



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT



OCT 31 2013

Escalon Premier Brands  
Scott Adrian  
Ref: H.J. Heinz Company  
1905 McHenry Avenue  
Escalon, CA 95320

**Re: Notice of Preliminary Decision – Emission Reduction Credits**  
**Facility Number: N-395**  
**Project Number: N-1121415**

Dear Mr. Adrian:

Enclosed for your review and comment is the District's analysis of H.J. Heinz Company's application for Emission Reduction Credits (ERCs) resulting from shutdown of the entire facility, at 2800 South El Dorado Street in Stockton, California. The quantity of ERCs proposed for banking is 229 lb-NOx/yr, 19 lb-SOx/yr, 239 lb-PM10/yr, 13 lb-CO/yr, and 173 lb-VOC/yr.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice comment period, the District intends to issue the ERCs. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Wai-Man So of Permit Services at (209) 557- 6449.

Sincerely,

David Warner  
Director of Permit Services

DW:WMS

Enclosures

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

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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# San Joaquin Valley Air Pollution Control District

## ERC Banking Application Review

Processing Engineer: Wai-Man So  
 Lead Engineer: Nick Peirce  
 Date: February 12, 2013

Facility Name: H.J. Heinz Company  
 Mailing Address: Escalon Premier Brands  
 1905 McHenry Avenue  
 Escalon, CA 95320

Contact Person: Scott Adrian (Plant Manager)  
 Telephone: (209) 552 – 6015  
 Email: [Scott.Adrian@us.hjheinz.com](mailto:Scott.Adrian@us.hjheinz.com)

Other Contact: Leland McPherrin (Senior Project Engineer)  
 Telephone: (209) 679 – 1667  
 Email: [LelandMcPherrin@us.hjheinz.com](mailto:LelandMcPherrin@us.hjheinz.com)

Facility Location: 2800 South California Street,  
 Stockton, CA 95206

Applications Received: June 4, 2012  
 Deemed Complete: January 24, 2013  
 Permits #: N-395-14-0  
 Project #: N-1121415

ERC Certification number: N-1085-1, -2, -3, -4, & -5

### I. Proposal

H.J. Heinz Company submitted an application for Emission Reduction Credits (ERCs) banking for shutdown the entire facility. Except for the diesel-fired emergency IC engine that powering the fire pump (permit unit N-395-8), all permit units have been surrendered to the District. The diesel-fired emergency IC engine permit will be transferred to the new property owner.

The applicant is proposing to only bank the emission reductions resulting from the shutdown of the 16.8 MMBtu/hr natural gas-fired boiler under permit unit N-395-14. The amounts of bankable emission reductions for shutdown of permit unit N-395-14 are summarized in the table below:

Pollutant	1 <sup>st</sup> Quarter (lb)	2 <sup>nd</sup> Quarter (lb)	3 <sup>rd</sup> Quarter (lb)	4 <sup>th</sup> Quarter (lb)	Total (lb)
NO <sub>x</sub>	69	70	60	30	229
SO <sub>x</sub>	6	6	4	3	19
PM <sub>10</sub>	72	73	63	31	239
CO	4	4	3	2	13
VOC	52	53	45	23	173

## II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (04/21/11)  
Rule 2301 Emission Reduction Credit Banking (01/19/21)

## III. Location of Reduction:

The facility was located at 2800 South California Street in Stockton, California.

## IV. Method of Generating Reductions:

Except permit unit N-395-8, all permit units have been surrendered to the District on December 7, 2012. The emissions reductions were generated by shutdown the entire stationary source. The equipment under the following permit unit was removed from site on April 4, 2012:

### N-395-14-0:

16.8 MMBtu/hr Hurst Boiler with a Powerflame ultra low NO<sub>x</sub> burner

## V. Calculations

### A. Assumption:

- The natural gas heating value is 1,000 Btu/scf (per District practice).
- F-Factor for Natural Gas is 8,578 dscf/MMBtu corrected to 60°F (40 CFR 60, Appendix B).
- The results of all Historical Actual Emission (HAE) and Actual Emission Reduction (AER) calculations are rounded to the nearest whole number.

### B. Emission factors:

Emission factors for calculation purpose will be based on the lowest of the emission limits from the following: District Rules requirements, District Policy, AP 42 (Tables 1.4-1 & 1.4-2), current Permit to Operate, and source testing data.

See detail emission factors determination in Appendix II of this document, the emission factors utilize to calculate Actual Emissions Reduction (AER) for this permit unit are summarized in the table below:

Pollutant	Emission Factors (EF)	Source
NO <sub>x</sub>	0.0073 lb-NO <sub>x</sub> /MMBtu	Average Source Testing Data
SO <sub>x</sub>	0.0006 lb-SO <sub>x</sub> /MMBtu	AP-42
PM10	0.0076 lb-PM10/MMBtu	N-395-14-0
CO	0.00037 lb-CO/MMBtu	Average Source Testing Data
VOC	0.0055 lb-VOC/MMBtu	N-395-14-0

### **C. Baseline Period Determination:**

Section 3.8 of District Rule 2201 defines the baseline period as "two consecutive years of operation immediately prior to the submission of the complete application" or "another time period of at least two consecutive years within the five years immediately prior to the submission of the complete application if it is more representative of normal source operation".

The District has determined that the consecutive two-year period immediately preceding the banking application was not representative of normal source operation.

In order to determine the period that is most representative of normal source operation, the facility's quarterly natural gas fuel usage records for the five year period immediately preceding the ERC application were averaged. Next, the usage from each two-consecutive-year (eight calendar quarter) period starting with the quarter in which the application was received were averaged and compared to the five-year average usage value. This comparison is repeated for each two-consecutive-year period until the two-consecutive-year period with average usage closest to the five year average usage is found. The two consecutive year period with average usage closest to the five year average usages is considered to be most representative of normal source operation.

Using the above methodology, the eight consecutive calendar quarter period with average fuel usages closest to the facility's five year usages average was Q1 2009 through Q4 2010 (see Appendix III of this document). Therefore, Q1 2009 through Q4 2010 is considered to be most representative of normal source operation and will be used as the baseline period.

### **D. Baseline Period Data:**

The applicant explained that the steam generated from the boiler, N-395-14-0 was used for mainly two separate areas, ketchup processing and supporting laboratory testing processes including the short process. The ketchup processing operation utilized the majority of the steam capacity, which was curtailed with the cessation of the ketchup processing operation on December 2, 2011. The boiler remained operational to support the laboratory testing processes until the boiler was removed from site on April 4, 2012. The entire laboratory including the short process operation was then relocated to another facility in the Los Banos area.

The laboratory used a comparatively small amount of steam generated from the boiler to support equipment and testing processes. The short process operation was a seasonal operation, which operates only during July, August, and September each year, and was used to test small batches of specific tomato cultivars. The seed business used the short process to test the processing and product attributes of potential varieties to determine whether the potential varieties were viable opportunities for the tomato processing industry.

Other than the ketchup processing operation, the short process consumed most of the remaining steam capacity generated from the boiler, N-395-14-0. The applicant explained that the provided material throughput and fuel usages data for the short process were the best estimate data the facility could provide.

Therefore, the natural gas fuel usage to support the short process was subtracted from the overall fuel usage of the boiler to determine the actual emission reductions for shutdown the boiler (see Appendix III of this document).

**E. Historical Actual Emissions (HAE)**

Historical Actual Emissions (HAEs) are emissions that actually occurred. The historical actual emissions from this permit unit are listed as follow (see Appendix IV of this document for detail calculations):

Pollutant	1 <sup>st</sup> Quarter (lb)	2 <sup>nd</sup> Quarter (lb)	3 <sup>rd</sup> Quarter (lb)	4 <sup>th</sup> Quarter (lb)
NO <sub>x</sub>	77	78	67	33
SO <sub>x</sub>	6	6	5	3
PM <sub>10</sub>	80	81	70	34
CO	4	4	3	2
VOC	58	59	50	25

**F. Actual Emissions Reductions**

Per District Rule 2201, section 4.12, Actual Emissions Reductions (AER) shall be calculated, on a pollutant-by-pollutant basis, as follows:

$$AER = HAE - PE2$$

Where:

HAE = Historic Actual Emissions

PE2 = Post Project Potential to Emit

Since the applicant proposed to shutdown the entire facility, therefore, the PE2 of each criteria pollutant from the permit unit is equal to zero. AER is equal to HAE, unless the HAE must be reduced such that they are surplus. As shown in section VI.E of this document, all HAE are surplus.

**G. Air Quality Improvement Deduction**

Per District Rule 2201, section 4.12.1, prior to banking, AER shall be discounted by 10% for Air Quality Improvement Deduction. Therefore, the Air Quality Improvement Deduction for emissions from the permit unit is summarized in the following table:

Pollutant	1 <sup>st</sup> Quarter (lb)	2 <sup>nd</sup> Quarter (lb)	3 <sup>rd</sup> Quarter (lb)	4 <sup>th</sup> Quarter (lb)
NO <sub>x</sub>	8	8	7	3
SO <sub>x</sub>	1	1	1	0
PM <sub>10</sub>	8	8	7	3
CO	0	0	0	0
VOC	6	6	5	2

## H. Bankable Emissions Reductions

The bankable emissions reductions are determined by subtraction of the air quality improvement deduction from the Actual Emissions Reductions. The bankable ERC of this unit is summarized in the table below:

Pollutant	1 <sup>st</sup> Quarter (lb)	2 <sup>nd</sup> Quarter (lb)	3 <sup>rd</sup> Quarter (lb)	4 <sup>th</sup> Quarter (lb)
NO <sub>x</sub>	69	70	60	30
SO <sub>x</sub>	6	6	4	3
PM <sub>10</sub>	72	73	63	31
CO	4	4	3	2
VOC	52	53	45	23

## VI. Compliance

To comply with the definition of Actual Emissions Reductions (Rule 2201, Section 3.2.1), the reduction must be:

### A. Real

The emissions reductions are real since the reductions were generated by permanent shutdown the entire ketchup processing facility.

### B. Enforceable

The reductions are enforceable since all permit units have been surrendered to the District. Equipment under permit unit N-395-8-1, diesel-fired emergency IC engine powering the fire pump was transferred to the new property owner. Operating the equipment without permits would result in enforcement action being taken.

### C. Quantifiable

The reductions are quantifiable since the reductions were calculated utilizing District-approved emission factors, and actual baseline period natural gas fuel usages.

### D. Permanent

The reductions are considered to permanent since the ketchup processing operation has been permanently shut down, and all of the facility's Permits to Operate have either been surrendered to the District or been transferred to the new property owner. Operation of the equipment without permits would result in enforcement action. Moreover, there is no clear evidence that the ketchup production from this facility will be shifted to other facilities in the District, since the company has no other ketchup processing facilities in the District.

**E. Surplus**

This section will contain an explanation of what actions were taken to ensure that all emission reductions were surplus.

1) Rules and Regulations:

The following air districts in California have Rules for Boilers, Steam Generators, and Process Heaters:

SJVAPCD Rule 4320:	Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters greater 5.0 MMBtu/hr (10/16/08)
BAAQMD Regulation 9, Rule 7:	Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters (05/04/11)
Sac Metro APCD Rule 411:	NO <sub>x</sub> from Boilers, Process Heaters and Steam Generators (08/23/07)
San Luis Obispo APCD Rule 430:	Control of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (7/26/95)
San Diego APCD Rule 69.2:	Industrial and Commercial Boilers, Process Heaters and Steam Generators (9/27/94)
SCAQMD Rule 1146:	Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters (9/5/08)
Yolo-Solano AQMD Rule 2.27	Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (8/14/96)

These Rules' requirements will be used to ensure the NO<sub>x</sub> and CO emissions from this 16.8 MMBtu/hr natural gas-fired boiler are surplus.

The NO<sub>x</sub> and CO emissions limits from each of the above listed Air Pollution Control Agency's Boilers, Steam Generators, and Process Heaters Rule are summarized in the following table.

Air Pollution Control District -- Boilers, Steam Generators, & Process Heaters Rules	Pollutants' Limits	
	NO <sub>x</sub>	CO
	(ppmvd @ 3% O <sub>2</sub> )	(ppmvd @ 3% O <sub>2</sub> )
SJVAPCD Rule 4320	9.0	400
BAAQMD Regulation 9, Rule 7	15	400
Sac Metro APCD Rule 411	15	400
San Luis Obispo APCD Rule 430	30	400
San Diego APCD Rule 69.2	30	400
SCAQMD Rule 1146	9	400
Yolo-Solano AQMD Rule 2.27	30	400

As shown in the above table, the NO<sub>x</sub> emission limit for both SJVAPCD Rule 4320 and SCAQMD Rule 1146 are same as 9 ppmvd @ 3% O<sub>2</sub>, which is the most stringent limit amongst others rules listed above. The CO emissions limit for all these Rules is identical, 400 ppmvd @ 3% O<sub>2</sub>. These limits will be considered as a standard requirement of this size of natural gas-fired boiler unit.

Therefore, this natural gas-fired boiler was in compliance with the requirements of all Districts Rules listed above during the baseline period.

## 2) Permitted Limitations:

Per current permit, the NO<sub>x</sub> and CO emissions limits are 9.0 ppmvd @ 3% O<sub>2</sub> and 100 ppmvd @ 3% O<sub>2</sub> respectively.

As shown in Appendix II, *Emission Factors Determination Calculation*, of this document, the last two years source testing data shows the highest NO<sub>x</sub> and CO emissions rates for this unit are 7.4 ppmvd @ 3% O<sub>2</sub> and 0.4 ppmvd @ 3% O<sub>2</sub> respectively.

In addition, the current permit has the following quarterly emissions limits:

Pollutant	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter
	(lb/quarter)	(lb/quarter)
NO <sub>x</sub>	819	2,390
SO <sub>x</sub>	N/A	212
PM <sub>10</sub>	N/A	566
CO	N/A	5,510
VOC	N/A	410



As calculated in Appendix IV, *Historical Actual Emission Calculation*, of this document, the highest quarterly emissions for the 2<sup>nd</sup> and 3<sup>rd</sup> quarter during the baseline period are:

Pollutant	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter
	(lb/quarter)	(lb/quarter)
NO <sub>x</sub>	83	70
SO <sub>x</sub>	N/A	6
PM <sub>10</sub>	N/A	72
CO	N/A	4
VOC	N/A	52

Therefore, this natural gas-fired boiler operated in compliance with its permit conditions during the baseline period.

3) Summary:

This natural gas-fired boiler was found to be in compliance with all applicable Rules and Regulations as well as their permitted emissions limits during the baseline period, so no adjustments to any of the NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, or VOC emissions were necessary. Moreover, the proposed emission reductions were made voluntarily and were not required by any present or pending regulation. Therefore, the emission reductions from the shutdown of the ketchup processing facility are surplus.

**F. Not used for the approval of an Authority to Construct or as Offsets**

The ERCs generated by permanent shutdown the entire facility were not used in the approval of an Authority to Construct or as offsets for any projects.

**G. Timely Submittal**

Pursuant to District Rule 2301, Section 4.2, in order to deem emissions reductions eligible for banking, an application for ERC has been filed no later than 180 days after the emissions reductions occurred.

The 16.8 MMBtu/hr natural gas-fired boiler was removed from site on April 4, 2012. The emissions reduction banking application was received on June 2, 2012. Therefore, the application was received within 180 days of the date the reductions occurred. The ERC application was filed in a timely manner.

## VII. Recommendation

Pending a successful public noticing period, issue Emission Reduction Credit Certificates to H.J. Heinz Company for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC in the following amounts:

Pollutant	1 <sup>st</sup> Quarter (lb)	2 <sup>nd</sup> Quarter (lb)	3 <sup>rd</sup> Quarter (lb)	4 <sup>th</sup> Quarter (lb)	Total (lb)
NO <sub>x</sub>	69	70	60	30	229
SO <sub>x</sub>	6	6	4	3	19
PM <sub>10</sub>	72	73	63	31	239
CO	4	4	3	2	13
VOC	52	53	45	23	173

## Appendices

Appendix I	Permit to Operate (PTO) N-395-14-0
Appendix II	Emissions Factors Determination Calculation
Appendix III	Baseline Period Determination
Appendix IV	Historical Actual Emissions Calculation
Appendix V	Draft Emissions Reduction Credit Certificates

## **Appendix I**

Permit to Operate (PTO)  
N-395-14-0

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-395-14-0

EXPIRATION DATE: 08/31/2013

## EQUIPMENT DESCRIPTION:

16.8 MMBTU/HR HURST BOILER WITH A POWERFLAME ULTRA LOW NOX BURNER

## PERMIT UNIT REQUIREMENTS

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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 unit shall only be fired on PUC-regulated natural gas. [District Rule 2201]
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, and 4306]
6. NOx emissions shall not exceed 9.0 ppmvd @ 3% O2 referenced as NO2. [District Rules 2201, 4305, and 4306]
7. CO emissions shall not exceed 100 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306]
8. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
9. PM10 emissions shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
10. VOC emissions shall not exceed 0.0055 lb/MMBtu. [District Rule 2201]
11. NOx emissions from the District permitted boilers/steam generators at this facility shall not exceed 819 pounds in the 2nd quarter and 2,390 pounds in the 3rd quarter in order to validate Emission Reduction Credits (ERC) banked under original certificate N-445-2. [District Rule 2201]
12. CO emissions from the District permitted boilers/steam generators at this facility shall not exceed 5,510 pounds in the 3rd quarter in order to validate ERC banked under original certificate N-445-3. [District Rule 2201]
13. VOC emissions from the District permitted boilers/steam generators at this facility shall not exceed 410 pounds in the 3rd quarter in order to validate ERC banked under original certificate N-445-1. [District Rule 2201]
14. SOx emissions from the District permitted boilers/steam generators at this facility shall not exceed 212 pounds in the 3rd quarter in order to validate ERC banked under original certificate N-445-5. [District Rule 2201]
15. PM10 emissions from the District permitted boilers/steam generators at this facility shall not exceed 566 pounds in the 3rd quarter in order to validate ERC banked under original certificate N-445-4. [District Rule 2201]
16. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

17. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]
18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
19. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
20. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306]
21. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]
22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
23. NO<sub>x</sub> emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rules 4305 and 4306]
24. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
25. Stack gas oxygen (O<sub>2</sub>) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
26. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306]
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
28. The permittee shall maintain a daily record of natural gas consumed by this unit. [District Rules 2201]
29. The permittee shall maintain a cumulative quarterly records of natural gas consumed by all the boilers/steam generators permitted at this facility to show compliance with the quarterly emissions limits. [District Rule 2201]
30. The permittee shall maintain a record of NO<sub>x</sub> emissions in 2nd quarter from all the permitted boilers/steam generators. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

31. The permittee shall maintain a record of NOx emissions in 3rd quarter from all the permitted boilers/steam generators. [District Rule 2201]
32. The permittee shall maintain a record of CO emissions in 3rd quarter from all the permitted boilers/steam generators. [District Rule 2201]
33. The permittee shall maintain a record of VOC emissions in 3rd quarter from all the permitted boilers/steam generators. [District Rule 2201]
34. The permittee shall maintain a record of SOx emissions in 3rd quarter from all the permitted boilers/steam generators. [District Rule 2201]
35. The permittee shall maintain a record of PM10 emissions in 3rd quarter from all the permitted boilers/steam generators. [District Rule 2201]
36. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]

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

## **Appendix II**

### Emission Factors Determination Calculation

N-395-14-0:

16.8 MMBtu/hr Hurst boiler with a Powerflame ultra low NOx burner

Emission factors for calculation purpose will be based on the lowest of the emission limits from the following: Current Permit to Operate, District Rules requirements, District Policy, AP 42 (Tables 1.4-1 & 1.4-2), and source testing data.

Emission factor in unit of ppmv @ 3% O<sub>2</sub> is converted to an equivalent lb/MMBtu number as follows:

$$EF \text{ (lb/MMBtu)} = \{(\text{ppmv}) \times F\text{-factor (dscf/MMBtu)} \times MW \text{ (lb/lb-mol)} \times [20.95/(20.95 - O_2\%)]\} / [\text{Molar Specific Volume of Gas (dscf/lb-mol)} \times 10^6]$$

Where,

F-factor is 8,578 (dscf/MMBtu) at 60°F;

Molar Specific Volume of Gas is 379.5 (dscf/lb-mol) at 60°F;

Molecular Weight of NO<sub>x</sub>, CO, and VOC are 46 (lb-NO<sub>x</sub>/lb-mol), 28 (lb-CO/lb-mol), and 16 (lb-VOC/lb-mol) respectively.

### NO<sub>x</sub>

Category		ppmv @ 3% O <sub>2</sub>	lb/MMBtu
Source Testing Data	1 <sup>st</sup> source test	4.6	0.00558
	2 <sup>nd</sup> source test	7.4	0.00898
	Average	--	0.0073
District Requirements	Rule 4320	9	0.011
Permit to Operate	N-395-14-0	9	0.011

### CO

Category		ppmv @ 3% O <sub>2</sub>	lb/MMBtu
Source Testing Data	1 <sup>st</sup> source test	0.4	0.0003
	2 <sup>nd</sup> source test	0.6	0.000443
	Average	--	0.00037
District Requirements	Rule 4320	400	0.295
Permit to Operate	N-395-14-0	100	0.074

The emission factors utilize to calculate emissions reductions are summarized in the table below:

Pollutant	N-395-14-0 Permit Limit (lb/MMBtu)	District Requirements Rule 4320/APR 1720 (lb/MMBtu)	AP-42 (lb/MMBtu)	Source Test (lb/MMBtu)	Lowest (lb/MMBtu)
NO <sub>x</sub>	0.011	0.011	0.1	0.0073	0.0073
SO <sub>x</sub>	0.00285	0.00285	0.0006	--	0.0006
PM <sub>10</sub>	0.0076	--	0.0076	--	0.0076
CO	0.074	0.295	0.084	0.00037	0.00037
VOC	0.0055	--	0.0055	--	0.0055



## **Appendix III**

### Baseline Period Determination

**Baseline Period Determination:**

**Permit N-395-14-0**

16.8 MMBtu/hr Hurst boiler with a PowerFlame ultra low NOx burner

This boiler was installed on December 3, 2007, therefore, no natural gas fuel usages were available from the first quarter to third quarter of 2007.

A certain amount of steam generated from the boiler was used for the short process operation. Since the short process was transferred to another facility within the District, the natural gas fuel usage to support the short process was subtracted from the overall fuel usage of the boiler.

Actual Boiler NG Usage = Overall Boiler NG Usage - Short Process NG Usage

Calender Quarter	Overall Boiler NG Usage (MMBtu)	Short Process NG Usage (MMBtu)	Actual Boiler NG Usage (MMBtu)
2007 Q1	N/A	N/A	N/A
2007 Q2	N/A	N/A	N/A
2007 Q3	N/A	N/A	N/A
2007 Q4	4,461	0	4,461
2008 Q1	10,833	0	10,833
2008 Q2	11,025	0	11,025
2008 Q3	9,931	41.52	9,889
2008 Q4	8,440	0	8,440
2009 Q1	11,570	0	11,570
2009 Q2	11,342	0	11,342
2009 Q3	9,566	40.73	9,525
2009 Q4	7,381	0	7,381
2010 Q1	9,567	0	9,567
2010 Q2	10,024	0	10,024
2010 Q3	8,827	57.44	8,770
2010 Q4	1,565	0	1,565
2011 Q1	10,462	0	10,462
2011 Q2	9,139	0	9,139
2011 Q3	9,269	54.31	9,215
2011 Q4	8,170	0	8,170

The actual quarterly natural gas fuel usage of the boiler used for ketchup processing operation is summarized below:

Calendar Year	2007	2008	2009	2010	2011
Actual Fuel Consumption	(MMBtu)	(MMBtu)	(MMBtu)	(MMBtu)	(MMBtu)
1st quarter	0	10,833	11,570	9,567	10,462
2nd quarter	0	11,025	11,342	10,024	9,139
3rd quarter	0	9,889	9,525	8,770	9,215
4th quarter	4,461	8,440	7,381	1,565	8,170

Calender Quarter	Boiler Actual NG Usage (MMBtu)	8 Quarters Difference
2007 Q1	0	
2007 Q2	0	
2007 Q3	0	
2007 Q4	4,461	
2008 Q1	10,833	
2008 Q2	11,025	
2008 Q3	9,889	
2008 Q4	8,440	
2009 Q1	11,570	
2009 Q2	11,342	
2009 Q3	9,525	731
2009 Q4	7,381	1,096
2010 Q1	9,567	938
2010 Q2	10,024	813
2010 Q3	8,770	673
2010 Q4	1,565	187
2011 Q1	10,462	325
2011 Q2	9,139	600
2011 Q3	9,215	639
2011 Q4	8,170	541

Average	8,905
---------	-------

The values in this column represent the absolute value of the difference between the boiler's actual quarterly fuel consumption averaged over the last 5 years since the date the application was submitted (187 MMBtu - considered to be "normal" source operation) and the quarterly consumption averaged over the previous 8 consecutive calendar quarters starting with 2007-Q4, as the boiler was installed on December 3, 2007 (application was received June 4, 2012). The smallest "difference" is assumed to be the 8 consecutive calendar quarter period whose averaged production most closely represents "normal" source operation.

For example:

$$731 = \text{ABS}(8,905 - (\text{SUM}(2007\text{-}Q4 \text{ through } 2009\text{-}Q3)/8)).$$

$$187 = \text{ABS}(8,905 - (\text{SUM}(2009\text{-}Q1 \text{ through } 2010\text{-}Q4)/8)).$$

$$541 = \text{ABS}(8,905 - (\text{SUM}(2010\text{-}Q1 \text{ through } 2011\text{-}Q4)/8)).$$

Since this value is the smallest "difference", the 8 consecutive calendar quarter period associated with it (2009-Q1 through 2010-Q4) is assumed to most closely represent "normal" source operation. Therefore, the baseline period is from 2009-Q1 through 2010-Q4.

## **Appendix IV**

### Historical Actual Emissions Calculation

**Historical Actual Emissions Calculation:**

$$PE = EF \text{ (lb/MMBtu)} \times \text{Fuel Consumption (MMBtu/quarter)}$$

Pollutant	EF (lb/MMBtu)
NOx	0.0073
SOx	0.0006
PM10	0.0076
CO	0.00037
VOC	0.0055

<b>2009</b>	Q1	Q2	Q3	Q4
NOx	84	83	70	54
SOx	7	7	6	4
PM10	88	86	72	56
CO	4	4	4	3
VOC	64	62	52	41

<b>2010</b>	Q1	Q2	Q3	Q4
NOx	70	73	64	11
SOx	6	6	5	1
PM10	73	76	67	12
CO	4	4	3	1
VOC	53	55	48	9

<b>Average</b>	Q1	Q2	Q3	Q4
NOx	77	78	67	33
SOx	6	6	5	3
PM10	80	81	70	34
CO	4	4	3	2
VOC	58	59	50	25

**Air Quality Improvement Deduction Calculations:**

$$\text{AQID} = \text{AER} \times (1 - 0.9)$$

<b>10%</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
NOx	8	8	7	3
SOx	1	1	1	0
PM10	8	8	7	3
CO	0	0	0	0
VOC	6	6	5	2

**Bankable Emission Reduction Calculations:**

$$\text{BER} = \text{AER} - \text{AQID}$$

<b>BER</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
NOx	69	70	60	30
SOx	6	6	4	3
PM10	72	73	63	31
CO	4	4	3	2
VOC	52	53	45	23

## **Appendix V**

Draft Emissions Reductions Credit Certificates

San Joaquin Valley  
Air Pollution Control District

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**Emission Reduction Credit Certificate  
N-1085-1**

ISSUED TO: H. J. HEINZ COMPANY  
ISSUED DATE: <DRAFT>  
LOCATION OF REDUCTION: 2800 S CALIFORNIA  
STOCKTON, CA 95206

**For VOC Reduction In The Amount Of:**

Quarter 1	Quarter 2	Quarter 3	Quarter 4
52 lbs	53 lbs	45 lbs	23 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source  
 Shutdown of Emissions Units  
 Other

Shutdown of the 16.8 MMBtu/hr natural gas-fired boiler

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director, APCO

**DRAFT**

David Warner, Director of Permit Services



San Joaquin Valley  
Air Pollution Control District

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718

**Emission Reduction Credit Certificate  
N-1085-2**

ISSUED TO: H. J. HEINZ COMPANY  
ISSUED DATE: <DRAFT>  
LOCATION OF REDUCTION: 2800 S CALIFORNIA  
STOCKTON, CA 95206

**For NOx Reduction In The Amount Of:**

Quarter 1	Quarter 2	Quarter 3	Quarter 4
69 lbs	70 lbs	60 lbs	30 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source  
 Shutdown of Emissions Units  
 Other

Shutdown of the 16.8 MMBtu/hr natural gas-fired boiler

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director, APCO

**DRAFT**

David Warner, Director of Permit Services

San Joaquin Valley  
Air Pollution Control District

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718

**Emission Reduction Credit Certificate**  
**N-1085-3**

ISSUED TO: H. J. HEINZ COMPANY  
ISSUED DATE: <DRAFT>  
LOCATION OF REDUCTION: 2800 S CALIFORNIA  
STOCKTON, CA 95206

**For CO Reduction In The Amount Of:**

Quarter 1	Quarter 2	Quarter 3	Quarter 4
4 lbs	4 lbs	3 lbs	2 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source  
 Shutdown of Emissions Units  
 Other

Shutdown of the 16.8 MMBtu/hr natural gas-fired boiler

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

**DRAFT**  
\_\_\_\_\_  
David Warner, Director of Permit Services

San Joaquin Valley  
Air Pollution Control District

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718

**Emission Reduction Credit Certificate  
N-1085-4**

ISSUED TO: H. J. HEINZ COMPANY  
ISSUED DATE: <DRAFT>  
LOCATION OF REDUCTION: 2800 S CALIFORNIA  
STOCKTON, CA 95206

**For PM10 Reduction In The Amount Of:**

Quarter 1	Quarter 2	Quarter 3	Quarter 4
72 lbs	73 lbs	63 lbs	31 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source  
 Shutdown of Emissions Units  
 Other

Shutdown of the 16.8 MMBtu/hr natural gas-fired boiler

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director /APCO

**DRAFT**  
\_\_\_\_\_  
David Warner, Director of Permit Services

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Air Pollution Control District

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**Emission Reduction Credit Certificate  
N-1085-5**

ISSUED TO: H. J. HEINZ COMPANY  
ISSUED DATE: <DRAFT>  
LOCATION OF REDUCTION: 2800 S CALIFORNIA  
STOCKTON, CA 95206

**For SOx Reduction In The Amount Of:**

Quarter 1	Quarter 2	Quarter 3	Quarter 4
6 lbs	6 lbs	4 lbs	3 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source  
 Shutdown of Emissions Units  
 Other

Shutdown of the 16.8 MMBtu/hr natural gas-fired boiler

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

**DRAFT**

David Warner, Director of Permit Services