# South Coast AQMD

# **Section 1, SCAQMD BACT Determination**

Source Type: Major/LAER
Application No.: 560283, 560285

Equipment Category: Furnace, Heating

Equipment Subcategory: Aluminum, ≤ 900°F

Date: September 15, 2016

|    | September 13, 2010                         |               |                 |           |                |  |
|----|--------------------------------------------|---------------|-----------------|-----------|----------------|--|
| 1. | <b>EQUIPMENT INFORM</b>                    | <u>MATION</u> |                 |           |                |  |
| A. | MANUFACTURER: Custom                       |               | В.              | MODEL:    | Aluminum       |  |
| C. | DESCRIPTION: Aluminum                      | forging furn  | ace             |           |                |  |
|    |                                            |               |                 |           |                |  |
| D. | FUNCTION: Furnace heats                    | aluminum bi   | llets prior and | during fo | orging process |  |
|    |                                            |               |                 |           |                |  |
| E. | SIZE/DIMENSIONS/CAPACIT                    | Y: 32'-9" x   | 11'-10.5" x 6'  | -2.5"     |                |  |
|    |                                            |               |                 |           |                |  |
| CO | MBUSTION SOURCES                           |               |                 |           |                |  |
| F. | MAXIMUM HEAT INPUT: 5.                     | 0 MMBtu/hr    |                 |           |                |  |
| G. | BURNER INFORMATION                         |               |                 |           |                |  |
|    | ТҮРЕ                                       | INDI          | VIDUAL HEAT I   | NPUT      | NUMBER         |  |
|    | ECLIPSE WINNOX                             | 5.            | 0 MMBtu/hr      |           | 1              |  |
|    |                                            |               |                 |           |                |  |
| H. | PRIMARY FUEL: NATURA                       | L GAS         | I. OTHER FUE    | EL: N/A   |                |  |
| J. | OPERATING SCHEDULE:                        | 24 7          | 52              |           |                |  |
| K. | EQUIPMENT COST:                            |               |                 |           |                |  |
| L. | L. EQUIPMENT INFORMATION COMMENTS:         |               |                 |           |                |  |
| 2. | COMPANY INFORMA                            | TION          |                 |           |                |  |
|    |                                            |               |                 | 1         |                |  |
| A. | COMPANY: Carlton Forge V                   | Vorks         |                 |           | CID: 22911     |  |
| C. | ADDRESS: 7743 E. Adams                     | St.           |                 |           | CS CODE:       |  |
|    | CITY: Paramount STATE:                     |               | 90723           | 332       |                |  |
| E. | CONTACT PERSON: Armando Bautista F. TITLE: |               |                 |           |                |  |

EMAIL: abautista@cfworks.com

G. PHONE NO.: (562) 633-1131

A. AGENCY: SCAQMD B. APPLICATION TYPE: MODIFICATION

C. SCAQMD ENGINEER: Monica Fernandez-Neild

D. PERMIT INFORMATION: PC ISSUANCE DATE: 5/27/14

P/O NO.: G42717,-8 PO ISSUANCE DATE: 9/19/2016

E. START-UP DATE: 8/1/2014

F. OPERATIONAL TIME: 2+ years

## 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

|                   | VOC | NOx                 | SOX         | СО | PM or PM <sub>10</sub> | INORGANIC   |
|-------------------|-----|---------------------|-------------|----|------------------------|-------------|
| BACT<br>Limit     |     | 30 PPMV             | Natural Gas |    |                        | Natural Gas |
| Averaging<br>Time |     | 1 HOUR              |             |    |                        |             |
| Correction        |     | @ 3% O <sub>2</sub> |             |    |                        |             |

B. OTHER BACT REQUIREMENTS:

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: The BACT requirements are based on Part D of the BACT Guidelines. No more stringent, achieved in practice, requirements were found in EPA, CARB, or SCAQMD BACT listings or elsewhere.

| 5  | CONTROL | TECHNOI | OCV  |
|----|---------|---------|------|
| J. |         |         | COLL |

A. MANUFACTURER: Eclipse Winnox B. MODEL: Low NOx

C. DESCRIPTION: Low NOx burner

D. SIZE/DIMENSIONS/CAPACITY:

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 560283,-5 PC ISSUANCE DATE: 5/27/14 PO NO.: G42717, -8 PO ISSUANCE DATE: 9/9/2016

F. REQUIRED CONTROL EFFICIENCIES:

| CONTAMINANT            | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |  |  |
|------------------------|-------------------------------|------------------------------|-----------------------|--|--|
| VOC                    | %                             | %                            | %                     |  |  |
| NOx                    | %                             | %                            | %                     |  |  |
| SOx                    | %                             | %                            | %                     |  |  |
| СО                     | %                             | %                            | %                     |  |  |
| PM                     | %                             | %                            | %                     |  |  |
| PM <sub>10</sub>       | %                             | %                            | %                     |  |  |
| INORGANIC              | %                             | %                            | %                     |  |  |
| C COMPROLED COMPONENTS |                               |                              |                       |  |  |

G. CONTROL TECHNOLOGY COMMENTS

## 6. DEMONSTRATION OF COMPLIANCE

| Α   | COMPLIANCE DE  | MONSTRATED BY: | Method 100 1 | 1 Source Test |
|-----|----------------|----------------|--------------|---------------|
| /l. | COMI LIANCE DE |                |              |               |

B. DATE(S) OF SOURCE TEST: 10/5/2014 and 10/19/2014

C. COLLECTION EFFICIENCY METHOD: N/A

D. COLLECTION EFFICIENCY PARAMETERS: N/A

E. SOURCE TEST/PERFORMANCE DATA: <10 PPMV NOx @3% O2 for both furnaces, and <143 PPMV CO @3% O2 (CO was measured well below 20% of full scale and was increased to 20% of scale or 40 ppmvd and corrected to 3% O2</p>

| F. | TEST | OPERATING PARAMET | ERS AND | CONDITIONS: |
|----|------|-------------------|---------|-------------|
|    |      |                   |         |             |

- G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 100.1
- H. MONITORING AND TESTING REQUIREMENTS:
- I. DEMONSTRATION OF COMPLIANCE COMMENTS:

| A.  | BCAT:                          | В       | . CCAT:   |     |          | C.                    | APPLICATIO | ON TYPE CODE: 50 |
|-----|--------------------------------|---------|-----------|-----|----------|-----------------------|------------|------------------|
| D.  | RECLAIM FAC?                   | E.      | TITLE V F | AC: |          | F. SOURCE TEST ID(S): |            | ST ID(S):        |
|     | YES ⊠ NO □                     |         | YES 🗵     | NO  |          |                       |            |                  |
| G.  | SCAQMD SOURCE                  | SPECIFI | C RULES:  |     |          |                       |            |                  |
| H.  | H. HEALTH RISK FOR PERMIT UNIT |         |           |     |          |                       |            |                  |
| H1. | MICR:                          | H2. MI  | CR DATE:  |     | H3. CAN  | CEF                   | R BURDEN:  | H4. CB DATE:     |
| H5: | : HIA:                         | H6. HIA | A DATE:   |     | H7. HIC: |                       |            | H8. HIC DATE:    |

# **Section 1, SCAQMD BACT Determination**



Source Type: Major/LAER

Application No.: 491442

Equipment Category:

Flare

Equipment Subcategory: Landfill Gas, Active Solid Waste

Landfill, Non-Hazardous Waste

Date: March 17, 2017

|    | Date.                                                             | March 17, 2017                      |                             |  |  |
|----|-------------------------------------------------------------------|-------------------------------------|-----------------------------|--|--|
| 1. | <b>EQUIPMENT INFORMA</b>                                          | ΓΙΟΝ                                |                             |  |  |
| A. | MANUFACTURER: John Zink                                           | B. MODEL:                           | Zink Ultra Low Emission     |  |  |
|    |                                                                   | (ZULE)                              |                             |  |  |
| C. | DESCRIPTION: 120 MMBtu/hr                                         | maximum input to enclosed flare     | es, landfill gas fired with |  |  |
|    | propane pilot                                                     |                                     |                             |  |  |
| D. |                                                                   | andfill gas vented from landfill ga | as collection system. Flare |  |  |
|    | is part of a two flare system. P                                  | ropane gas pilot.                   |                             |  |  |
| E. |                                                                   | 12'D. x 50' H., 120 MMBtu/hr, 4     | 1000 SCFM landfill gas      |  |  |
|    | permitted limit                                                   |                                     |                             |  |  |
| CO | MBUSTION SOURCES                                                  |                                     |                             |  |  |
| F. | MAXIMUM HEAT INPUT: 120 M                                         | IMBtu/hr                            |                             |  |  |
| G. | BURNER INFORMATION                                                |                                     |                             |  |  |
|    | TYPE                                                              | INDIVIDUAL HEAT INPUT               | NUMBER                      |  |  |
|    | ZULE                                                              | 120 MMBtu/hr                        | 1                           |  |  |
|    |                                                                   |                                     |                             |  |  |
| H. | I. PRIMARY FUEL: LANDFILL GAS  I. OTHER FUEL: PROPANE GAS (PILOT) |                                     |                             |  |  |
| J. | OPERATING SCHEDULE: 24                                            | HRS/DAY 7 DAYS/WEEK 52 V            | WKS/YR                      |  |  |
| K. | EQUIPMENT COST:                                                   |                                     |                             |  |  |
| L. | EQUIPMENT INFORMATION COM                                         | IMENTS:                             |                             |  |  |

# 2. COMPANY INFORMATION

| A. | COMPANY: Chiquita Canyon, LLC                                       | B. FAC ID: 119219         |
|----|---------------------------------------------------------------------|---------------------------|
| C. | ADDRESS: 29201 Henry Mayo Drive CITY: Valencia STATE: CA ZIP: 91355 | D. NAICS CODE: 582212     |
| E. | CONTACT PERSON: Mike Dean                                           | F. TITLE: General Manager |
| G. | PHONE NO.: 661-257-3655 H. EMAIL: 6                                 | leanmj@repsrv.com         |

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Guarang Rawal

D. PERMIT INFORMATION: PC ISSUANCE DATE: 6/27/12

P/O NO.: G25306 PO ISSUANCE DATE: 6/26/2013

E. START-UP DATE:12/7/2009 Source Test Date

F. OPERATIONAL TIME: 7 years

## 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

|                   | VOC                   | NOX                         | SOX       | СО                         | PM OR PM <sub>10</sub> | INORGANIC |
|-------------------|-----------------------|-----------------------------|-----------|----------------------------|------------------------|-----------|
| BACT<br>Limit     | 1.33 lb/hr            | 0.025 lb/MMBtu<br>2.4 lb/hr | 2.5 lb/hr | 0.06 lb/MMBtu<br>7.2 lb/hr | 1.4 lb PM10/hr         |           |
| Averaging<br>Time | 1 HR                  | 1 HR                        |           | 1 HR                       | 1 HR                   |           |
| Correction        | (as CH <sub>4</sub> ) |                             |           |                            |                        |           |

B. OTHER BACT REQUIREMENTS:

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: Maximum 4000 scfm landfill gas (Condition 8). 1400°F Min temp (Condition 5). Annual performance tests (Condition 12). Per source test PM10 as PM. BACT Limits apply when unit is fired on landfill gas.

| 5  | CONTROL | TECHNOI | OCV  |
|----|---------|---------|------|
| J. |         |         | COLL |

| A. | MANUFACTURER: |  | MODEL: |
|----|---------------|--|--------|
|    |               |  |        |

C. DESCRIPTION:

D. SIZE/DIMENSIONS/CAPACITY:

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: PO NO.: PO ISSUANCE DATE:

F. REQUIRED CONTROL EFFICIENCIES:

| CONTAMINANT      | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |  |  |  |
|------------------|-------------------------------|------------------------------|-----------------------|--|--|--|
| VOC              | 98%                           | %                            | %                     |  |  |  |
| NOx              | %                             | %                            | %                     |  |  |  |
| SOx              | %                             | %                            | %                     |  |  |  |
| СО               | %                             | %                            | %                     |  |  |  |
| PM               | %                             | %                            | %                     |  |  |  |
| PM <sub>10</sub> | %                             | %                            | %                     |  |  |  |
| INORGANIC        | %                             | %                            | %                     |  |  |  |

G. CONTROL TECHNOLOGY COMMENTS 99% by wt. Destruction Efficiency Methane. 98% by wt destruction efficiency or less than 20 ppmvd, hexane, @ 3% O2

- A. COMPLIANCE DEMONSTRATED BY: Source Test
- B. DATE(S) OF SOURCE TEST: 12/7/2009
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 98.9% TGNMO Destruction Eff., 2.13 ppm VOC (as hexane) @3% O2, < 0.02 lb CO/MMBtu; <23.3 ppm CO@ 3% O2, 0.01 lb/MMBtu NOx, 6.7 ppm NOx @3% O2; 1.22 lb SOX/hr (as SO2); 0.75 lb PM/hr;
- F. TEST OPERATING PARAMETERS AND CONDITIONS: 2367 dscfm landfill\_gas
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD 25.3, 100.1, SCAQMD 5.1, ARB Mod. Method 307.91
- H. MONITORING AND TESTING REQUIREMENTS: Source Testing annually for Methane, TGNMO, NOx, CO, SOx, PM10 (as PM), O2, N2, H2O, Temp and Flow
- I. DEMONSTRATION OF COMPLIANCE COMMENTS:

| A.  | BCAT:                            | B. CCAT:       | B. CCAT: 50     |                   | C. APPLICATION TYPE CODE: 10 |  |
|-----|----------------------------------|----------------|-----------------|-------------------|------------------------------|--|
| D.  | RECLAIM FAC?                     | E. TITLE V     | E. TITLE V FAC: |                   | SST ID(S): PR09359           |  |
|     | YES □ NO □                       | YES 🗵          | NO □            |                   |                              |  |
| G.  | G. SCAQMD SOURCE SPECIFIC RULES: |                |                 |                   |                              |  |
| H.  | H. HEALTH RISK FOR PERMIT UNIT   |                |                 |                   |                              |  |
| H1. | MICR:                            | H2. MICR DATE: | НЗ              | 3. CANCER BURDEN: | H4. CB DATE:                 |  |
| H5: | : HIA:                           | H6. HIA DATE:  | H7              | '. HIC:           | H8. HIC DATE:                |  |

South Coast

# **Section 1, SCAQMD BACT Determination**

Source Type: Major/LAER

Application No.: 513835

Equipment Category:

Equipment Subcategory: Digester Gas

Flare

Date: March 15, 2017

| 1. | <b>EQUIPMENT INFORMATION</b> |
|----|------------------------------|
|    |                              |

A. MANUFACTURER: Bekaert B. MODEL: CEB 350

- C. DESCRIPTION: 12 MMBtu/hr enclosed flare, digester gas fired with natural gas pilots
- D. FUNCTION: Flare incinerates excess digester gas not used as fuel in the boilers or fuel cell system, or to relieve pressure from storage tanks.
- E. SIZE/DIMENSIONS/CAPACITY: 3'-8" W. x 3' 8" L. x 23'-4" H., 12 MMBtu/hr, 333 SCFM digester gas permitted limit

### **COMBUSTION SOURCES**

- F. MAXIMUM HEAT INPUT: 12 MMBtu/hr
- G. BURNER INFORMATION

| ТҮРЕ     | INDIVIDUAL HEAT INPUT | NUMBER |
|----------|-----------------------|--------|
| NIT MESH | 12 MMBtu/hr           | 1      |
|          |                       |        |

- H. PRIMARY FUEL: DIGESTER GAS I. OTHER FUEL: NATURAL GAS (PILOT)
- J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR
- K. EQUIPMENT COST:
- L. EQUIPMENT INFORMATION COMMENTS: FLARE OPERATES INTERMITTANTLY AS NEEDED SECONDARY TO FUEL CELLS AND BOILER. MAINTENANCE IMPROVEMENTS FOR THERMOCOUPLES, IGNITERS AND THE EXHAUST STACK WERE MADE BY THE FACILITY TO ACHIEVE RELIABLE OPERATION.

## 2. COMPANY INFORMATION

| A. COMPANY: EMWD-PVRWRF                                     | B. FAC ID: 7417                     |  |
|-------------------------------------------------------------|-------------------------------------|--|
| C. ADDRESS: 1301 Case Rd. CITY: Perris STATE: CA ZIP: 92570 | D. NAICS CODE:<br>221320            |  |
| E. CONTACT PERSON: Alison Torres                            | F. TITLE: Sr. AQ Compliance Analyst |  |
| G. PHONE NO.: 951-928-3777 x 6345 H. EMAIL:                 | torresa@emwd.org                    |  |

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Angela Shibata

D. PERMIT INFORMATION: PC ISSUANCE DATE: 6/27/12

P/O NO.: G25306 PO ISSUANCE DATE: 6/26/2013

E. START-UP DATE: 11/9/2011

F. OPERATIONAL TIME: 5 years

## 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

|                   | VOC            | NOx            | SOX | CO            | PM OR PM <sub>10</sub> | Inorganic |
|-------------------|----------------|----------------|-----|---------------|------------------------|-----------|
| BACT<br>Limit     | 0.038 lb/MMBtu | 0.025 lb/MMBtu |     | 0.06 lb/MMBtu |                        |           |
| Averaging<br>Time | 1 HR           | 1 HR           |     | 1 HR          |                        |           |
| Correction        |                |                |     |               |                        |           |

B. OTHER BACT REQUIREMENTS:

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: Maximum 333 scfm digester gas (Condition 11). 1600°F Min temp (Condition 7). Performance tests every five years (Condition 18). BACT Limits apply when fired on digester gas.

| _         | CONTROL | TECHNICI OCY |
|-----------|---------|--------------|
| <b>5.</b> | CONTROL | TECHNOLOGY   |

| A. | MANUFACTURER: | В. | MODEL: |
|----|---------------|----|--------|
|    |               |    |        |

C. DESCRIPTION:

D. SIZE/DIMENSIONS/CAPACITY:

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: PO NO.: PO ISSUANCE DATE:

F. REQUIRED CONTROL EFFICIENCIES:

| CONTAMINANT      | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |  |  |
|------------------|-------------------------------|------------------------------|-----------------------|--|--|
| VOC              | %                             | %                            | %                     |  |  |
| NOx              | %                             | %                            | %                     |  |  |
| SOx              | %                             | %                            | %                     |  |  |
| СО               | %                             | %                            | %                     |  |  |
| PM               | %                             | %                            | %                     |  |  |
| PM <sub>10</sub> | %                             | %                            | %                     |  |  |
| INORGANIC        | %                             | %                            | %                     |  |  |

G. CONTROL TECHNOLOGY COMMENTS

- A. COMPLIANCE DEMONSTRATED BY: Source Test
- B. DATE(S) OF SOURCE TEST: 11/9/2011
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 96.9% TGNMO Destruction Effic., 99.99 HC destruction Effic., 0.70 ppm VOC (as hexane), 0.011 lb CO/MMBtu; 13.8 ppm CO@ 3%O2, 0.014 lb/MMBtu NOx, 10.45 ppm NOx @3%O2; 0.455 lb SOX/hr (as SO2)
- F. TEST OPERATING PARAMETERS AND CONDITIONS: 246 dscfm digester gas
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD 25.3, 100.1, ARB Mod. Method 307.91
- H. MONITORING AND TESTING REQUIREMENTS: Source Testing every five years for TGNMO, NOx, CO, PM10, O2, N2, H2O, Temp and BTU Value

| Ī | I. | DEMONSTRATION OF COMPLIANCE COMMENTS: |
|---|----|---------------------------------------|
|   |    |                                       |
|   |    |                                       |

| A.  | BCAT:                            | B. CCAT: 50       | 0               | C. APPLICATION      | ON TYPE CODE: 10      |  |
|-----|----------------------------------|-------------------|-----------------|---------------------|-----------------------|--|
| D.  | RECLAIM FAC?                     | E. TITLE V F      | E. TITLE V FAC: |                     | F. SOURCE TEST ID(S): |  |
|     | YES □ NO □                       | YES ⊠             | NO □            |                     |                       |  |
| G.  | G. SCAQMD SOURCE SPECIFIC RULES: |                   |                 |                     |                       |  |
| H.  | I. HEALTH RISK FOR PERMIT UNIT   |                   |                 |                     |                       |  |
| H1. | . MICR: 6.55 x10-9               | H2. MICR DATE: 6/ | /19/13 H3. CA   | NCER BURDEN:<br>0.5 | H4. CB DATE: 6/19/13  |  |
| Н5  | : HIA:                           | H6. HIA DATE:     | Н7. НІС         | C:                  | H8. HIC DATE:         |  |

# South Coast AQMD

# **Section 1, SCAQMD BACT Determination**

Source Type: Major/LAER Application No.: 499293/551284

Equipment Category: **Food Oven** 

Equipment Subcategory: **Snack Food** 

|    | Date:                       |                | <b>March 8, 2017</b>    |                              |
|----|-----------------------------|----------------|-------------------------|------------------------------|
| 1. | <b>EQUIPMENT INFORM</b>     | MATION         |                         |                              |
| A. | MANUFACTURER: Maxon         |                | B. MODEL:               | C1 120-28 RGX (E)            |
|    |                             |                |                         |                              |
| C. | DESCRIPTION: Natural gas    | s-fired food o | ven to bake corn meal c | heese puffs                  |
|    |                             |                |                         |                              |
| D. | FUNCTION: Food oven equ     | uipped with 1  | .6 MMBtu/hr burner to   | bake Frito Lay cheese puffs. |
|    | The combustion air is recir | culated in the | oven with a 0.5 HP blo  | wer to distribute the heat   |
|    | before exhausting to atmos  | phere.         |                         |                              |
| E. | SIZE/DIMENSIONS/CAPACIT     |                |                         |                              |
|    | cheese puffs. Oven is conv  | eyorized and   | equipped with one Max   | xon low NOx burner.          |
| CC | MBUSTION SOURCES            |                |                         |                              |
| F. | MAXIMUM HEAT INPUT: 1       | .6 MMBtu/hr    |                         |                              |
| G. | BURNER INFORMATION          |                |                         |                              |
|    | ТҮРЕ                        | INDIV          | VIDUAL HEAT INPUT       | NUMBER                       |
|    | MAXON CYCLOMAX              | 1.             | 6 MMBtu/hr              | 1                            |
|    |                             |                |                         |                              |
| H. | PRIMARY FUEL: NATURA        | L GAS          | I. OTHER FUEL: N/A      |                              |
| J. | OPERATING SCHEDULE:         | 24 7 5         | 52                      |                              |
| K. | EQUIPMENT COST:             |                |                         |                              |
| L. | EQUIPMENT INFORMATION       | COMMENTS:      |                         |                              |

### 2. **COMPANY INFORMATION**

| A. | COMPANY: Frito-Lay, Inc.                                      |            | B. FAC ID: 000346            |
|----|---------------------------------------------------------------|------------|------------------------------|
| C. | ADDRESS: 9535 Archibald Ave. CITY: Rancho Cucamonga STATE: CA | ZIP: 91730 | D. NAICS CODE: 311919        |
| E. | CONTACT PERSON: Bob Biasci                                    |            | F. TITLE: Technical Director |
| G. | PHONE NO.: (909) 941-6203                                     | H. EMAIL:  | bob.biacsi@pepsico.com       |

A. AGENCY: SCAQMD B. APPLICATION TYPE: MODIFICATION

C. SCAQMD ENGINEER: Michael Solis

D. PERMIT INFORMATION: PC ISSUANCE DATE: 9/15/09

P/O NO.: G4333 PO ISSUANCE DATE: 9/15/2009

E. START-UP DATE: 4/15/2008

F. OPERATIONAL TIME: 8 years

## 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

|                   | VOC | NOX                 | SOX | CO                  | PM or PM <sub>10</sub> | INORGANIC |
|-------------------|-----|---------------------|-----|---------------------|------------------------|-----------|
| BACT<br>Limit     |     | 25 PPMV             |     | 75 PPMV             |                        |           |
| Averaging<br>Time |     | 1 HOUR              |     | 1 HOUR              |                        |           |
| Correction        |     | @ 3% O <sub>2</sub> |     | @ 3% O <sub>2</sub> |                        |           |

- B. OTHER BACT REQUIREMENTS: Method 100.1 Source Test every 5 years pursuant to Permit Condition D28.9
- C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology
- D. EMISSION INFORMATION COMMENTS: Emissions guaranteed by manufacturer per application package

| 5  | CONTROL | TECHNOI | OCV  |
|----|---------|---------|------|
| J. |         |         | COLL |

| A. | MANUFACTURER: | B. | MODEL: |
|----|---------------|----|--------|
|    |               |    |        |

C. DESCRIPTION: N/A. No add-on control equipment

D. SIZE/DIMENSIONS/CAPACITY:

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: PO NO.: PO ISSUANCE DATE:

F. REQUIRED CONTROL EFFICIENCIES:

| CONTAMINANT      | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |  |  |
|------------------|-------------------------------|------------------------------|-----------------------|--|--|
| VOC              | %                             | %                            | %                     |  |  |
| NOx              | %                             | %                            | %                     |  |  |
| SOx              | %                             | %                            | %                     |  |  |
| СО               | %                             | %                            | %                     |  |  |
| PM               | %                             | %                            | %                     |  |  |
| PM <sub>10</sub> | %                             | %                            | %                     |  |  |
| INORGANIC        | %                             | %                            | %                     |  |  |

G. CONTROL TECHNOLOGY COMMENTS

- A. COMPLIANCE DEMONSTRATED BY: Method 100.1 Source Test when the equipment was under Application #471591.
- B. DATE(S) OF SOURCE TEST: April 29, 2009
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 20 PPMV NOx @3% O2. 58 PPMV CO @3% O2
- F. TEST OPERATING PARAMETERS AND CONDITIONS: Tested at normal load. Oven Temp 298°F. 1700 lb product per hour. Fuel Flow 15.77 scfm nat gas.
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 100.1
- H. MONITORING AND TESTING REQUIREMENTS: Source testing every 5 years pursuant to Permit Condition D28.9

| I. | DEMONSTRATION OF COMPLIANCE COMMENTS: |
|----|---------------------------------------|
|    |                                       |
|    |                                       |

| A.  | BCAT: 000255                   | B. CCAT:        |            | C. APPLICATIO | ON TYPE CODE: 50  |  |
|-----|--------------------------------|-----------------|------------|---------------|-------------------|--|
| D.  | RECLAIM FAC?                   | E. TITLE V FAC  | <b>C</b> : | F. SOURCE TES | ST ID(S): PR09058 |  |
|     | YES ⊠ NO □                     | YES 🗵           | NO 🗆       |               |                   |  |
| G.  | SCAQMD SOURCE                  | SPECIFIC RULES: |            |               |                   |  |
| Н.  | H. HEALTH RISK FOR PERMIT UNIT |                 |            |               |                   |  |
| H1. | MICR:                          | H2. MICR DATE:  | H3. CAN    | NCER BURDEN:  | H4. CB DATE:      |  |
| H5  | : HIA:                         | H6. HIA DATE:   | Н7. НІС    |               | H8. HIC DATE:     |  |

# South Coast AQMD

# **Section 1, SCAQMD BACT Determination**

Source Type: Major/LAER

Application No.: 551284

**Equipment Category:** Food Oven

Equipment Subcategory: **Tortilla Chip Oven** 

|    | Date:                                                           |           | Marc          | ch 8, 2017 |                            |  |
|----|-----------------------------------------------------------------|-----------|---------------|------------|----------------------------|--|
| 1. | <b>EQUIPMENT INFORMAT</b>                                       | TION      |               |            |                            |  |
| A. | MANUFACTURER: Casa Herrer                                       | a         | В.            | MODEL:     | C1 120-28 RGX (E)          |  |
| C. | DESCRIPTION: Natural gas-fire                                   | ed food o | ven to dry an | d bake tor | tilla chips.               |  |
| D. | FUNCTION: Food oven equipped masa into tortilla chips prior to  |           |               | •          | and ribbon burners to bake |  |
| E. | E. SIZE/DIMENSIONS/CAPACITY:                                    |           |               |            |                            |  |
| CO | MBUSTION SOURCES                                                |           |               |            |                            |  |
| F. | MAXIMUM HEAT INPUT: 5.774                                       | MMBtu/    | ħr            |            |                            |  |
| G. | BURNER INFORMATION                                              |           |               |            |                            |  |
|    | TYPE                                                            | INDIV     | VIDUAL HEAT   | ΓINPUT     | NUMBER                     |  |
|    | CASA HERRERA ENSIGN<br>RIBBON                                   | 4.03      | 32 MMBtu/h    | nr         |                            |  |
| IR | I IET COMB. ULTRA GLO 7D-<br>400P                               | 1.74      | 42 MMBtu/h    | ır         |                            |  |
| H. | PRIMARY FUEL: NATURAL G                                         | AS        | I. OTHER FU   | JEL: N/A   |                            |  |
| J. | OPERATING SCHEDULE: 24                                          | 7 5       | 52            |            |                            |  |
| K. | EQUIPMENT COST:                                                 |           |               |            |                            |  |
| L. | EQUIPMENT INFORMATION COMidentical line under D86, Appl. No. 55 |           |               |            |                            |  |

# 2. COMPANY INFORMATION

| A. | COMPANY: Frito-Lay, Inc.                                      |      |       |       | B. FAC ID:           | : 000346           |
|----|---------------------------------------------------------------|------|-------|-------|----------------------|--------------------|
| C. | ADDRESS: 9535 Archibald Ave. CITY: Rancho Cucamonga STATE: CA | ZIP  | p: 9: | 1730  | D. NAICS 0<br>311919 |                    |
| E. | CONTACT PERSON: Bob Biasci                                    |      |       |       | F. TITLE:            | Technical Director |
| G. | PHONE NO.: (909) 941-6203                                     | Н. Е | EMA]  | IL: b | ob.biacsi@           | pepsico.com        |

A. AGENCY: SCAQMD B. APPLICATION TYPE:

C. SCAQMD ENGINEER: Michael Solis

D. PERMIT INFORMATION: PC ISSUANCE DATE: 9/15/09

P/O NO.: G28761 PO ISSUANCE DATE: 9/15/2009

E. START-UP DATE: 3/17/2014

F. OPERATIONAL TIME: 3 years

# 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

|                   | VOC | NOx                 | SOX | СО               | PM or PM <sub>10</sub> | INORGANIC |
|-------------------|-----|---------------------|-----|------------------|------------------------|-----------|
| BACT<br>Limit     |     | 54 PPMV             |     | 2000 PPMV        |                        |           |
| Averaging<br>Time |     | 1 HOUR              |     | 15 MIN           |                        |           |
| Correction        |     | @ 3% O <sub>2</sub> |     | STACK CONDITIONS |                        |           |

- B. OTHER BACT REQUIREMENTS: CO limit based on SCAQMD Rule 407 requirements
- C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology
- D. EMISSION INFORMATION COMMENTS: Enter any additional comments regarding Emissions Information.

| 5  | CONTROL | TECHNOI | OCV  |
|----|---------|---------|------|
| J. |         |         | COLL |

| A. | MANUFACTURER: | B. | MODEL: |
|----|---------------|----|--------|
|    |               |    |        |

C. DESCRIPTION: N/A. No add-on control equipment

D. SIZE/DIMENSIONS/CAPACITY:

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: PO NO.: PO ISSUANCE DATE:

F. REQUIRED CONTROL EFFICIENCIES:

| CONTAMINANT      | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |  |  |  |
|------------------|-------------------------------|------------------------------|-----------------------|--|--|--|
| VOC              | %                             | %                            | %                     |  |  |  |
| NOx              | %                             | %                            | %                     |  |  |  |
| SOx              | %                             | %                            | %                     |  |  |  |
| СО               | %                             | %                            | %                     |  |  |  |
| PM               | %                             | %                            | %                     |  |  |  |
| PM <sub>10</sub> | %                             | %                            | %                     |  |  |  |
| INORGANIC        | %                             | %                            | %                     |  |  |  |

G. CONTROL TECHNOLOGY COMMENTS

- A. COMPLIANCE DEMONSTRATED BY: SCAQMD Method 100.1 Source Test
- B. DATE(S) OF SOURCE TEST: January 13, 2015
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 43 PPMV NOx @3% O2. 36 PPMV CO @ stack conditions. (Identical Unit D86 : 22.9 PPMV NOx @3% O2. 85 PPMV CO @ stack conditions)
- F. TEST OPERATING PARAMETERS AND CONDITIONS: Tested at normal load. Burner firing rate 50%. Stack Fan Temp >560°F. Oven Temps: Top: 302°F, Middle:470°F, Lower: 299°F
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 100.1

| H. | MONITORING | AND | <b>TESTING</b> | REQUIREMENTS: |
|----|------------|-----|----------------|---------------|
|----|------------|-----|----------------|---------------|

| A. | B. CCAT:                                                 |                 |             |                               | C. APPLICATION TYPE CODE: 50 |  |  |               |  |
|----|----------------------------------------------------------|-----------------|-------------|-------------------------------|------------------------------|--|--|---------------|--|
| D. | RECLAIM FAC?                                             | E. TITLE V FAC: |             | F. SOURCE TEST ID(S): PR14386 |                              |  |  |               |  |
|    | YES ⊠ NO □ YES ⊠ NO □                                    |                 |             |                               |                              |  |  |               |  |
| G. | SCAQMD SOURCE                                            | SPEC            | IFIC RULES: |                               |                              |  |  |               |  |
| Н. | H. HEALTH RISK FOR PERMIT UNIT                           |                 |             |                               |                              |  |  |               |  |
| H1 | H1. MICR: H2. MICR DATE: H3. CANCER BURDEN: H4. CB DATE: |                 |             |                               |                              |  |  |               |  |
| H5 | 5: HIA:                                                  | H6.             | HIA DATE:   |                               | H7. HIC:                     |  |  | H8. HIC DATE: |  |
|    |                                                          |                 |             |                               |                              |  |  |               |  |

I. DEMONSTRATION OF COMPLIANCE COMMENTS: 54 ppmv @3%O2 limit was established during permit evaluation to ensure there was no increase in emissions due to a modification with an increased rating of the unit. Previous source test prior to modification showed unit tested at 53.7 ppm @3%O2.

# **Section 1, SCAQMD BACT Determination**



Source Type: Major/LAER

Application No.: Oven 1-580239, Oven 1B-580240, Oven 5-440543, Oven 6-440544, Cat Ox-563257

Equipment Category: Food Oven

Equipment Subcategory: Bakery

Date: April 7, 2016

## 1. EQUIPMENT INFORMATION

A. MANUFACTURER: Oven No. 1 and 1B; Chubco/Winkler; Oven No. 5 Baker Perkins; Oven No 6 Lanham Machinery B. MODEL: #1 – BE/W; #1B – Superflo 2328075, #5- 960, #6- N/A

- C. DESCRIPTION: Four bakery ovens manifolded to a single catalytic oxidizer for VOC control
- D. FUNCTION: Four natural gas-fired bakery ovens are used to bake bread products such as rolls and buns. Yeast is used in the products resulting in the release of VOCs which are collected by a ventilation system and control by a catalytic oxidizer
- E. SIZE/DIMENSIONS/CAPACITY: Catalytic Oxidizer 7' W x 20' L x 6' H with a 50 HP blower

### **COMBUSTION SOURCES**

- F. MAXIMUM HEAT INPUT: Cat Ox 4.0 MMBtu/hr; Oven 1 3.2 MMBtu/hr; Oven 5 2.8 MMBtu; Oven 1B 5.4 MMBtu/hr; Oven 6 3.2 MMBtu/hr
- G. BURNER INFORMATION

| ТҮРЕ                                       | INDIVIDUAL HEAT INPUT | NUMBER |
|--------------------------------------------|-----------------------|--------|
| OVEN 1 UNKNOWN "LOW NOX"                   | 1.6 MMBtu/hr          | 2      |
| OVEN 1B UNKNOWN "LOW NOX"                  | 5.4 MMBtu/hr          | 1      |
| OVEN 5 – BAKER PERKINS                     |                       | 42     |
| OVEN 6 – FLYNN NO. 156HN                   |                       | 24     |
| CAT OX – MAXON OVENPACK<br>400 EB-4 BURNER | 4.0 MMBtu/hr          | 1      |

H. PRIMARY FUEL: NATURAL GAS I. OTHER FUEL: N/A

J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR

K. EQUIPMENT COST:

L. EQUIPMENT INFORMATION COMMENTS: OPERATING TEMP LESS THAN 5000F

# 2. COMPANY INFORMATION

| A. COMPANY: Galasso's Bakery                                | B. FAC ID: 72351                |
|-------------------------------------------------------------|---------------------------------|
| C. ADDRESS: 10820 San Sevaine Way CITY: Mira Loma STATE: CA | D. NAICS CODE: 311812           |
| E. CONTACT PERSON: Brian Workman                            | F. TITLE: Chief Engineer        |
| G. PHONE NO.: (951) 360-1211                                | H. EMAIL: bworkman@galassos.com |



A. AGENCY: SCAQMD B. APPLICATION TYPE: OTHER

C. SCAQMD ENGINEER: Vicky Lee

D. PERMIT INFORMATION: PC ISSUANCE DATE:

P/O NO.: G43113, G43117, F83743, F83744, G32643

PO ISSUANCE DATE: 10/6/2016

E. START-UP DATE:

F. OPERATIONAL TIME: > 10 years

# 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

|                   | voc                | NOX                                                   | SOX | СО                                                  | PM or PM <sub>10</sub> | INORGANIC |
|-------------------|--------------------|-------------------------------------------------------|-----|-----------------------------------------------------|------------------------|-----------|
| BACT<br>Limit     | CONTROL EFFICIENCY | OVENS: 40 PPM<br>CAT Ox: Compliance<br>WITH RULE 1147 |     | OVENS: 800 PPMV<br>(Compliance with<br>Rule 1153.1) |                        |           |
| Averaging<br>Time | CAT OX: 1 HR       | OVENS:15 MIN                                          |     | OVENS: COMPLIANCE<br>WITH RULE 1153.1               |                        |           |
| Correction        |                    | OVENS: 3% O2                                          |     | OVENS: COMPLIANCE<br>WITH RULE 1153.1               |                        |           |

B. OTHER BACT REQUIREMENTS:

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: Enter any additional comments regarding Emissions Information.

### 5. CONTROL TECHNOLOGY

A. MANUFACTURER: Anguil B. MODEL: 100

C. DESCRIPTION: Catalyic Oxidizer

D. SIZE/DIMENSIONS/CAPACITY: 4.00 MMBtu/hr Maxon burner venting ovens Oven 1, 1B, 5 and 6

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 563257 PC ISSUANCE DATE:

PO NO.: G32643 PO ISSUANCE DATE: 10/6/2016

F. REQUIRED CONTROL EFFICIENCIES:

| CONTAMINANT      | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |
|------------------|-------------------------------|------------------------------|-----------------------|
| VOC              | 95%                           | %                            | %                     |
| NOx              | %                             | %                            | %                     |
| SOx              | %                             | %                            | %                     |
| СО               | %                             | %                            | %                     |
| PM               | %                             | %                            | %                     |
| PM <sub>10</sub> | %                             | %                            | %                     |
| INORGANIC        | %                             | %                            | %                     |

G. CONTROL TECHNOLOGY COMMENTS Inlet temp catalyst bed ≥600°F. Average uncontrolled emission rate 14.7 lb. VOC/day/oven (from permit evaluation)

- A. COMPLIANCE DEMONSTRATED BY: Source Test
- B. DATE(S) OF SOURCE TEST: Cat Ox (VOC) April 6, 2006 & March 8, 2011, Ovens (NOx): #1-May 21, 2015, #1B April 8, 2016, #5 June 9, 2006, #6 June 21, 2006
- C. COLLECTION EFFICIENCY METHOD: Smoke test
- D. COLLECTION EFFICIENCY PARAMETERS: Inward air flow at oven openings. Exhaust rate 3556 dscfm (inlet to Cat Ox).
- E. SOURCE TEST/PERFORMANCE DATA: Actual Control Efficiency 95.04%, Inlet VOC 20.6 lb/hr Outlet 1.02 lb/hr (both as ethanol). Outlet VOC Conc. 34.3 ppmv VOC (as ethanol).
- F. TEST OPERATING PARAMETERS AND CONDITIONS: Normal operation processing rolls, bread sticks and buns
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 25.1 and 25.3, SCAQMD Method 100.1

| H. | MONITORING AND TESTING REQUIREMENTS:  |
|----|---------------------------------------|
|    | •                                     |
|    |                                       |
| т  | DEMONSTRATION OF COMPLIANCE COMMENTS: |
| 1. | DEMONSTRATION OF COMPLIANCE COMMENTS: |
|    |                                       |
|    |                                       |

| A.  | BCAT:           | B. CCAT:   |                 | C. APPLICATION TYPE CODE: |          |                                |         |               |
|-----|-----------------|------------|-----------------|---------------------------|----------|--------------------------------|---------|---------------|
| D.  | RECLAIM FAC?    | E.         | E. TITLE V FAC: |                           | F.       | F. SOURCE TEST ID(S): PR11031, |         |               |
|     | YES □ NO ⊠      |            | YES ⊠ NO □      |                           |          | 06151A-B, 14410                |         |               |
| G.  | SCAQMD SOURCE   | SPECIFIC   | RULES: 11       | 153, 1                    | 153.1    |                                |         |               |
| H.  | HEALTH RISK FOR | R PERMIT U | JNIT            |                           |          |                                |         |               |
| H1. | . MICR:         | H2. MICR   | R DATE:         |                           | H3. CAN  | CER                            | BURDEN: | H4. CB DATE:  |
| Н5  | : HIA:          | H6. HIA I  | 6. HIA DATE:    |                           | H7. HIC: |                                |         | H8. HIC DATE: |
|     |                 |            |                 |                           |          |                                |         |               |

# **Section 1, SCAQMD BACT Determination**



Source Type: Major/LAER

Application No.: 448345

**Equipment Category:** Flare

Equipment Subcategory: Digester Gas, Food Waste and

**Manure Digester** 

|    | Date:                                                                                                                                                   |                | March            | ı 17, 2017    |                           |  |  |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------|---------------|---------------------------|--|--|
| 1. | <b>EQUIPMENT INFORM</b>                                                                                                                                 | MATION         |                  |               |                           |  |  |
| A. | MANUFACTURER: John Zi                                                                                                                                   | nk             | В.               | MODEL: (ZULE) | Zink Ultra Low Emission   |  |  |
| C. | DESCRIPTION: 39.3 MMB                                                                                                                                   | tu/hr enclosed | d flare, digeste | er gas fire   | d with natural gas pilots |  |  |
| D. | <ol> <li>FUNCTION: Flare incinerates digester gas vented from food waste and manure anaerobic<br/>digesters. Natural gas (or propane) pilot.</li> </ol> |                |                  |               |                           |  |  |
| E. | SIZE/DIMENSIONS/CAPACIT<br>limit                                                                                                                        | Y: 7'D. x 40   | o' H., 39.3 MN   | MBtu/hr, 3    | 32.4 MMBtu/hr permitted   |  |  |
| CO | MBUSTION SOURCES                                                                                                                                        |                |                  |               |                           |  |  |
| F. | MAXIMUM HEAT INPUT: 39                                                                                                                                  | 9.3 MMBtu/h    | r                |               |                           |  |  |
| G. | BURNER INFORMATION                                                                                                                                      |                |                  |               |                           |  |  |
|    | TYPE                                                                                                                                                    | INDIV          | VIDUAL HEAT      | INPUT         | NUMBER                    |  |  |
|    | ZULE                                                                                                                                                    | 13.            | 1 MMBtu/hr       |               | 3                         |  |  |
|    |                                                                                                                                                         |                |                  |               |                           |  |  |
| H. | PRIMARY FUEL: DIGESTER                                                                                                                                  | GAS            | I. OTHER FU      | EL: NAT (     | GAS/PROPANE               |  |  |
| J. | . OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR                                                                                                  |                |                  |               |                           |  |  |
| K. | EQUIPMENT COST:                                                                                                                                         |                |                  |               |                           |  |  |
| L. | EQUIPMENT INFORMATION GAS.                                                                                                                              | COMMENTS: I    | NTERMITTAN       | T OPERAT      | TION TO PROCESS DIGESTER  |  |  |

### 2. **COMPANY INFORMATION**

| A. | COMPANY: Inland Empire Utilities Agency RP-5 SHF            | B. FAC ID: 128863     |
|----|-------------------------------------------------------------|-----------------------|
| C. | ADDRESS: 6063 Kimball Ave. CITY: Chino STATE: CA ZIP: 91708 | D. NAICS CODE: 582212 |
| E. | CONTACT PERSON: Sylvie Lee                                  | F. TITLE: Manager     |
| G. | PHONE NO.: 909-993-1646 H. EMAIL: s                         | lee@ieua.org          |

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Angela Shibata

D. PERMIT INFORMATION: PC ISSUANCE DATE: 8/8/06

P/O NO.: G28957 PO ISSUANCE DATE: 12/12/2013

E. START-UP DATE:10/30/2008 Source Test Date

F. OPERATIONAL TIME: > 6 months

## 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

| A. BACI EMBOIOT EMITO AT EXTOR OF TWEE. |            |                               |           |                             |                        |           |  |  |
|-----------------------------------------|------------|-------------------------------|-----------|-----------------------------|------------------------|-----------|--|--|
|                                         | VOC        | NOx                           | SOX       | co                          | PM or PM <sub>10</sub> | INORGANIC |  |  |
| BACT<br>Limit                           | 5.5 lb/day | 0.025 lb/MMBtu<br>19.4 lb/day | 1.4 lb/hr | 0.06 lb/MMBtu<br>46.6 lb/hr | 14.2 lb PM10/hr        |           |  |  |
| Averaging<br>Time                       | 1 HR       | 1 HR                          |           | 1 HR                        | 1 HR                   |           |  |  |
| Correction                              |            |                               |           |                             |                        |           |  |  |

- B. OTHER BACT REQUIREMENTS: Maximum 32.4 MMBtu/hr digester gas (Condition 7). 1500°F Min temp (Condition 9). Performance tests every 5 years (Condition 12). Per source test PM10 as PM.
- C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology
- D. EMISSION INFORMATION COMMENTS: Permit does not have minimum VOC destruction efficiency or residence time requirements.

| _  | CONTRACT | TECTIMAL ( | N 17 |
|----|----------|------------|------|
| 5. | CONTROL  | TECHNOLO   | ДŦY  |

| A. | MANUFACTURER: | B. | MODEL: |
|----|---------------|----|--------|
|    |               |    |        |

C. DESCRIPTION:

D. SIZE/DIMENSIONS/CAPACITY:

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: PO NO.: PO ISSUANCE DATE:

F. REQUIRED CONTROL EFFICIENCIES:

| CONTAMINANT      | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |
|------------------|-------------------------------|------------------------------|-----------------------|
| VOC              | %                             | %                            | %                     |
| NOx              | %                             | %                            | %                     |
| SOx              | %                             | %                            | %                     |
| СО               | %                             | %                            | %                     |
| PM               | %                             | %                            | %                     |
| PM <sub>10</sub> | %                             | %                            | %                     |
| INORGANIC        | %                             | %                            | %                     |

G. CONTROL TECHNOLOGY COMMENTS

- A. COMPLIANCE DEMONSTRATED BY: Source Test
- B. DATE(S) OF SOURCE TEST: 10/30/2008
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 5.05 ppm VOC (as CH4); 0.08 lb VOC/hr (as (CH4); < 0.0046 lb CO/MMBtu; 5.9 ppm CO@ 3% O2; 0.016 lb/MMBtu NOx; 12.3 ppm NOx @3% O2; 0.01 lb SOX/hr (as SO2); 0.096 lb PM/hr;
- F. TEST OPERATING PARAMETERS AND CONDITIONS: 279 dscfm digester gas. Minimum flow during S/T run 133.5 dscfm.
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD 25.3, 100.1, SCAQMD 5.1, ARB Mod. Method 307.91

| H. | MONITORING AND TESTING REQUIREMENTS: Source Testing every 5 years for Methane, TGNMO, NOx, CO, SOx, PM10 (as PM), O2, N2, H2O, Temp and Flow |
|----|----------------------------------------------------------------------------------------------------------------------------------------------|
| I. | DEMONSTRATION OF COMPLIANCE COMMENTS:                                                                                                        |
|    |                                                                                                                                              |

| A.  | BCAT:             | B. CCAT: 50                 | C. APPLICATION         | TION TYPE CODE: 10     |  |
|-----|-------------------|-----------------------------|------------------------|------------------------|--|
| D.  | RECLAIM FAC?      | E. TITLE V FAC:             | F. SOURCE TE           | ST ID(S): PR03440      |  |
|     | YES □ NO □        | YES ⊠ NO □                  |                        |                        |  |
| G.  | SCAQMD SOURCE S   | PECIFIC RULES:              |                        |                        |  |
| Н.  | HEALTH RISK FOR F | PERMIT UNIT                 |                        |                        |  |
| H1. | . MICR: 2.36x10-7 | H2. MICR DATE: 11/12/13 H3. | CANCER BURDEN:<br><0.5 | H4. CB DATE: 11/12/13  |  |
| Н5  | : HIA: <1.0       | H6. HIA DATE: 11/12/13 H7.  | HIC: <1.0              | H8. HIC DATE: 11/12/13 |  |

# South Coast AQMD

# **Section 1, SCAQMD BACT Determination**

Source Type: Major/LAER

Application No.: 562449

Equipment Category: Boiler

Equipment Subcategory: 39.9 MMBtu/hr with SCR

Date: March 22, 2016

|    | Date.                                                                                          | Wai ch 22, 2010            |                           |  |  |  |  |
|----|------------------------------------------------------------------------------------------------|----------------------------|---------------------------|--|--|--|--|
| 1. | <b>EQUIPMENT INFORMATION</b>                                                                   |                            |                           |  |  |  |  |
| A. | MANUFACTURER: Simoneau                                                                         | B. MODEL: F                | X2-35                     |  |  |  |  |
|    |                                                                                                |                            |                           |  |  |  |  |
| C. | DESCRIPTION: 39.9 MMBtu watertub                                                               | e boiler with low NOx burn | ner and SCR unit with     |  |  |  |  |
|    | ammonia injection                                                                              |                            |                           |  |  |  |  |
| D. | D. FUNCTION: Boilers provides steam for laundry facilities, hospital heating and sterilization |                            |                           |  |  |  |  |
| υ. | procedures.                                                                                    |                            |                           |  |  |  |  |
|    | procedures.                                                                                    |                            |                           |  |  |  |  |
| E. | SIZE/DIMENSIONS/CAPACITY: Boiler                                                               | No. 2                      |                           |  |  |  |  |
|    |                                                                                                |                            |                           |  |  |  |  |
| CO | MBUSTION SOURCES                                                                               |                            |                           |  |  |  |  |
| F. | MAXIMUM HEAT INPUT: 39.9 MMBtu                                                                 | /hr                        |                           |  |  |  |  |
| C  |                                                                                                |                            |                           |  |  |  |  |
| G. | BURNER INFORMATION                                                                             |                            |                           |  |  |  |  |
|    | TYPE INC                                                                                       | DIVIDUAL HEAT INPUT        | NUMBER                    |  |  |  |  |
|    | WEBSTER 3                                                                                      | 89.9 MMBtu/hr              | 1                         |  |  |  |  |
| ** | DDD AADVELEL NATUDAL CAC                                                                       | FUEL OIL                   |                           |  |  |  |  |
| H. | PRIMARY FUEL: NATURAL GAS                                                                      | FOEL OIL                   |                           |  |  |  |  |
| J. | J. OPERATING SCHEDULE: 24 7 52                                                                 |                            |                           |  |  |  |  |
| K. | EQUIPMENT COST:                                                                                |                            |                           |  |  |  |  |
|    |                                                                                                |                            |                           |  |  |  |  |
| L. | EQUIPMENT INFORMATION COMMENTS                                                                 |                            |                           |  |  |  |  |
|    | IDENTICAL BOILERS AND SCR WITH IDI                                                             |                            | RMIT NO. BOILER 1 G36227, |  |  |  |  |
|    | BOILER 3 G36229, SCR 1 G36231, SCR 3 G                                                         | 30234                      |                           |  |  |  |  |

# 2. COMPANY INFORMATION

| A. | COMPANY: US GOVT, VET. AFFAIRS (LONG BEACH)                     | MEI  | O CTR  | B. FAC ID: 13990               |
|----|-----------------------------------------------------------------|------|--------|--------------------------------|
| C. | ADDRESS: 5901 E. 7 <sup>th</sup> ST. CITY: Long Beach STATE: CA | ZIP: | 90822  | D. NAICS CODE: 622110          |
| E. | CONTACT PERSON: Jason Thompson                                  |      |        | F. TITLE: Env Protection Spec. |
| G. | PHONE NO.: 562-826-8000 x3083                                   | H.   | EMAIL: |                                |

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Roy Olivares

D. PERMIT INFORMATION: PC ISSUANCE DATE:

P/O NO.: G36227

PO ISSUANCE DATE: 6/18/2015

E. START-UP DATE: 8/7/2015

F. OPERATIONAL TIME: > 1 year

# 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

| 71. Driet         | A. BROT EMISSION EMITS AND AVERAGING TIMES. |         |     |           |                        |                  |  |  |  |
|-------------------|---------------------------------------------|---------|-----|-----------|------------------------|------------------|--|--|--|
|                   | VOC                                         | NOx     | SOX | CO        | PM or PM <sub>10</sub> | Inorganic        |  |  |  |
| BACT<br>Limit     |                                             | 5 ppmvd |     | 100 ppmvd |                        | 5 ppmvd NH3 slip |  |  |  |
| Averaging<br>Time |                                             | 15 min  |     | 15 MIN    |                        | 60 MIN           |  |  |  |
| Correction        |                                             | @ 3% O2 |     | @ 3% O2   |                        | @ 3% O2          |  |  |  |

- B. OTHER BACT REQUIREMENTS: When firing on Standby fuel: 40 ppmvd NOx @3%O2, 15 min avg; 400 ppmvd CO @3%O2.
- C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology
- D. EMISSION INFORMATION COMMENTS: Enter any additional comments regarding Emissions Information.

## 5. CONTROL TECHNOLOGY

A. MANUFACTURER: Pasasia B. MODEL: Custom

- C. DESCRIPTION: Selective Catalytic Reduction, low temp de-NOx, haldor topsoe, model dnx-1029. Ammonia injection, three 150 lb cylinders, feed forward
- D. SIZE/DIMENSIONS/CAPACITY: 4'-9" W x 4'-9" L x 9'-0" H
- E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 562452 PC ISSUANCE DATE:

PO NO.: G36233 PO ISSUANCE DATE: 6/18/2015

F. REQUIRED CONTROL EFFICIENCIES: Emission requirements are mass based and listed in Section 4 emission Information

| CONTAMINANT      | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |
|------------------|-------------------------------|------------------------------|-----------------------|
| VOC              | %                             | %                            | %                     |
| NOx              | %                             | %                            | %                     |
| SOx              | %                             | %                            | %                     |
| СО               | %                             | %                            | %                     |
| PM               | %                             | %                            | %                     |
| PM <sub>10</sub> | %                             | %                            | %                     |
| INORGANIC        | %                             | %                            | %                     |

G. CONTROL TECHNOLOGY COMMENTS Pressure drop not to exceed 2.5" H2O. SCR be temperature 400-650oF. Ammonia injection shall not exceed 0.55 lb/hr. Ammonia injection to start when cat bed outlet temp reaches 400oF. Start-ups not to exceed 120 min for cold start and 30 min for warm start.

- A. COMPLIANCE DEMONSTRATED BY: Source Test PR16435
- B. DATE(S) OF SOURCE TEST: October 12, 2016
- C. COLLECTION EFFICIENCY METHOD:
- D. COLLECTION EFFICIENCY PARAMETERS:
- E. SOURCE TEST/PERFORMANCE DATA: low mid and high fire each tested for NOx, CO and NH3. Reference source test report for details of each load tested. All loads met emission limits for each contaminant,
- F. TEST OPERATING PARAMETERS AND CONDITIONS: Low fire 322 Mcfd, mid fire 437 Mcfd, 814 Mcfd
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 207.1, SCAQMD 100.1

| H. | MONITORING AND TESTING REQUIREMENTS: NH3 slip test every 3 months for first year. |
|----|-----------------------------------------------------------------------------------|
| I. | DEMONSTRATION OF COMPLIANCE COMMENTS:                                             |
|    |                                                                                   |

| A.  | A. BCAT: 011204 B. CCAT: 81           |         |            |                               | C. APPLICATION TYPE CODE: 10 |     |         |               |  |
|-----|---------------------------------------|---------|------------|-------------------------------|------------------------------|-----|---------|---------------|--|
| D.  | RECLAIM FAC? E. TITLE V FAC:          |         |            | F. SOURCE TEST ID(S): PR16435 |                              |     |         |               |  |
|     | YES □ NO □                            |         | YES ⊠ NO □ |                               |                              |     |         |               |  |
| G.  | G. SCAQMD SOURCE SPECIFIC RULES: 1146 |         |            |                               |                              |     |         |               |  |
| Н.  | H. HEALTH RISK FOR PERMIT UNIT        |         |            |                               |                              |     |         |               |  |
| H1. | MICR:                                 | H2. MIC | R DATE:    |                               | H3. CAN                      | CER | BURDEN: | H4. CB DATE:  |  |
| H5: | HIA:                                  | H6. HIA | HIA DATE:  |                               | H7. HIC:                     |     |         | H8. HIC DATE: |  |
|     |                                       |         |            |                               |                              |     |         |               |  |

# South Coast AQMD

# Part B, Section I: SCAQMD BACT Determination

Source Type: Major/LAER

Application No.: 546360

Equipment Category: I.C. Engine, Digester Gas Fired

Equipment Subcategory:

|    | Date:                                                                                       |               | April 4           | , 2017       |                             |  |  |  |
|----|---------------------------------------------------------------------------------------------|---------------|-------------------|--------------|-----------------------------|--|--|--|
| 1. | <b>EQUIPMENT INFORM</b>                                                                     | MATION        |                   |              |                             |  |  |  |
| A. | MANUFACTURER: Cooper                                                                        | Bessmer       | В.                | MODEL:       | LSVB-12-SGC                 |  |  |  |
| C. | DESCRIPTION: Spark Ignition, four strokes with modified turbocharged-intercooled, V-12 type |               |                   |              |                             |  |  |  |
| D. | FUNCTION: On-site electrical power generation                                               |               |                   |              |                             |  |  |  |
| E. | SIZE/DIMENSIONS/CAPACITY: 3471 HP, driving 2500 kW generator                                |               |                   |              |                             |  |  |  |
| СО | COMBUSTION SOURCES                                                                          |               |                   |              |                             |  |  |  |
| F. | F. MAXIMUM HEAT INPUT:                                                                      |               |                   |              |                             |  |  |  |
| G. | G. BURNER INFORMATION                                                                       |               |                   |              |                             |  |  |  |
|    | ТҮРЕ                                                                                        | INDIV         | IDUAL HEAT I      | NPUT         | NUMBER                      |  |  |  |
|    |                                                                                             |               |                   |              | <u></u>                     |  |  |  |
|    |                                                                                             |               |                   |              |                             |  |  |  |
| H. | PRIMARY FUEL: Digester a gas                                                                | nd/or natural | I. OTHER FUE      | EL:          |                             |  |  |  |
| J. | OPERATING SCHEDULE:                                                                         | 24 HRS/DAY    | 7 DAYS/WE         | EK 52        | WKS/YR                      |  |  |  |
| K. | EQUIPMENT COST: Not Avail                                                                   | able          |                   |              |                             |  |  |  |
| L. | EQUIPMENT INFORMATION generator, 5,008,500 Btu/hr capa                                      |               | Engine is equippe | ed with an e | exhaust heat recovery steam |  |  |  |
| 2. | COMPANY INFORMA                                                                             | ATION         |                   |              |                             |  |  |  |
| A. | COMPANY: Orange County                                                                      | Sanitation D  | istrict           | B. FAC       | CID: 017301                 |  |  |  |
| C. | ADDRESS: 10844 Ellis Ave                                                                    |               | e: 92708          | D. NAI       | CS CODE:                    |  |  |  |
| E. | CONTACT PERSON: Terry                                                                       | Ahn           |                   | F. TITL      | E: Regulatory Specialist    |  |  |  |
| G  | PHONE NO · 714-593-7082                                                                     |               | H EMAIL:          | tahn@oc      | sd com                      |  |  |  |

| 2  | DEDIATE | <b>INFORM</b> | A TION |
|----|---------|---------------|--------|
| J. | PCKWIII | INFURIVIA     |        |

| A. | AGENCY: SCAQMD | B. | APPLICATION TYPE: | PERMIT TO OPERATE |
|----|----------------|----|-------------------|-------------------|
|    |                |    |                   |                   |
|    |                |    |                   |                   |

C. SCAQMD ENGINEER:

D. PERMIT INFORMATION: PC ISSUANCE DATE:

P/O NO.: G45189 PO ISSUANCE DATE: 3/3/2017

E. START-UP DATE:

F. OPERATIONAL TIME:

# 4. EMISSION INFORMATION

| Α   | BACT EMI | SSION LIMIT | S AND AVERA | GING TIMES:  |
|-----|----------|-------------|-------------|--------------|
| 71. | DACILMI  |             |             | CHILL OTHER. |

|                   | VOC                     | NOx                     | SOX | СО                      | PM OR PM <sub>10</sub> | INORGANIC |
|-------------------|-------------------------|-------------------------|-----|-------------------------|------------------------|-----------|
| BACT<br>Limit     | 30 ррм                  | 11 ррм                  |     | 250 ррм                 | RULE 404               |           |
| Averaging<br>Time | Per 1110.2 requirements | Per 1110.2 requirements |     | Per 1110.2 requirements |                        |           |
| Correction        | 15% O <sub>2</sub>      | 15% O <sub>2</sub>      |     | 15% O <sub>2</sub>      |                        |           |

- B. OTHER BACT REQUIREMENTS: Compliance with emission requirements of Rule 1110.2(d)(1)(C)
- C. BASIS OF THE BACT/LAER DETERMINATION:
- D. EMISSION INFORMATION COMMENTS: Enter any additional comments regarding Emissions Information.

| _     | CONTROL | TEATINE |          |
|-------|---------|---------|----------|
|       |         |         | 1 M - V  |
| - 7 - |         |         | X /X T I |

- A. MANUFACTURER: Johnson Matthey, Inc. B. MODEL: 79449
- C. DESCRIPTION: Selective Catalytic Reduction and Catalytic Oxidizer
- D. SIZE/DIMENSIONS/CAPACITY: SCR metallic substrate with 37.33 cu.ft. volume and CatOx aluminum oxide or platinum with 200 CPSI oxidation catalyst, 18.67 cu.ft. volume
- E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 559225 PC ISSUANCE DATE:

PO NO.: G45196 PO ISSUANCE DATE: 3/3/2017

F. REQUIRED CONTROL EFFICIENCIES: Maintain compliance with Rule 1110.2(d)(1)(C) for engine emissions.

| CONTAMINANT      | OVERALL CONTROL<br>EFFICIENCY | CONTROL DEVICE<br>EFFICIENCY | COLLECTION EFFICIENCY |  |  |
|------------------|-------------------------------|------------------------------|-----------------------|--|--|
| VOC              | %                             | %                            | %                     |  |  |
| NOx              | %                             | %                            | %                     |  |  |
| SOx              | %                             | %                            | %                     |  |  |
| CO               | %                             | %                            | %                     |  |  |
| PM               | %                             | %                            | %                     |  |  |
| PM <sub>10</sub> | %                             | %                            | %                     |  |  |
| INORGANIC        | %                             | %                            | %                     |  |  |

G. CONTROL TECHNOLOGY COMMENTS Maintain compliance with Rule 1110.2(d)(1)(C) for engine emissions. H2S compliance with Rule 431.1.

- A. COMPLIANCE DEMONSTRATED BY: Source test conducted when equipment was under Permit to Construct (A/N 497717).
- B. DATE(S) OF SOURCE TEST: November 20, 2014
- C. COLLECTION EFFICIENCY METHOD:
- D. COLLECTION EFFICIENCY PARAMETERS:
- E. SOURCE TEST/PERFORMANCE DATA:
- F. TEST OPERATING PARAMETERS AND CONDITIONS:
- G. TEST METHODS (SPECIFY AGENCY): NOx, CO and O2 determined using SCAQMD Method 100.1. VOC determined using SCAQMD Method 25.3.

| H. | MONITORING AND TESTING REQUIREMENTS: Compliance with Rule 1110.2(f) |
|----|---------------------------------------------------------------------|
| I. | DEMONSTRATION OF COMPLIANCE COMMENTS:                               |
|    |                                                                     |

| A.  | BCAT:                            | B.        | B. CCAT:        |  |          | C.                    | C. APPLICATION TYPE CODE: |               |  |
|-----|----------------------------------|-----------|-----------------|--|----------|-----------------------|---------------------------|---------------|--|
| D.  | D. RECLAIM FAC?                  |           | E. TITLE V FAC: |  | F        | F. SOURCE TEST ID(S): |                           |               |  |
|     | YES □ NO □                       |           | YES □ NO □      |  |          |                       |                           |               |  |
| G.  | G. SCAQMD SOURCE SPECIFIC RULES: |           |                 |  |          |                       |                           |               |  |
| H.  | H. HEALTH RISK FOR PERMIT UNIT   |           |                 |  |          |                       |                           |               |  |
| H1. | MICR:                            | H2. MICE  | MICR DATE:      |  | H3. CAN  | CER 1                 | BURDEN:                   | H4. CB DATE:  |  |
| Н5  | : HIA:                           | H6. HIA I | HIA DATE:       |  | H7. HIC: |                       |                           | H8. HIC DATE: |  |