ambient Air Quality Analysis (AAQA)

Section 4.14.1 requires an AAQA to be performed for projects that trigger public notice. The following table shows the summary of AAQA:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>1 Hour</th>
<th>3 Hours</th>
<th>8 Hours</th>
<th>24 Hours</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Pass</td>
<td>X</td>
<td>Pass</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NO₂</td>
<td>Pass¹</td>
<td>X</td>
<td>X</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>SO₂</td>
<td>Pass</td>
<td>Pass</td>
<td>X</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Pass²</td>
<td>Pass²</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Pass²</td>
<td>Pass²</td>
</tr>
</tbody>
</table>

*Results were taken from the PSD spreadsheets.
¹The project was compared to the 1-hour NO2 National Ambient Air Quality Standard that became effective on April 12, 2010 using the District’s approved procedures.
²The criteria pollutants are below EPA’s level of significance as found in 40 CFR Part 51.165 (b)(2).

The criteria modeling runs indicate that the emissions will not cause or significantly contribute to a violation of the State or National Ambient Air Quality Standards.

7. Additional Requirements for new Major Sources and Federal Major Modifications

Per Section 4.15 of Rule 2201, “Compliance Certification” and “Alternative Siting Analysis” is required for any project, which constitutes a New Major Source or a Federal Major Modification.

Compliance Certification
The owner of a new Major Source or a source undergoing a Federal Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. The compliance certification from the facility is included in Appendix IV of this document.

Alternative Siting Analysis
The proposed project will occur at an existing facility which has several other emission units beside these tortilla chip making lines. The proposed modifications
are expected to result in the least possible impact to the environment. Alternative sites would involve the relocation and/or construction of various support structures and facilities on a much greater scale, and would therefore, result in a much greater impact to the environment.

Compliance is expected with this rule.

**Rule 2520 Federally Mandated Operating Permits**

This facility is in-process of obtaining a Title V permit under separate project. Therefore, no further discussion is necessary.

**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. The following condition will be placed on the permit.

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

**California Health & Safety Code 41700**

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. The risk management review (RMR) results are summarized in the following table:

<table>
<thead>
<tr>
<th>Category</th>
<th>Tortilla Chip Line (Unit 1-6)</th>
<th>Tortilla Chip Line (Unit 2-7)</th>
<th>Project Total</th>
<th>Facility Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritization Score</td>
<td>0.01</td>
<td>0.00</td>
<td>0.01</td>
<td>0.54</td>
</tr>
<tr>
<td>Acute Hazard Index</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A</td>
</tr>
<tr>
<td>Chronic Hazard Index</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A</td>
</tr>
<tr>
<td>Maximum Individual Cancer Risk</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A</td>
</tr>
<tr>
<td>T-BACT Required?</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Conditions Required?</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹This project passes on prioritization with a score of less than 1.0; therefore, no further discussion is necessary.
The prioritization score is less than 1.0. In accordance with the District’s Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

Compliance is expected with this Rule.

Rule 4201 Particulate Matter Concentration

Section 3.0 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.

N-1919-1-6: Tortilla Chip Line #3
Natural Gas/LPG Combustion in Ovens:
The ovens are fired on natural gas/LPG fuel. Therefore, compliance is expected with the limit in this rule.

Fryer:
PM$_{10}$ emissions: 7.7 lb-PM$_{10}$/day
PM$_{10}$ fraction: 1.0 lb-PM$_{10}$/lb-PM (assumed)
Airflow rate: 704 cfm
Operating Schedule: 24 hr/day (1,440 min/day)

\[
\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( \frac{7.7 \text{ lb - PM}_{10}}{\text{day}} \right) \left( \frac{7,000 \text{ gr - PM}}{\text{lb - PM}} \right)}{\left( \frac{704 \text{ ft}^3}{\text{min}} \right) \left( \frac{1,440 \text{ min}}{\text{day}} \right) \left( \frac{1.0 \text{ lb - PM}_{10}}{\text{lb - PM}} \right)} = 0.053 \frac{\text{gr - PM}}{\text{dscf}}
\]

The grain loading factor (gr-PM/dscf) is not above 0.1 lb-PM/dscf limit. Therefore, it is concluded that fryer will be operated in compliance with this Rule.

Ambient Air Cooler:
PM$_{10}$ emissions: 5.0 lb-PM$_{10}$/day
PM$_{10}$ fraction: 1.0 lb-PM$_{10}$/lb-PM (assumed)
Airflow rate: 4,700 cfm
Operating Schedule: 24 hr/day (1,440 min/day)

\[
\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( \frac{5.0 \text{ lb - PM}_{10}}{\text{day}} \right) \left( \frac{7,000 \text{ gr - PM}}{\text{lb - PM}} \right)}{\left( \frac{4,700 \text{ ft}^3}{\text{min}} \right) \left( \frac{1,440 \text{ min}}{\text{day}} \right) \left( \frac{1.0 \text{ lb - PM}_{10}}{\text{lb - PM}} \right)} = 0.005 \frac{\text{gr - PM}}{\text{dscf}}
\]

The grain loading factor (gr-PM/dscf) is not above 0.1 lb-PM/dscf limit. Therefore, it is concluded that ambient air cooler will be operated in compliance with this Rule.
N-1919-2-7: Tortilla Chip Line #4
Natural Gas/LPG Combustion in Ovens:
The ovens are fired on natural gas/LPG fuel. Therefore, compliance is expected with the limit in this rule.

Fryer:
PM$_{10}$ emissions: 7.4 lb-PM$_{10}$/day
PM$_{10}$ fraction: 1.0 lb-PM$_{10}$/lb-PM (assumed)
Airflow rate: 704 cfm
Operating Schedule: 24 hr/day (1,440 min/day)

$$\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \left( \frac{\text{7.4 lb - PM}_{10}}{\text{day}} \right) \left( \frac{\text{7,000 gr - PM}}{\text{lb - PM}} \right) = \left( \frac{\text{704 ft}^3}{\text{min}} \right) \left( \frac{\text{1,440 min}}{\text{day}} \right) \left( \frac{\text{1.0 lb - PM}_{10}}{\text{lb - PM}} \right) = 0.051 \frac{\text{gr - PM}}{\text{dscf}}$$

The grain loading factor (gr-PM/dscf) is not above 0.1 lb-PM/dscf limit. Therefore, it is concluded that fryer will be operated in compliance with this Rule.

Rule 4202 Particulate Matter - Emission Rate

Section 4.0 of this rule, a person shall not discharge into the atmosphere PM emissions in excess of the maximum allowable limit determined the equations specified in this Rule.

Based on the calculations in the confidential document, the emission units under each permit are expected to comply with the requirements of this Rule.

Rule 4301 Fuel Burning Equipment

Section 3.1 defines Fuel Burning Equipment as any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

Heat from LPG/natural gas combustion is directly transferred to tortilla chips; therefore, these ovens are not subject to the requirements of this rule.

Rule 4309 Dryers, Dehydrators, and Ovens

This rule applies to any dryer, dehydrator, or oven that is fired on gaseous fuel, liquid fuel, or is fired on gaseous and liquid fuel sequentially, and the total rated heat input for the unit is 5.0 MMBtu/hr or greater.
N-1919-1-6: Tortilla Chip Line #3
Heat input rate of each oven will be 3.2 MMBtu/hr after the proposed modification; therefore, these ovens are not subject to the requirements of this rule.

N-1919-2-7: Tortilla Chip Line #4
Per Section 4.1.4 of this rule, units used to bake or fry food for human consumption are exempt from the requirements of this rule. These ovens are used to bake or fry food for human consumption and are exempt from the requirements of this rule.

California Environmental Quality Act (CEQA)

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

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.

- Identify the ways that environmental damage can be avoided or significantly reduced.

- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas 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.

This project results in an increase in GHG emissions from permit N-1919-1-6, which are estimated as follows:

\[
\text{GHG Increase}_{N-1919-1-6} = 2 \text{ ovens} \times (3.2 - 1.9) \text{ MMBtu/hr} \times 117 \text{ lb-CO}_2e/\text{MMBtu} \times 8,760 \text{ hr/yr} + 2,205 \text{ lb-CO}_2e/\text{mton-CO}_2e \times 1,209 \text{ mtons-CO}_2e/\text{yr}
\]

Page - 24
GHG Increase \( N_{-1919-2.7} = 0 \) mtons-CO\(_2\)e/yr

Total GHG Increase = GHG Increase \( N_{-1919-1.6} + \) GHG Increase \( N_{-1919-2.7} \)
= 1,209 mtons-CO\(_2\)e/yr + 0 mtons-CO\(_2\)e/yr
= 1,209 mtons-CO\(_2\)e/yr

Per District's policy APR-2005\(^6\), Frito Lay has proposed to reduce GHG by 29% (0.29 x 1,209 mtons-CO\(_2\)e/yr = 351 mtons-CO\(_2\)e/yr) by purchasing carbon credits from a District approved source. Thus, the proposed project is presumed to have a less than cumulatively significant impact on global climate change.

The following condition shall be included in permit N-1919-1-6:

- Prior to operating under Authority to Construct N-1919-1-6, the permittee shall surrender 351 metric tons per year of CO\(_2\) equivalent greenhouse gas (GHG) credits, from a District-approved source. An additional 351 metric tons of GHG credits shall then be surrendered each year at least 60 days prior to the anniversary date of first operation, until the permittee supplies permanent GHG reductions, or complies with District established Best Performance Standard (BPS). All credits surrendered shall be demonstrated by the submittal of documentation, on or before the deadlines discussed above, that proves the retirement of the credits. [California Environmental Quality Act]

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 regulations is expected. Therefore, issuance of ATCs is recommended upon addressing comments from the public, EPA, CARB, and the applicant.

X. Billing Information

<table>
<thead>
<tr>
<th>Permit #</th>
<th>Fee Schedule</th>
<th>Fee Description</th>
<th>Previous Fee Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1919-1-6</td>
<td>3020-02G</td>
<td>6.4 MMBtu/hr (total)</td>
<td>3020-02F</td>
</tr>
<tr>
<td>N-1919-2-7</td>
<td>3020-02G</td>
<td>10.96 MMBtu/hr (total)</td>
<td>3020-02G</td>
</tr>
</tbody>
</table>

Appendices
Appendix I: Draft Authority to Construct Permits
Appendix II: Top-Down BACT Analysis and BACT Guideline
Appendix III: Permits to Operate
Appendix IV: Compliance Certification Letter
Appendix I
Draft Authority to Construct Permits
AUTHORITY TO CONSTRUCT

PERMIT NO: N-1919-1-6
LEGAL OWNER OR OPERATOR: Frito-Lay Inc
MAILING ADDRESS: 600 Garner Rd
MODESTO, CA 95357-0514

LOCATION: 600 Garner Rd
MODESTO, CA 95357-0514

EQUIPMENT DESCRIPTION:
Modification of Line #3 (Tortilla Chip) Consisting of Two Permit Exempt Pre-Cookers (Steam-Heated), Two 1.9 MMBTU/hr Ovens (Direct-Fired), One Cooker (Steam-Heated), One Mechanical Seasoner, and a Heat & Control Ambient Air Cooler Served by a High Velocity Air Filter. Increase Heat Input Rate of Each Oven from 1.9 MMBTU/hr to 3.2 MMBTU/hr and Increase PM10 and VOC Emission Rates From the Fryer and the Ambient Air Cooler.

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4201]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. The ovens shall be fired primarily on natural gas fuel. LPG fuel shall only be used during periods of natural curtailment, and the use of LPG shall not exceed 384 hours in a calendar year. [District Rule 2201]
5. The combustion equipment shall be equipped with a mass or volumetric fuel flow meter capable of measuring the natural gas and LPG fuel usages. [District Rule 2201]
6. Emissions from natural gas combustion in each oven shall not exceed any of the following emission limits: 0.1 lb-NOx/MBtu, 0.0029 lb-SOx/MBtu, 0.012 lb-PM10/MBtu, 0.47 lb-CO/MBtu, and 0.0053 lb-VOC/MBtu. [District Rule 2201]
7. Emissions from LPG fuel combustion in each oven shall not exceed any of the following emission limits: 14 lb-NOx/1,000 gal, 0.45 lb-SOx/1,000 gal, 0.40 lb-PM10/1,000 gal, 42.535 lb-CO/1,000 gal, and 0.47 lb-VOC/1,000 gal. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

You must notify the District Compliance Division at (209) 557-6400 when construction is completed and prior to operating the equipment or modifications authorized by this Authority to Construct. This is not a permit to operate. Approval or denial of a permit to operate will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadedin, Executive Director APCD

DAVID WARNER, Director of Permit Services
8. PM10 emissions from the fryer shall not exceed 7.7 pounds in any one day. [District Rule 2201]

9. VOC emissions from the fryer shall not exceed 3.3 pounds in any one day. [District Rule 2201]

10. PM10 emissions from the ambient air cooler shall not exceed 5.0 pounds in any one day. [District Rule 2201]

11. The permittee shall maintain records sufficient to demonstrate compliance with each daily emission limit. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070 and 2201]

12. Prior to operating under Authority to Construct N-1919-1-6, the permittee shall surrender 351 metric tons per year of CO2 equivalent greenhouse gas (GHG) credits, from a District-approved source. An additional 351 metric tons of GHG credits shall then be surrendered each year at least 60 days prior to the anniversary date of first operation, until the permittee supplies permanent GHG reductions, or complies with District established Best Performance Standard (BPS). All credits surrendered shall be demonstrated by the submittal of documentation, on or before the deadlines discussed above, that proves the retirement of the credits. [California Environmental Quality Act]

13. Prior to operating equipment under under this Authority to Construct, the permittee shall mitigate the following quantities of NOx: 1st quarter: 583 lb, 2nd quarter: 583 lb, 3rd quarter: 583 lb, and 4th quarter: 584 lb. Offsets shall be provided at the applicable offset ratio of 1.5:1. [District Rule 2201]

14. NOx ERC S-3425-2 (or a certificate split from any of these certificates) shall be used to supply the required NOx offsets, unless a revised offsetting proposal is received and approved by the District. Following the revisions, this Authority to Construct permit shall be re-issued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to re-issuance of this Authority to Construct permit. [District Rule 2201]

15. Prior to operating equipment under under this Authority to Construct, the permittee shall mitigate the following quantities of PM10: 1st quarter: 159 lb, 2nd quarter: 160 lb, 3rd quarter: 160 lb, and 4th quarter: 160 lb. Offsets shall be provided at the applicable offset ratio of 1.5:1. [District Rule 2201]

16. PM10 ERC C-1070-4 (or a certificate split from any of these certificates) shall be used to supply the required PM10 offsets, unless a revised offsetting proposal is received and approved by the District. Following the revisions, this Authority to Construct permit shall be re-issued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to re-issuance of this Authority to Construct permit. [District Rule 2201]
AUTHORITY TO CONSTRUCT

PERMIT NO: N-1919-2-7
LEGAL OWNER OR OPERATOR: FRITO-LAY INC
MAILING ADDRESS:
600 GARNER RD
MODESTO, CA 95357-0514
LOCATION:
600 GARNER RD
MODESTO, CA 95357-0514

EQUIPMENT DESCRIPTION:
MODIFICATION OF LINE #4 (TORTILLA CHIP) CONSISTING OF TWO STEAM-HEATED PRE-COOKER, TWO 5.48 MMBTU/HR CASA HERRERA MODEL MA-CH/V XXXL OVENS (DIRECT-FIRED, INDUCED DRAFT), ONE STEAM-HEATED COOKER AND A MECHANICAL SEASONER: INCREASE PM10 AND VOC EMISSION RATES FROM THE FYFRER

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. The ovens shall be fired primarily on natural gas fuel. LPG fuel shall only be used during periods of natural curtailment, and the use of LPG shall not exceed 384 hours in any calendar year. [District Rule 2201]
5. The combustion equipment shall be equipped with a mass or volumetric fuel flow meter capable of measuring the natural gas and LPG fuel usages. [District Rule 2201]
6. Emissions from natural gas combustion in each oven shall not exceed any of the following emission limits: 0.1 lb-NOx/MMBtu, 0.0029 lb-SOx/MMBtu, 0.012 lb-PM10/MMBtu, 0.47 lb-CO/MMBtu, and 0.0053 lb-VOC/MMBtu. [District Rule 2201]
7. Emissions from LPG fuel combustion in each oven shall not exceed any of the following emission limits: 14 lb-NOx/1,000 gal, 0.45 lb-SOx/1,000 gal, 0.40 lb-PM10/1,000 gal, 42.53 lb-CO/1,000 gal, and 0.47 lb-VOC/1,000 gal. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services
N-1919-2-7 December 3, 2011 6:27 AM - K:\APCO\ APP\ Permit Inspection Note-Regulated
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
8. PM10 emissions from the fryer shall not exceed 7.4 pounds in any one day. [District Rule 2201]
9. VOC emissions from the fryer shall not exceed 3.2 pounds in any one day. [District Rule 2201]
10. The permittee shall maintain records sufficient to demonstrate compliance with each emission limit and permit requirement. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070 and 2201]
Appendix II
Top-Down BACT Analysis and BACT Guideline
## San Joaquin Valley
Unified Air Pollution Control District

### Best Available Control Technology (BACT) Guideline 1.6.2*

*Last Update 6/23/2006*

**Oven - Tortilla, \( \leq 5 \text{ MMBtu/hr} \)**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>natural gas fired with optional LPG as backup fuel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

*This is a Summary Page for this Class of Source*
Top-Down BACT Analysis for NOx

Step 1 - Identify All Possible Control Technologies:
BACT Guideline 1.6.2 lists the following technology to reduce NO\textsubscript{x} emissions from tortilla chip ovens:

1. Use of natural gas with optional LPG as backup fuel (achieved-in-practice)

Step 2 - Eliminate Technologically Infeasible Options:
The technology listed in Step 1 is feasible for tortilla chip ovens.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness:
1. Use of natural gas with optional LPG as backup fuel (achieved-in-practice)

Step 4 - Cost Effective Analysis:
There is no technologically feasible option for which cost-effectiveness analysis is required.

Step 5 - Select BACT:
The ovens will be required to be fired on natural gas with LPG as backup fuel.
Appendix III
Permits to Operate
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-1919-1-5                         EXPIRATION DATE: 10/31/2012

EQUIPMENT DESCRIPTION:
LINE #3 (TORTILLA CHIP) CONSISTING OF TWO PERMIT EXEMPT PRE-COOKERS (STEAM-HEATED), TWO 1.9
MMBTU/HR OVENS (DIRECT-FIRED), ONE COOKER (STEAM-HEATED), ONE MECHANICAL SEASONER, AND A
HEAT & CONTROL AMBIENT AIR COOLER SERVED BY A HIGH VELOCITY AIR FILTER.

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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]
3. Particulate matter emissions shall not exceed 0.1 grains/scf in concentration. [District Rule 4201]
4. The ovens shall be fired primarily on natural gas fuel. LPG fuel shall only be used during periods of natural
curtailment, and the use of LPG shall not exceed 384 hours in a calendar year. [District Rule 2201]
5. The combustion equipment shall be equipped with a mass or volumetric fuel flow meter capable of measuring the
   natural gas and LPG fuel usages. [District Rule 2201]
6. NOx emissions from the combustion of natural gas shall not exceed 0.1 lb/MMBtu. [District Rule 2201]
7. VOC emissions from the combustion of natural gas shall not exceed 0.065 lb/MMBtu. [District Rule 2201]
8. CO emissions from the combustion of natural gas shall not exceed 0.47 lb/MMBtu. [District Rule 2201]
9. PM10 emissions from the combustion of natural gas shall not exceed 0.012 lb/MMBtu. [District Rule 2201]
10. SOx emissions from the combustion of natural gas shall not exceed 0.0029 lb/MMBtu. [District Rule 2201]
11. NOx emissions from the combustion of LPG shall not exceed 14 lb/1,000 gal. [District Rule 2201]
12. VOC emissions from the combustion of LPG shall not exceed 0.47 lb/1,000 gal. [District Rule 2201]
13. CO emissions from the combustion of LPG shall not exceed 42.535 lb/1,000 gal. [District Rule 2201]
14. PM10 emissions from the combustion of LPG shall not exceed 0.40 lb/1,000 gal. [District Rule 2201]
15. SOx emissions from the combustion of LPG shall not exceed 0.45 lb/1,000 gal. [District Rule 2201]
16. PM10 emissions from the fryer shall not exceed 7.0 lb/day. [District Rule 2201]
17. VOC emissions from the fryer shall not exceed 3.1 lb/day. [District Rule 2201]
18. PM10 emissions from the ambient air cooler shall not exceed 4.7 lb/day. [District Rule 2201]
19. The permittee shall maintain records sufficient to demonstrate compliance with each daily emission limit. These
   records shall contain each calculated emission quantity as well as each process variable used in the respective
   calculations. All records shall be retained for a minimum of five years, and shall be made available for District
   inspection upon request. [District Rules 1070 and 2201]

Add NOx and PM10 credits.

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-1919-2-6
EXPIRATION DATE: 10/31/2012

EQUIPMENT DESCRIPTION:
LINE #4 (TORTILLA CHIP) CONSISTING OF TWO STEAM-HEATED PRE-COOKER, TWO 5.48 MMBTU/HR CASA HERRERA MODEL MACH IV XVXL OVENS (DIRECT-FIRED, INDUCED DRAFT), ONE STEAM-HEATED COOKER AND A MECHANICAL SEASONER.

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. The ovens shall be fired primarily on natural gas fuel. LPG fuel shall only be used during periods of natural curtailment, and the use of LPG shall not exceed 384 hours in any calendar year. [District Rule 2201]
5. The combustion equipment shall be equipped with a mass or volumetric fuel flow meter capable of measuring the natural gas and LPG fuel usages. [District Rule 2201]
6. NOx emissions from the combustion of natural gas shall not exceed 0.1 lb/MMBtu. [District Rule 2201]
7. VOC emissions from the combustion of natural gas shall not exceed 0.0053 lb/MMBtu. [District Rule 2201]
8. CO emissions from the combustion of natural gas shall not exceed 0.47 lb/MMBtu. [District Rule 2201]
9. PM10 emissions from the combustion of natural gas shall not exceed 0.012 lb/MMBtu. [District Rule 2201]
10. SOx emissions from the combustion of natural gas shall not exceed 0.0029 lb/MMBtu. [District Rule 2201]
11. NOx emissions from the combustion of LPG shall not exceed 14 lb/1,000 gal. [District Rule 2201]
12. VOC emissions from the combustion of LPG shall not exceed 0.47 lb/1,000 gal. [District Rule 2201]
13. CO emissions from the combustion of LPG shall not exceed 42.535 lb/1,000 gal. [District Rule 2201]
14. PM10 emissions from the combustion of LPG shall not exceed 0.40 lb/1,000 gal. [District Rule 2201]
15. SOx emissions from the combustion of LPG shall not exceed 0.45 lb/1,000 gal. [District Rule 2201]
16. PM10 emissions from the fryer shall not exceed 7.0 lb/day. [District Rule 2201]
17. VOC emissions from the fryer shall not exceed 3.0 lb/day. [District Rule 2201]
18. The permittee shall maintain records sufficient to demonstrate compliance with each emission limit and permit requirement. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070 and 2201]

These terms and conditions are part of the Facility-wide Permit to Operate.
Appendix IV
Compliance Certification Letter
November 23, 2011

Mr. Rupi Gill
San Joaquin Valley Air Pollution Control District
4800 Enterprise Way
Modesto CA 95355-8718

Subject: Compliance Statement for Frito-Lay, Inc. - Modesto

Dear Mr. Gill:

In accordance with Rule 2201, Section 4.15, "Additional Requirements for New Major Sources and Federal Major Modifications," Frito-Lay, Inc. is pleased to provide this compliance statement regarding its tortilla chip oven project N-1103895.

All major stationary sources in California owned or operated by Frito-Lay, Inc. - Modesto, or by any entity controlling, controlled by, or under common control with Frito-Lay, Inc. - Modesto, and which are subject to emission limitations, are in compliance or on a schedule for compliance with all applicable emission limitations and standards. These sources include one or more of the following facilities:

Frito-Lay, Inc.: 600 Garner Road, Modesto, CA 95357

Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Please contact me if you have any questions regarding this certification.

Sincerely,

[Signature]
Bryan Birrell,
Regional Vice President
Frito-Lay Inc., Modesto